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Self-checkouts in fashion stores - Is it good or bad?

An exploratory study on customer attitudes and customer loyalty within a fashion retail context

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Abstract

Title: Self-checkouts in fashion stores - Is it good or bad? An exploratory study on customer attitudes and customer loyalty within a fashion retail context.

Keywords: Self-checkouts, Self-service technology, SST, customer attitudes, customer loyalty, fashion store, fashion context, fashion retail context.

Purpose: The first research purpose is to identify what factors that influence a customer's creation of an attitude towards the implementation of self-checkouts in an experiential context, focusing on Swedish fashion stores. The second purpose is to explore if the implementation of self-checkouts in Swedish fashion stores is a factor that influences a customer's loyalty towards a store.

Methodology: By applying an epistemology social constructionism position and an ontological relativism position, we have conducted a qualitative and exploratory study to investigate the research's purpose. Moreover, we have conducted the research by using an abductive approach where we both have used previous literature and theories as well as gathered our own empirical data to be able to answer the purpose. The empirical data was collected by semi-structured interviews with 19 customers of different demographic backgrounds.

Theoretical perspective: We have reviewed previous literature, theories, and models connected to three different concepts: self service technology, customer attitudes and customer loyalty. Firstly, when it comes to self service technology, we have been focused on previous literature that are connected to self-checkouts and self service technology within fashion retail. Secondly, in the subject of customer attitudes, we have been focused on previous literature that is connected to self service technology in some kind of way. Finally, in connection to customer loyalty, we have focused on literature that is related to the fashion context.

Findings/Conclusions: Answering our first purpose, we found that the majority of factors mentioned in earlier research to influence customer attitudes also applies in a fashion store context, except for the factors called '*enjoyment*' and '*stimulation*'. However, we could also identify five new factors relevant in the specific context of fashion stores, called *store context, online competition, previous experience, practical design and security alarms*. Answering our second purpose, we found that self-checkouts in fashion stores are not a factor that have a major influence on customers' loyalty to a store, in the majority of cases. Based on these findings we could develop a theoretical framework for customer attitudes and customer loyalty connected to self-checkouts in a fashion context.

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Frida Fransson and Isabell Schönström

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1. Introduction

In this chapter, background information about the concepts self-service technology, self-service technology in fashion stores, customer attitudes and customer loyalty will be presented. In addition, the relevance of this research will also be discussed. Thereafter, the aim of the study and delimitations will be presented. Lastly, the thesis structure will be introduced.

1.1 Background

The ongoing digitalisation in society has led to a rapid advance in retailers' use of technology. By using technology, retailers can find new ways to decrease costs, enhance customers' shopping experiences (Park, Ha & Jeong, 2020) and increase the efficiency (Nanda, Xu & Zhang, 2021). In other words, technology is used by retailers to increase their performance, but also to increase customers' loyalty (Liang, Lee & Workman, 2021). As the use of technology is expanding, customers increasingly feel more comfortable with using technology within several retail sectors, such as grocery stores, restaurants and hotels (Park, Ha & Jeong, 2020). According to an investigation, 67 percent of the customers stated that they were more willing to shop at a store that is using new technology (Lund, 2020). Furthermore, it was also found that two out of three customers expressed that the retailers' use of technology enables customers to experience a more efficient and quicker shopping experience (Lund, 2020). As there seems to be a pressure from customers on retailers to implement more technology, the future retail stores seem to become increasingly digitized (Lund, 2020).

Among various kinds of technologies, self-service technology (SST) is one of the most common kinds to implement in retail stores (Park, Ha & Jeong, 2020). Park, Ha & Jeong (2020) defined SST as the "technological interfaces that enable customers to produce a service independent of direct service employee involvement" (p. 371). SST was first introduced in the 1990s in the Netherlands and came to Sweden in the 2000s (Bonnier, n.d). The first implementation of SST in the Swedish market was in a grocery store in 2002 (Bonnier, n.d). The grocery store introduced the so-called self-scanning, which is one of many SSTs that are nowadays used with success within the grocery sector (Bonnier, n.d). Even if customers have been slow to adapt to the new technology, customers' use of SST has drastically increased in recent years (Bonnier, n.d).

SST involves many varieties of technologies, such as self-checkouts and self-scanning (Park, Ha & Jeong, 2020). The Self-checkout, which is the technology that will be addressed in this thesis, is a technology that allows customers to "scan, bag and pay" by themselves (Lee & Leonas, 2021, p. 264). The use of self-checkouts have numerous advantages for both retailers and customers. Retailers' advantages of the implementation of self-checkouts are, for example, the

ability to relocate staff into other tasks and decrease costs (Strongpoint, 2017). Customers also gain some advantages by using self-checkouts, such as less queuing and more control over their purchases (Cashit, n.d).

The implementation of self-checkouts began many years ago and has been very successful within some retail sectors, such as the grocery sector (Hamacher, 2017). However, the implementation of self-checkouts within the fashion industry is still relatively new (Lindström, 2018). The self-checkout was first introduced in the Swedish fashion market in 2018 in a store called H&M, and was well received by the customers (Lindström, 2018). Since then other fashion stores such as Zara have also implemented this self-checkout technique (Krona, 2021). According to Lee and Leonas (2021), there is a growing interest among customers to use more SST technologies while shopping in fashion stores. This is because customers are currently quite dissatisfied with the cashier-checkout involving long queues, low level of service and therefore also less attractive shopping experiences (Lee & Leonas, 2021). Some people claim that since customers prefer to shop at stores who offer some type of self-service technology (SST), retailers who use SST can increase customers' loyalty (Datema, n.d).

It is common knowledge that retailers who have established strong customer loyalty have a competitive advantage on the market (Rahman, Fadrul, Yusrizal, Marlyna & Momin, 2022). Customer loyalty has many definitions but is in summary described as a long-term relationship between a customer and an organization (Ayodeji & Rjoub, 2020), which is the definition that will be used in this thesis. Earlier research has found that retailers' use of SST can have both advantages and disadvantages influencing customers' loyalty towards a store (Shahid Iqbal, Hassan & Habibah, 2018; Sharma, Ueno & Kingsshott, 2021). Since the relationship between SST and customer loyalty is relatively unclear, but customer loyalty is something all retailers want to achieve, it is important to explore whether SST affects customers' attitudes to the extent that it can increase or decrease customer loyalty.

According to Weijters, Falk and Schillewaert (2007), an attitude can be described as "a person's negative or positive evaluation of performing the target behavior" (p. 5). Even if many customers have a positive attitude towards self-checkouts (Sydsvenskan, 2018) and there are many advantages with using them (Strongpoint, 2017; Cashit, n.d), not all customers seem to be convinced by the new implementation of it. Some customers believe that retailers' implementation of self-checkouts leads to fewer jobs, which can make customers determinant to not use it (Sydsvenskan, 2018; Apost, 2020). Other customers believe that it becomes too stressful for the employees to control several cashiers at once (Klint, 2008), which also affects customers to not use it. Finally, some customers even call the self-checkouts for the "biggest mockery of the digital revolution" (Linde, 2017, p. 1), which implies their dissatisfaction.

However, since customers' experience of and attitudes towards the use of self-checkouts mostly have been investigated within other sectors with different environmental contexts, such as the grocery sector (Dean, 2008; Lee & Lyu, 2016), it is interesting to explore how the customers apprehend the self-checkout in a different context, such as the fashion sector. Lee and Leonas (2021) mention that customers "expectations and decisions depend on the context (e.g., category specific)" (p. 265), which makes it difficult to know if customers' attitude towards the implementation of self-checkouts within the fashion sector is the same as within the grocery sector. The fashion store environment is different compared to other store environments since it is very focused on how well the employees' are serving the customers and since the help of employees often are considered as a part of the shopping experience (Lee & Leonas, 2021), which can make customers skeptical to the implementation of self-service, such as self-checkouts. Therefore, this is a topic that needs to be explored further. In addition, since previous research has found that the use of technology can result in an increased or decreased customer loyalty (Liang, Lee & Workman, 2021), it is interesting to explore if stores within the service-oriented fashion environment can use self-checkouts as a tool to increase customer loyalty.

1.2 Problem discussion

What can be stated from the introduction is that self-checkouts are still relatively new in the Swedish fashion market and therefore customers' attitudes and loyalty to this technology have still not been investigated to a greater extent. For this reason, a research gap around customers' attitudes and customer loyalty to self-checkout in a fashion context can be identified as it has not previously been investigated at a more in-depth level in the Swedish market.

As mentioned in the background, previous research on customer attitudes and SST have mainly been done in the grocery context (Dean, 2008; Lee & Lyu, 2016). The already conducted research on self-checkouts within the grocery sector have, for instance, focused on usage behavior (Larson, 2019) and whether customers prefer self-service checkouts or traditional staffed checkouts (Sharma, Ueno & Kingshott, 2021). The few studies that have been made within the field of self-checkouts in fashion retail have aimed at identifying the intentions to use self-checkouts in fashion stores (Lee & Leonas, 2021). Other studies have clarified the need for technology in fashion stores (Rese, Schlee & Baier, 2019) and also investigated consumer acceptance of SST in fashion retail (Park, Ha & Jeong, 2020).

Despite the fact that these topics are well explored in other contexts, it could not be ruled out that the same type of attitudes that arise against SST in grocery stores can be applied in a fashion context. As mentioned in the introduction, Lee and Leonas (2021) explain that customers "expectations and decisions depend on the context (e.g., category specific)" (p. 265), which points out that there can exist differences between different retail sectors due to their context. Furthermore, Rese, Schlee and Baier (2019) explain that customers put higher valuation on

receiving personal service in the fashion industry. Since self-checkouts are a payment method where the customer serves themselves, it is interesting to investigate what reactions and attitudes this creates among the customers. As fashion retail involves more hedonic aspects that affect the customer's experience of the visit (Park, Ha & Jeong, 2020), we can not rule out that customers' attitudes towards the implementation of self-checkouts in fashion stores will be the same as in grocery stores, where the customer values the utilitarian aspects more (Wong, 2021). For the reasons mentioned above, this research is important to implement in order to identify whether the same attitudes towards self-checkouts in other retail sectors arise in a fashion context and whether there may be other factors that can influence customers' attitudes towards self-checkouts that do not exist in other retail contexts.

The self-checkouts usage process in a grocery store and in other retail stores is quite similar. A self-checkout within the retail sector usually functions so that when a customer wants to pay for their products, they go to a self-checkout to pay (Honestbox, n.d). Here they scan their products with a scanner and then click on to the next step to pay for the goods (Honestbox, n.d). However, the systems are still a bit different as the customer that uses a self-checkout in a fashion store also is responsible for taking off the alarms from the clothes themselves (Bäckman & Zabell, 2014), which the customer does not have to do in a grocery store. According to Bäckman and Zabell (2014), this creates another step in the payment process which can make the customers consider the payment process to be too complicated. Therefore, there is also a difference between self-checkouts in grocery stores and in fashion stores. Thus, we believe that it is worth investigating whether the attitudes towards self-checkouts in fashion stores differ from the attitudes that customers have towards SST in other retail contexts as well as investigating whether this technology can affect customer loyalty to the store.

When reviewing previous research within SST and customer loyalty, it could be found that not much research has been conducted about self-checkouts in fashion stores and if this type of technology can influence the customers loyalty to the store. Former research within SST and customer loyalty have focused on examining the store quality through customer satisfaction and loyalty (Demirci-Orel & Kara, 2014; Sharma, Ueno & Kingshott, 2021). In addition, these studies were also made with a focus on grocery stores, which, as previously explained, can differ from fashion stores. Due to these reasons, a large knowledge gap could be identified and therefore we believe it is of value to investigate whether self-checkouts can be a decisive factor affecting customer loyalty to a store within a fashion context.

Lastly, it also seems like the majority of studies within the fashion store context and SST is conducted with a quantitative research strategy. These studies also recommend performing similar studies but with a qualitative research method to get an even deeper insight into customers' attitudes and aspects of SST in fashion stores (Rese, Schlee & Baier, 2019). Therefore, the use of a qualitative research method is also a reason why this research is valuable

to conduct, as we believe that this can contribute to a more comprehensive and a more in-depth understanding of customers' attitudes to self-checkouts in fashion stores.

1.2.1 Managerial and theoretical contributions

From a theoretical perspective, this research will contribute to expanding the literature related to customer attitudes, customer loyalty and SST. This research will also test previously developed models and theories in connection to these topics that have been made in other contexts in order to investigate whether these literature can be applied in more context, such as fashion stores. In the end of this research, we are hoping to be able to develop a theoretical framework related to the fashion context that is based on previous literature but also new findings from this research.

From a managerial perspective, this research will contribute with valuable insights into customers' attitudes towards self-checkout in Swedish fashion stores and if the implementation of this payment system can affect the customer loyalty to the store. The study can also help fashion companies to gain a better understanding of how to adapt their implementation of self-checkout in their stores after the customers' needs. This research and its insights can possibly also apply to and be useful for other fashion retailers from other parts of the world.

1.3 Research purpose

This research has two overarching purposes. Firstly, we want to identify what factors that influence a customer’s creation of an attitude towards the implementation of self-checkouts in an experiential context, which will have a focus on Swedish fashion stores. Secondly, we want to explore if the implementation of self-checkouts in Swedish fashion stores is a factor that influences a customer’s loyalty towards a store.

1.4 Thesis layout

This thesis is divided into six chapters. The first chapter introduces the research topic and discusses the problem of the chosen area. The chapter also describes the purpose of the research. Chapter two presents previous research made within the topics of *SST and self-checkouts in fashion stores, customer attitudes and customer loyalty*. Furthermore, it also presents our theoretical framework. Thereafter, chapter three will present the methodological choices for the thesis. Chapter four presents the empirical findings from the data collection where we discuss the participants' opinions connected to the research topic. The fifth chapter includes the analysis of the empirical material together with the already existing academic literature. In the sixth and final chapter, the conclusion of the research is presented where we answer our research purpose. The last chapter also includes limitations of the research, theoretical and managerial contributions, and suggestions for future research.

2. Literature review

In this chapter, the authors will present a literature review on relevant concepts for this dissertation. The concepts that will be discussed are SST, customer attitudes and customer loyalty. It was considered relevant to examine previous literature within these areas as they will act as a support to be able to answer to our research purpose. In the section for SST, we will go deeper into SST in fashion stores and self-checkouts in order to get a better insight into what theory already exists on SST and to clarify the function of a self-checkout. In the section for customer attitudes, we will explain different types of models that measure attitudes towards technology. These were considered relevant to include in our literature review as the factors included in these models were of interest to test whether they also fit into a fashion context or not. In the customer loyalty section, we have reviewed previous research done on customer loyalty in relation to SST in order to get a better understanding of the topic. At the end of the chapter, a theoretical framework is presented that discusses how the concepts relate to each other.

2.1 Self-service technology (SST)

As stated in the introduction, self-service technology is defined as “technological interfaces that enable customers to produce a service independent of direct service employee involvement” (Meuter, Ostrom, Roundtree & Bitner, 2000, p. 50). This definition of SST is the most accepted and used in academic literature. Since SST and self-checkouts are the main focus of this research, it is considered relevant to include previous research done within these areas. This is to get an insight into what SST actually is and how it works.

In today’s society, there are a wide range of SST such as self-check-in stations at airports, self-checkout at hotels, self-checkout payment systems, online banking, online shopping, and automated teller machines (Guan et al. 2021). SST has become a large part of consumers' everyday lives, especially in the retail sector (Sharma, Ueno & Kingshott, 2021). According to Sharma, Ueno and Kingshott (2021, p.2) “SSTs offer both opportunities and challenges for customers and service providers”. Previous studies suggest that the positive aspects of SST for the customer are that it is time-saving, convenient and that it can make the customer more financially aware (Sharma, Ueno & Kingshott, 2021). Sharma, Ueno and Kingshott (2021) also explain that by using SST the customer gets more control over the shopping situation and allows the customer to avoid unnecessary interaction with the staff in the store. The positive aspects and benefits of SST for companies are that it can reduce staff costs, increase the service quality and work efficiency, and contribute to increased customer loyalty and satisfaction (Demirci-Orel, & Kara, 2014; Sharma, Ueno & Kingshott, 2021).

There are also some challenges with the implementation and usage of SST. What has been shown in previous research on SST is that it can lead to a perceived technical anxiety and an increased stress for the customer due to inexperience and lower technical knowledge (Lee and Coughlin,

2015; Sharma, Ueno & Kingshott, 2021). According to Van Riel, Semejin, Ribbink and Bomert-Peters (2012), customers' lack of knowledge and experience of SST may possibly cause a longer waiting time in the cue for the customer as it can be perceived as a complicated payment method. Another challenge with SST is that customers may consider the technology to be too complicated to use and thus may contribute to poor acceptance of the technology (Sharma, Ueno & Kingshott, 2021). The fact that some customers do not want to accept the implementation of SST in retail stores may have to do with that SST can contribute to less integration between the customer and the personnel (Sharma, Ueno & Kingshott, 2021), which according to Scherer, Wünderlich and Von Wangenheim (2015), can lead to a decrease in customer loyalty to the store and the company.

According to Ayodeji and Rjoub (2020, p. 29) "the use of SSTs creates a feeling of independence by operating desired transactions at a particular point in time, which will result in a reduction in costs". To be able to use SST, it is required that the customer participates wholeheartedly in the use process and it is important that companies understand how customers react and behave when they use SST (Ayodeji & Rjoub, 2020). The SST that are implemented in retail stores must be "... easy to use, offer speedy delivery, be reliable, and easy to control, and as such, SSTs must be flexible and not too rigid in order not to result in users feeling discomfort or impatience" (Ayodeji & Rjoub, 2020, p. 29).

2.1.1 SST in fashion retail

Customers today are gaining a higher interest in SST within fashion retail (Sachdeva & Goel, 2015; Lee & Leonas, 2020). Due to this increased demand for SST, fashion retailers have started to set up different types of in-store technologies to fulfill the consumers' technological demands (Lee & Leonas, 2020). An example of SST that fashion retailers are deploying are digital video walls where the customers "… can browse product styles and photos from the websites (e.g., social media), add items of interest to a cart called my room and request a fitting room" (Park, Ha & Jeong, 2020, p. 372). Another type of SST that is also starting to become popular in fashion stores are interactive mirrors that are placed in the fitting rooms and serve as a tool for the customer to help them adjust the lighting in the fitting room to see the product in the environment in which it is intended to be used (Park, Ha & Jeong, 2020). The mirrors also serve as a communication tool where they can ask the staff for help with different sizes or models. With the interactive mirrors, customers can also save the clothes they have tried on in their "personal room", and by doing so, customers can get recommendations on other similar items that are similar to the items they have saved in their personal profile (Park, Ha & Jeong, 2020).

Earlier conducted studies shows that customers today are more discontented with the traditional staffed checkout as it is perceived by some customers to take longer time due to long queues, which leads to customers getting a less pleasant experience (Collier & Kimes, 2013; Lee & Leonas, 2020). This has led to that many fashion retailers have implemented self-checkout

systems in the stores. Park, Ha and Jeong (2020) describes that brands such as Nike and Zara have started to install self-checkouts in their stores that allows customers to carry out the payment process of the products themselves without having to stand in long queues to be served by the staff. Other types of technologies that are also beginning to appear in the fashion industry are virtual reality, apps that can picture the products in 3D, and augmented reality, which according to Park, Ha and Jeong (2020, p. 372) is "… enabled in mobile devices also support consumers to make informed decisions by serving an immersive and hyper-realistic shopping experience in virtual world …". It is also becoming more common with virtual face recognition and body recognition where the customer can try on clothes, shoes, or make-up products in a virtual way to see how these items could fit on them in real life (Park, Ha & Jeong, 2020).

2.1.2 Self-checkouts

Self-checkout systems are one of many self-service technologies that a consumer faces within today's retail sector (Meuter et al. 2000; Cebeci, Ertug & Turkcan, 2019). Self-checkouts are "… checkouts where customers scan the barcodes of their products, pay for the products, and put them into bags on their own, without the help of service employees" (Cebeci, Ertug & Turkcan, 2019, p. 1027). Self-checkout systems are a type of SST that contributes to a more efficient way of shopping as it saves the customer queuing time and unnecessary contact with the staff in the store, which are factors that can contribute to a shopping trip taking longer time to complete (Lee, & Yang, 2013; Cebeci, Ertug & Turkcan, 2019). As self-checkout systems contribute with many positive and beneficial aspects both to the company and the customer, the implementation of these self-payment systems has increased in the retail industry (Demirci-Orel & Kara, 2014; Cebeci, Ertug & Turkcan, 2019).

Fernandes and Pedroso (2017) explains that it is very beneficial for retailers to let customers take on a role as an 'employee' when he or she is going to pay for their items in the store, since it is considered a very appealing idea for customers. Self-checkout systems are increasingly being seen as a beneficial alternative to implement in retail stores in order to save money instead of spending them on hiring and training new staff (Fernandes & Pedroso, 2017). Self-checkouts are also considered to expand retailers' productivity as well as broadening companies' customer segments (Fernandes & Pedroso, 2017).

2.2 Customer attitudes towards technology

According to Weijters, Falk and Schillewaert (2007), an attitude can be described as "a person's negative or positive evaluation of performing the target behavior" (p. 5), which is the description of attitudes that will be used in this thesis. Retail stores implementation of SST does not always result in positive customer attitudes (Elliott, Meng & Hall, 2012). If the benefits with SST are not clear to the customers, they will probably not try the new technology until they are forced to (Elliott, Meng & Hall, 2012). In order for retailers to gain the advantages of developing new

technology such as SST, it is crucial that customers get a positive experience of the technology and get a positive attitude towards its implementation, which in the end can lead to the customers using the technology (Lin & Chang, 2011). According to Elliott, Meng and Hall (2012), it is "generally assumed that an individual with a positive attitude toward using SST is more likely to use the technology than someone with a negative attitude towards SST usage" (p. 313). Because of that the trend of using SST in stores is increasing and the customers are increasingly being more exposed to technology, customers' attitudes towards SST also seems to go through a change (Elliott, Meng & Hall, 2012). Due to these reasons, an important part of the process is to understand customers' attitudes towards new technology (Lin & Chang, 2011).

To be able to understand the formation of customers' attitudes and behaviors in connection to new technology, academics have developed numerous theoretical models (Lin & Chang, 2011). According to Lin and Chang (2011), the four most common theories are the innovation diffusion theory (IDT), the theory of reasoned action (TRA), the technology acceptance model (TAM), and the theory of planned behavior (TPB). However, they also state that TAM is the most used and accepted model, therefore this model will be discussed more in detail below.

2.2.1 The technology acceptance model

The technology acceptance model, TAM, is originally developed and based on the theory of reasoned action (TRA) and is used to "tracing the impact of external factors in explaining internal beliefs, attitudes, and intentions" (Lin & Chang, 2011, p.425). According to Lin and Chang (2011), the TAM primary involves two factors that influence customers' attitudes and behavior, which are *perceived ease of use* and *perceived usefulness*. Firstly, customers' perceived ease of use measures "the degree to which an individual believes that using a particular system would be free of physical and mental efforts" (Lin & Chang, 2011, p. 427). Secondly, perceived usefulness is "the degree to which an individual believes that using a particular system would enhance his/her job performance" (Lin & Chang, 2011, p. 427), such as shopping (Park, Ha and Jeong, 2020). According to Weijters, Falk and Schillewaert (2007), the usefulness factor is connected to the utilitarian aspect of the shopping experience where the customers desire an easy and efficient visit. In accordance with the TAM, the degree of a customers' belief in those two factors decides his/her attitude toward the technology, which later on leads to the customer's intention to use (Weijters, Falk & Schillewaert, 2007). However, the TAM's primary concepts are not considered to fully reflect the impacts of external factors that possibly can affect the users' acceptance (Lin & Chang, 2011). Therefore, the TAM has been extended several times.

The TAM is a useful model in many retail contexts that are using SST, such as restaurants, banks and grocery stores (Park, Ha & Jeong, 2020). According to Park, Ha and Jeong (2020) the model is a favorable model to use when it comes to trying to explain different phenomenons, but it also has some limitations. For example, they explain that the TAM is considered to be too simple to be able to entirely explain a phenomenon. When it comes to research on technology in the past,

the ones that have been using TAM have mostly focused on the practical aspects of the technology, such as the usefulness and usability (Park, Ha & Jeong, 2020). However, the experiential and hedonic aspects of the technology have been neglected (Park, Ha & Jeong, 2020). Since the customer experience of technology often includes both utilitarian and hedonic aspects, the TAM have been considered to be inadequate when it comes to explaining customers' adoption of SST in contexts that involve hedonic aspects, such as fashion retail (Park, Ha & Jeong, 2020).

Due to those reasons, the TAM has been remade and extended several times. *Perceived risk* and *perceived control* are two additional factors that are found to also have an important role in understanding customers attitudes towards SST (Wang, Harris & Patterson, 2012). Other researchers have extended the TAM to involve more hedonic aspects of SST in the TAM, such as *enjoyment, aesthetic appeal and stimulation* (Park, Ha & Jeong, 2020). According to Wang, Harris and Patterson (2012), an individual is likely to have a more positive attitude toward SST if "it is perceived to be useful, easy to use, enjoyable, not risky and controllable" (p. 57).

New SST technology that is used in fashion stores is an important part of customers' perception of the atmosphere in stores since customers' shopping experiences not only depend on the practical aspects but also the hedonic aspects (Park, Ha & Jeong, 2020). Earlier research seems to have focused on the practical aspects the most and ignoring the hedonic aspects (Park, Ha & Jeong, 2020). According to Park, Ha and Jeong (2020), customers' use of technology in stores naturally leads to their judgment of the practical as well as hedonic aspects of the technology. In a fashion retail context, the practical aspects of the technology are connected to its functionality and ways to access this functionality for hedonic aspects such as enjoyment, aesthetics and stimulation (Park, Ha & Jeong, 2020).

Firstly, customers' perceived enjoyment off SST in a store is connected to "the degree to which a consumer's use of in-store SSTs is perceived to be fun and pleasant in its own right, separate from the fulfillment of her shopping goals" (Park, Ha & Jeong, 2020, p. 374). According to Park, Ha and Jeong (2020), this factor is one of the most vital hedonic aspects that have been found to influence customers' perceived enjoyment in many different sectors using technology. Therefore, this aspect has been incorporated into the TAM and tested by several researchers (Park, Ha & Jeong, 2020). Park, Ha and Jeong (2020) also mentioned that fashion retailers that are incorporating SST into their customers' shopping experience are enriching a pleasant shopping experience, which in turn lead to that their customers are developing a positive attitude toward SST technology.

Secondly, customers' perception of the technologies aesthetic appeal refers to "the extent to which a consumer perceives that SSTs in stores are visually appealing" (Park, Ha & Jeong, 2020, p. 374). This aspect is connected to the sensory value in customers' shopping experience (Park,

Ha & Jeong, 2020). The aesthetics of SST technology have an important role in the hedonic aspect of the shopping experience since customers seem to quickly determine if the aesthetic is visually attractive and pleasurable (Park, Ha & Jeong, 2020), which in the long term can influence customers attitude towards SST.

Finally, the amount of stimulation is connected to "product qualities that have the potential to offer new impressions, opportunities and insights, which are usually provided by novel, interesting and stimulating elements" (Park, Ha & Jeong, 2020, p. 374). In previous research about user experience and retail contexts, stimulation is found to be an vital hedonic factor that influences how customers react towards different objects (Park, Ha & Jeong, 2020). Park, Ha and Jeong (2020) also found that objects that are offering stimulation encourage positive feelings within customers since stimulation is a basic human need that people strive to fulfill. Due to the same reason, a product or service that offers simulation, and in that way affects customers' overall impression of the product or service positively, has a positive influence on customers' attitudinal responses (Park, Ha & Jeong, 2020).

Since the TAM is developed to understand customers' beliefs, attitudes and intentions towards technology (Weijters, Falk & Schillewaert, 2007), the model is considered to have an important role when answering the purposes of this research. We consider the original factors in the TAM, *perceived usefulness* and *perceived ease of use*, to be important to include in when executing this research since these factors are connected to customers' attitudes through the utilitarian aspect of the use of self-checkouts in fashion stores. However, since the original TAM model is considered by several researchers to not grasp all the aspects of the shopping experience (e.g Lin & Chang, 2011; Wang, Harris & Patterson, 2012), which not only consists of the utilitarian aspect but also the hedonic aspect, we will also include the extended varians of the TAM model. In this respect, we will include the factors that are connected to the hedonic aspect of the user's experience, which are *enjoyment, aesthetic appeal and stimulation*. Additionally, we will include the extension of the TAM model that includes the factors of *perceived risk* and *perceived control*, since these factors also are considered important to evaluate when you are aiming to understand which factors are influencing customers' attitudes towards SST (Wang, Harris & Patterson, 2012).

2.2.2 External factors

The external factors mentioned earlier, "often include individual differences, situational factors, and variables suggested by other theories" (Lin & Chang, 2011, p. 425). Previous research has found several situational factors that have an influence on customers attitudes towards SST (Lin & Chang, 2011). In earlier studies made by Dabholkar (1996) and Dabholkar and Bagozzi (2002), *perceived waiting time* was identified as one situational factor influencing customer attitudes. Waiting time refers to the length of the queue at the self-checkouts and is a situational factor that customers in general want to minimize (Weijters, Falk & Schillewaert, 2007). Since it

is found in earlier studies that perceived waiting time is affecting customers' attitudes, we believe that this factor is important to consider in relation to this research's purposes.

In the study made by Wang, Harris and Patterson (2012), two more situational factors could be identified. The first one is *perceived task complexity* which refers to "the number and the type of items being purchased" (Wang, Harris and Patterson, 2012, p. 67). The authors found that customers mostly want to use self-checkouts if the task is simple, for example, when the customer is only buying a few products. The second one is *companion influence* and refers to the influence of the company the customer is shopping with (Wang, Harris and Patterson, 2012). For example, older customers who are more likely to think that SST is too complicated, only use SST if they are with younger people who have a greater competence about how to use it (Wang, Harris and Patterson, 2012). Even if these two factors were not investigated in connection to customers' attitudes in the study made by Wang, Harris and Patterson (2012), it does not exclude that those situational factors have an important role influencing customers' overall experience of SST usage and therefore also influence customers' general attitude towards SST. In this respect, we believe that these two factors also are important to consider when exploring customers' attitudes towards self-scheouts in fashion stores.

When it comes to individual differences, previous research has found that it is an important factor influencing the TAM (Wang, Harris and Patterson, 2012). According to Wang, Harris and Patterson (2012), individual differences can be divided into two categories, *demographic factors* and *psychographic factors*. The demographic factors that have been found in previous research to influence customers' attitudes are *age, gender, education, and income* (Wang, Harris & Patterson, 2012). In this research, demographic factors will only include age and gender since the other two factors, education and income, are considered irrelevant to answer the purposes of the research. The psychographic factors that have been found to influence customers' attitudes are *self-efficacy, computer anxiety,* and *personal innovativeness* (Lin & Chang, 2011). Firstly, the authors explain that self-efficacy includes customers' perception of their own ability to implement a behavior and their motivation to do so. Secondly, they express that computer anxiety involves the fear and concern customers feel when thinking about, or actually using, technology. Finally, personal innovativeness refers to customers' willingness to try new technology (Lin & Chang, 2011). Other researchers have also found that customers' need for *human interaction* are an important psychographic factor influencing customers attitudes towards SST (Dabholkar & Bagozzi, 2002; Dabholkar, 1996; Wang, Harris & Patterson, 2012). All the psychological factors mentioned above will be taken into consideration when answering the purposes of this research since they are relevant when exploring customers' attitudes in connection to technology.

Since individual differences impact customers' willingness to use technology, the individual differences should be taken into account when researching about customers' attitude and

behavior in connection to SST (Lin & Chang, 2011). However, since customers both can have favorable and unfavorable attitudes towards technology, the factors mentioned above are not enough to explain individual differences in customers' technology adoption (Lin & Chang, 2011). Therefore, *technology readiness* (TR), as a part of an individual characteristic, was developed.

2.2.2.1 Technology readiness

Technology readiness (TR) involves customers' ability to use new technology in order to reach goals in both their home life and work life (Lin & Chang, 2011). According to Lin and Chang (2011), the structure of TR includes "an overall state of mind resulting from a gestalt of mental enablers and inhibitors that collectively determine a person's predisposition toward technologies" (p.428). This structure involves four concepts, which are *optimism, innovativeness, discomfort and insecurity* (Lin & Chang, 2011). Firstly, optimism refers to a customer with a general positive feeling towards technology that sees the benefits with the use of it, such as the control, flexibility and efficiency (Lin & Chang, 2011). Secondly, innovativeness includes a customer's tendency to be an opinion leader when it comes to technology (Lin & Chang, 2011). According to Park, Ha and Jeong (2020), individuals that are more innovative tend to have a higher confidence and desire to try new ideas, such as new technology. In addition, the researchers explain that innovative individuals seem to better handle uncertainty and impression. Earlier research has also found that optimistic and innovative individuals perceive more hedonic value by using new technology since they perceive the use as joyful and exciting (Park, Ha & Jeong, 2020). Therefore, individuals that are optimistic and innovative would perceive fashion stores' use of SST such as self-checkouts as entertaining and stimulating (Park, Ha & Jeong, 2020).

Thirdly, discomfort is when customers are feeling overwhelmed by using technology because of that they have experienced that they lose control over it (Lin & Chang, 2011). Lastly, insecurity refers to customers' distrust and skepticism about the technology's ability to function properly (Lin & Chang, 2011). According to Park, Ha and Jeong (2020), individuals with a high degree of the negative factors of TR are more likely to have negative views towards the use of technology. In addition, those individuals tend to view new technology as too complex and unsecure and since the individuals are feeling fear and anxiety, they will become even more resistant to use the technology, which will result in further negative perceptions of the technology (Park, Ha & Jeong, 2020). If the technology in stores for some reason would not work, individuals with high degrees of the negative TR factors will have a more difficult time coping with it, which will make them appreciate the hedonic factors less (Park, Ha & Jeong, 2020).

As probably understood, the first two factors of TR, optimism and innovativeness, have a positive influence on TR and encourage customers to have a positive attitude towards technology (Park, Ha & Jeong, 2020). In contrast, the last two factors, discomfort and insecurity, have a negative influence on TR and make customers resistant towards the use of technology (Park, Ha

& Jeong, 2020). Since not all customers are ready to use technology, several researchers point out that TR should be included in models connected to technology acceptance and SST (Lin & Chang, 2011). In addition, in sectors that are rapidly changing and that are growing in both spending power and technology use, such as the fashion retail sector, a greater understanding of consumer characteristics in relation to technology is vital, which is where the TR becomes important (Park, Ha, Jeong, 2020).

Due to the reasons mentioned above, the TAM is suggested by some researchers to include TR and is then re-named to technology readiness and acceptance model, TRAM (Park, Ha & Jeong, 2020). The TRAM suggests that TR should be a key factor in the TAM as peoples' TR have an crucial impact on how customers perceive technology through its usefulness and ease of use (Park, Ha & Jeong, 2020). However, researchers seem to be in a disagreement whether TR should be considered as one variable including all the four sub-factors of TR or if these factors should be considered to be separate due to inconsistent results regarding the four factors influenced in previous studies (Park, Ha & Jeong, 2020).

Even if some factors of TR are partly similar to some factors in the psychographic factors within the concept of individual differences, TR will be explored in this research since the term is argued by several researchers (e.g. Park, Ha & Jeong, 2020; Lin & Chang, 2011) to have an important impact on customers' acceptance of new technology. Since we are exploring customers' attitudes, it is important for us to understand what individual differences are influencing the formation of attitudes. Additionally, in our research, TR will involve all four sub-factors since we believe that they all are interesting to test in relation to our phenomenon and environmental context.

2.3 Customer loyalty

Since customer loyalty is one of the main subjects of this study, it has been considered relevant to include previous studies done on customer loyalty and customer loyalty in relation to SST. This is because this study is investigating whether customers' attitudes towards self-checkouts can affect their loyalty to the fashion store. Therefore, it is considered worthwhile to examine previous research on customer loyalty in order to gain an understanding of what it means and to be able to support the results of this research.

Yuen and Chan (2010) argue that "loyalty is an attitude" (p. 225) which means that the customer creates positive feelings for a company or brand and leads to the customer being willing to repurchase goods from the brand again. This is consistent with Kincaid's (2003) definition of customer loyalty which is defined as "... a consumer behavior, built on positive experience and value, which leads to buying products/services, even when that may not appear to be the most rational decision" (p. 10). In today's business environment, competition has become significantly larger and more challenging, and it has become even more important for companies and

organizations to gain a large loyal crowd of customers in order for the company's success to continue (Ayodeji & Rjoub, 2020). Additionally, a loyal customer can be defined by the fact that he or she does not betray their loyal brand in the first place and does not allow themselves to get distracted by other companies' offers and deals (Glinskienė, Kvedaraitė & Kvedaras, 2010; Ayodeji & Rjoub, 2020).

For companies to achieve a competitive advantage it is beneficial to develop a strong customer loyalty (Rahman et al., 2022). Rahman et al. (2022) state that there are two different approaches of customer loyalty, and these are behavioral and attitude approaches. The behavioral approach means that "… loyal customers are willing to make repeated purchases of the same product/service or additional products/services from the same company … (Rahman et al., 2022, p. 59). The attitude approach means that customers "… are willing to provide recommendations to others, as well as refusing to buy from competitors (Rahman et al., 2022, p. 59). In this study Rahman et al. (2022) argue that "customer loyalty is a result of customers satisfaction" (p.59). They mean that if the customer feels pleased with the experience they have gained through the product or service, this will result in the customer choosing this product or service as their first choice the next time they are going to buy it again (Rahman et al. 2022).

Ayodeji and Rjoub (2020) describes customer loyalty as "… the desire of customers to have a long-term relationship with an organization" (p.28). Yuen and Chan (2010) explain that a loyal customer is a customer who repurchases the same brand for a long time and a loyal customer is also someone who is unconcerned about potential price upturns of the products that the customer buys. Customer loyalty is also related to positive word-of-mouth as customers who have had a positive experience of a brand or company tend to recommend the brand to other people around them (Yuen & Chan, 2010).

2.3.1 Customer loyalty in relation to SST

Shahid Iqbal, Hassan and Habibah (2018) explains that previous literature on SST in relation to customer loyalty proves that SST contributes to increased loyalty and customer satisfaction. This is also agreed by Sharma, Ueno and Kingsshott (2021) who states that SST comes with a variety of advantages for firms such as customers' increased loyalty to the company. This has contributed to companies finding it easier to reach new customer groups (Sharma, Ueno & Kingsshott, 2021). Previous studies confirm that how easy SST is to use will affect how pleased a customer will be with a product or service (Ayodeji & Rjoub, 2020; Wang, Harris, & Patterson, 2013). When the customer is satisfied with the ease of use of the technology it will contribute to the customer considering repurchasing the product or service again and therefore also becoming loyal to that company (Ayodeji & Rjoub, 2020; Wang, Harris, & Patterson, 2013). When a customer evaluates their experience of the ease of use of SST their evaluation can result in that the customer creates strong feelings towards the SST, and if the customer is satisfied with the technology, it will lead to that he or she becomes loyal to that service provider (Ayodeji & Rjoub, 2020; Hawang & Kim, 2007; Lim, Kum & Lee, 2015). Robertson, McDonald, Leckie and

McQuilken (2016) argue that the level of contentment that customers feel when using SST can contribute to an increase in the customer's trust to the company, which can lead to them deciding to maintain a long-term relationship with the company.

Even though SST can contribute with a lot of advantages for companies that result in increased customer loyalty, there are also some disadvantages that can affect the loyalty to the company negatively. Sharma, Ueno and Kingsshott (2021) explains that the use of SST within retail stores can result in less personal and social contact between the customer and the staff. This can affect the customers' loyalty to the store negatively as they do not get that personal interaction as they do when they pay at a staffed cash register (Sharma, Ueno & Kingsshott, 2021). This is in line with what Elliot, Meng and Hall (2012) explain that there is a potential risk of reduced customer loyalty among companies that implement SST. This is because self-service contributes to a reduced interaction and social connection between the customer and the staff, which can lead to a negative impact on customer loyalty to the company (Elliot, Meng & Hall, 2012). Elliot, Meng and Hall (2012) also explain that it is even more important for companies to maintain the personal relationship and social bond between the customers and the staff as digitalisation takes up more and more space in the store to maintain customer loyalty.

One model that appeared when examining previous research is the *Service Profit Chain*, which is used to explore loyalty towards the use of SST (Shahid Iqbal, Hassan & Habibah, 2018). This model shows how important it is for companies to have a good relationship between their customers and employees in order to increase customer loyalty and customer satisfaction. According to the model, increased customer loyalty and satisfaction will contribute to company growth and increased profitability (Shahid Iqbal, Hassan & Habibah, 2018).

However, this model will not be applied in this research. The reason why we did not choose to apply to the Service Profit Chain model is because that model further examines the relationship between the customer and the employees. Since our study is made through a customer perspective and not an employee perspective, this model is not considered relevant to apply in this research. Instead, the authors have chosen to develop their own conceptual model which they will use as a guide to get answers to the research questions. Instead, customer loyalty will be examined through the two approaches that Rahman et al. (2022) highlights when examining customer loyalty, and these are the behavioral and the attitudinal approach. The description of the self-made conceptual model that will be applied in this research is described more in detail in the next part of this chapter.

2.4 Theoretical model

Our theoretical model (Figure 1) is based on the theoretical findings, models and aspects presented in the literature review earlier in this chapter. As mentioned earlier, we have been able to identify some research gaps such as customers' attitudes towards the use of self-checkouts in

connection to shopping contexts with an experiential environment as well as how the use of self-checkouts in those contexts influence customers loyalty towards the store. In addition, it is interesting to explore if there are any other factors, besides those already found in earlier literature, that affect customers formation of attitudes in an experiential shopping environment. Lastly, since the use of self-checkouts is relatively new in Sweden, it is important to investigate what attitudes and opinions they have towards the new phenomenon to enable stores to create successful self-checkout implementations. Due to these reasons, there is a need to fill these knowledge gaps by exploring if there are more factors that are influencing customers' attitudes and loyalty.

Our theoretical model includes all concepts from the literature review that we believe are relevant to be able to answer the purposes of this research. Firstly, our model includes most of the factors mentioned in the literature review that are connected to individual differences, such as TR, demographic factors, and psychological factors, as well as all the sub-factors connected to these concepts (Wang, Harris & Patterson, 2012; Lin & Chang, 2011). We want to include individual differences in our model since it is found by previous research that these factors have an impact on customer attitudes (Wang, Harris & Patterson, 2012; Lin & Chang, 2011) and since it helps us to understand if and how individual differences affect individuals' perception of the self-checkouts characteristics. Secondly, our model includes all characteristics of self-checkouts mentioned in the literature review that are both connected to the utilitarian as well as hedonic aspects. For example, we want to include the factors in the TAM, perceived ease of use and perceived usefulness, that are exploring customer attitudes from an utilitarian aspect since it gives us a perception about if the practical intentions with the self-checkout is fulfilled. However, our model also includes the extended variations of the TAM since some of those factors are connected to the characteristic aspects of the self-checkout, perceived risk and perceived control, and some are connected to the hedonic aspects, enjoyment, aesthetics and stimulation.

Thirdly, we believe it is important to include the situational factors in the model since it is found by previous research that different factors in a specific situation has a large impact on customers' formation of an attitude (Dabholkar, 1996; Dabholkar & Bagozzi, 2002; Wang, Harris & Patterson, 2012). Fourthly, attitude, and its definition by Weijters, Falk and Schillewaert (2007) to be either positive or negative, is a part of the model since this is the main concept to explore in our research. Additionally, all previously mentioned concepts and factors are found by earlier research to influence customers' attitudes to become either positive or negative, therefore we want to explore if this also is the case in the specific shopping environment of a Swedish fashion store. Lastly, our model includes the two different approaches, behavioral and attitudinal (Rahman et al., 2022), within customer loyalty since we want to investigate if the attitude towards self-checkouts is a factor that is affecting customers loyalty in a positive or negative way towards the store or brand. Additionally, we want to investigate if the loyalty that is created (if

created) by customers' attitudes towards self-checkouts, is connected to either the behavioral and/or the attitudinal approach. By using this framework we hope to answer the research purposes to identify what factors influence a customer's formation of an attitude towards the implementation of self-checkouts in an experiential context and if the implementation of self-checkouts in Swedish fashion stores is a factor that influences a customer's loyalty towards a store.

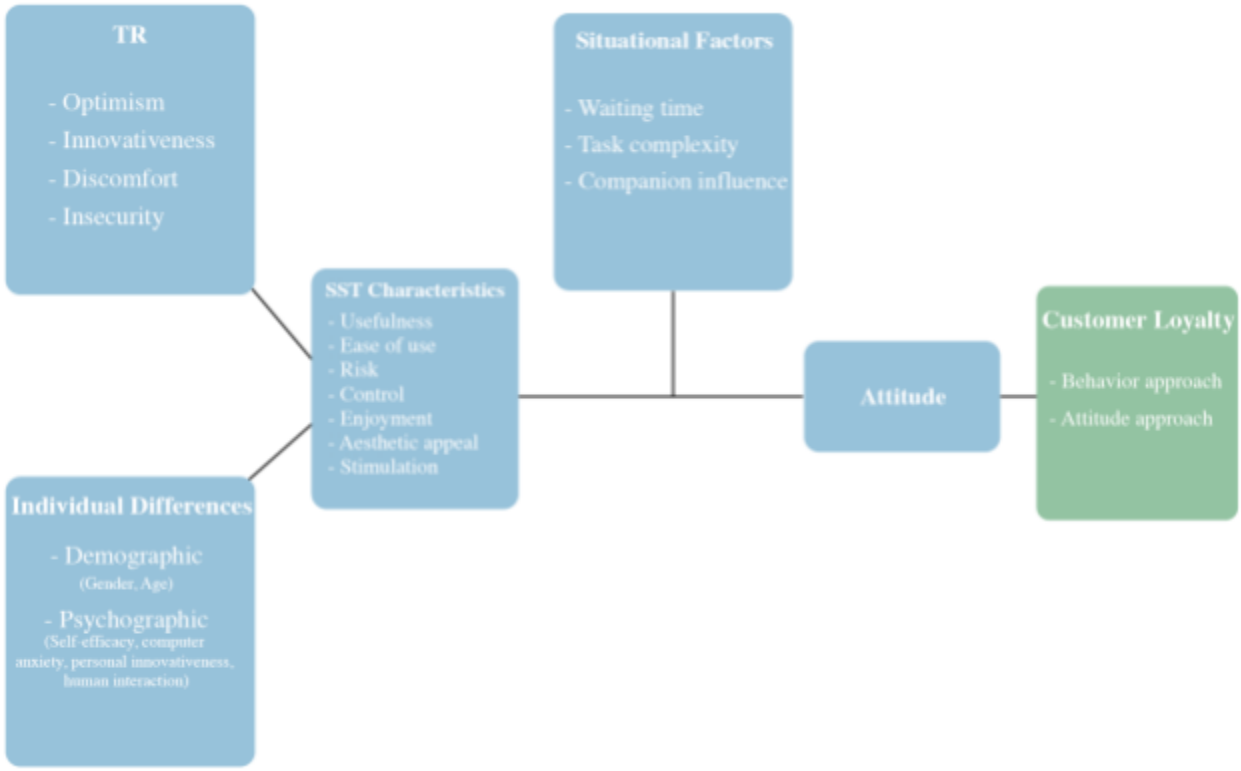

Figure 1, *Description of theoretical framework.*

3. Methodology

This chapter describes the methodological choices we have made for this research. In this section, we will clearly explain our research philosophy, research approach, research strategy and design, data collection methods, sampling, quality of research and limitations, and finally our ethical considerations.

3.1 Research philosophy

According to Easterby-Smith, Thorpe and Jackson (2015), research philosophy refers to "a system of beliefs and assumptions about the development of knowledge" (p. 124). The authors also point out that it is important to reflect about which philosophical position a study has in order to make it more simple to understand the chosen research design, the data collection and how it is comprehended. There are two types of research assumptions that are separating between the different research philosophies. The first one is called *ontology* and refers to the assumption individuals have about the nature of reality. The second one is called *epistemology* and is connected to individuals' assumption about what knowledge that is considered to be acceptable and valid as well as how this knowledge should be communicated to other people (Easterby-Smith, Thorpe & Jackson, 2015).

When it comes to social science, there are three main ontology positions: *realism, relativism* and *nominalism* (Easterby-Smith, Thorpe & Jackson, 2015). The most relevant in our study, is relativism, which refers to the assumption that the world exists of many truths and that facts depend on the perspective of the individual observing the reality (Easterby-Smith, Thorpe & Jackson, 2015). In other words, the individual's perspective of reality depends on factors such as status, time and context which allows different perspectives of reality (Easterby-Smith, Thorpe & Jackson, 2015). The ontological positioning in our research is relativism as we believe that customers' attitudes, experiences and loyalty vary with regards to context, social norms and time. In addition, our research is collecting empirical data from individuals with different backgrounds such as age, gender and occupation, which influence their experience and attitude towards self-checkouts, resulting in their loyalty. Lastly, since the context we are exploring involves several customers with different experiences and perceptions about self-checkouts in fashion stores, we believe that there will be many 'truths' to take into consideration when answering the research purpose. Therefore, the relativist position is considered to be the most appropriate ontology position.

Moreover, there are two kinds of epistemology positions: *positivism* and *social constructionism* (Easterby-Smith, Thorpe & Jackson, 2015). In the matter of our research, the epistemology positioning is social constructionism. Shortly described, social constructionism is when you believe that there are many aspects of societal reality and that those are "determined by people rather than by objective and external factors" (Easterby-Smith, Thorpe & Jackson, 2015, p.52).

This means that humans should not measure facts but instead explore different patterns in social behavior as well as different meanings of people's experiences. Since we are trying to understand our phenomenon connected to customer attitudes and loyalty through exploring customers' experiences and perceptions of self-checkouts in fashion stores, we believed this position was most suitable. According to Easterby-Smith, Thorpe and Jackson (2015), the social constructionism positioning is the most appropriate one when you are trying to understand what people are thinking and feeling, both individually and collectively, as well as how they are communicating it to each other. Since the purpose of this research is to explore individuals' thoughts and feelings and what underlying factors there are that affect them, the social constructionism position was considered most suitable. In addition, as we were more interested in the depth and width of factors influencing customers' attitudes and loyalty, the social constructionism positioning was considered more suitable than the positivist positioning.

3.2 Research approach

Under this section, we will explain how our theory and study are connected to one another. Saunders, Lewis and Thornhill (2019) present three kinds of approaches on how to relate theory and research. Firstly, the *deductive* approach is when "... the conclusion is derived logically from a set of premises ..." (Saunders, Lewis & Thornhill, 2019, p.144). In other words, the research's authors are expanding already existing theories by reviewing previous literature and then collecting data to test the theory (Saunders, Lewis & Thornhill, 2019). Secondly, the *inductive* approach is used to fill research gaps and develop theories by using the findings from the study (Saunders, Lewis & Thornhill, 2019). Lastly, the *abductive* approach is a mix between the other two approaches and refers to "collecting data to explore a phenomenon, identify themes and explain patterns, to generate a new or modify an existing theory ..." (Saunders, Lewis & Thornhill, 2019, p.145).

With the three different approaches in mind, we saw several possible ways to approach this research. Firstly, the nature of the chosen phenomenon made us believe that an *inductive* approach was the most suitable approach to choose. However, when we realized the extensive amount of literature and research on our phenomenon, as discussed in the previous chapter, we came to the conclusion that those theories and research findings could help us understand and formulate our theoretical framework. The realization that the existing theories about self-checkouts in other retail contexts could be relevant in our chosen context, made us think that the *deductive* approach was even more suitable to use. In the end, we decided that it would be most suitable to combine the advantages with both the inductive approach and the deductive approach, which resulted in us choosing to apply an *abductive* approach. Since the abductive approach could be considered to be a combination of the other two approaches (Saunders, Lewis & Thornhill, 2019), the interrelation between the inductive and deductive processes in the research will be discussed in the following sections to explain the abductive course of action.

We have been applying a deductive approach when it comes to using already existing theories in order to understand our chosen phenomenon. We have, deductively, focused on the main concepts in connection to our research on SST and fashion stores, by using theories that can facilitate the understanding of factors influencing customers' attitudes (Weijters, Falk & Schillewaert, 2007; Lin & Chang, 2011; Wang, Harris & Patterson, 2012; Park, Ha & Jeong, 2020; Dabholkar, 1996) towards self-checkouts as well as customers' loyalty towards the stores using self-checkouts (Rahman et al., 2022). We planned to benefit from using a deductive approach when writing the literature review in order to more easily understand the already existing theory connected to our phenomenon. The theories, models, and factors that were found in previous literature were then, for example, used to formulate interview questions to investigate if the participants thought that those were relevant in the fashion context as well. Furthermore, relevant factors found by previous literature have been tested as potential factors influencing customers' attitudes and loyalty in our research context of self-checkouts in fashion stores, which is also in line with the deductive approach.

Even if previous literature provides a large amount of relevant factors to investigate, those have mainly been investigated in a different context and with a quantitative research design. Therefore, there is a reason to believe that there are more factors to be revealed that are influencing customers' attitudes and loyalty in a different as well as more hedonic contexts, such as a fashion store context. For this reason, a degree of inductive approach has been used by applying theoretical triangulation (Patton, 1990) on the theories discussed in the theoretical framework chapter. We also used the inductive approach when formulating interview questions to explore if there were any other factors in the fashion context that influence customer attitudes and loyalty towards self-checkouts.

There are some differences in deductive, inductive and abductive reasoning. As mentioned before, Saunders, Lewis and Thornhill (2019) explain that the conclusion of a research is based on a set of premises, which means that if the premises is true, the conclusion has to be true. Explained in another way by Bryman and Bell (2015), deductive reasoning is about testing hypotheses, which we do by testing if the factors found in earlier research also are relevant in the fashion store context. However, due to the nature of our phenomenon, our study is also dependent on the collection and analysis of empirical data as well as our qualitative research design, which is more in line with inductive reasoning. As described by Bryman and Bell (2015) and Saunders, Lewis and Thornhill (2019), the abductive approach is a mix of processes in the other two approaches where the inductive approach stands for the collection of qualitative data as a source for inspiration to new theoretical ideas and where the deductive approach stands for the review of the already existing knowledge and theories. Since our study involves both inductive and deductive processes, the abductive approach was considered the most suitable to use.

3.3 Research strategy

According to Bell, Bryman, and Harley (2019), qualitative and quantitative research strategies are the two main strategies to use when conducting business research. When using a qualitative research strategy, the researcher collects data through testing theories and gathering non-numeric data (Bell, Bryman & Harley, 2019). Non-numeric data includes visual documents, text, words, and video and has the purpose of creating a more in-depth meaning to a particular topic (Bell, Bryman & Harley, 2019). When we were to choose a strategy for this research, it quickly became clear that we wanted to apply a qualitative strategy as the subject we wanted to investigate lacked a broader theoretical understanding and since we were interested in getting a deeper understanding of the topics. This is also in line with the abductive approach that is applied for this research as this approach both consist of already existing theories but also new findings.

As previously mentioned, it has been stated that much previous research has been done in the field of customer attitudes towards SST in other retail contexts, such as grocery stores. However, we can not determine whether these attitudes also apply in a fashion context before the area has been explored more in depth. Therefore, we chose to apply a qualitative strategy to investigate these areas in a fashion context as we considered that this would provide us with rich and in-depth data. With the use of a semi-structured interview method, we were able to access more detailed answers to our research purpose that a quantitative strategy was not considered to give us.

A qualitative strategy is considered to be more unstructured and therefore allows the interviewees to speak more freely and spontaneously during the interview (Bell, Bryman & Harley, 2019). This is also a reason for why a qualitative strategy was the most suitable to use when conducting this research as this gave the opportunity for the participants to speak more freely around the subject which provided us with rich and broad data on the subject. As qualitative research invites for more spontaneity this gave us as researchers a better opportunity to adapt to the participant when interacting with them. By using a qualitative strategy we were enabled to be more flexible when conducting the data and this created the opportunity to gather a deeper insight into the attitudes of customers on the implementation of self-checkouts in Swedish fashion stores and whether this technology can have any impact on customer loyalty to the fashion store.

3.4 Research design

Saunders, Lewis and Thornhill (2019) states that research design is the complete plan of how the research will be accomplished. For this study an exploratory research design was selected as it according to Saunders, Lewis and Thornhill (2019) can be "... particularly useful if you wish to clarify your understanding of an issue, problem or phenomenon, such as if you are unsure of its precise nature" (p. 187). As our research purpose has not been explored in more depth before this

required a research design that would help us to clarify this phenomenon. That is why an exploratory design was considered to be most advantageous to use in order for us to create a deeper understanding of our research topic. As our intention was to explore *what* factors influence customers attitudes towards the implementation of self-checkouts in Swedish fashion stores this goes in line with Saunders, Lewis, and Thornhills (2019) explanation that exploratory research questions are more likely to begin the question with *"What"* or *"How"*.

Due to that an exploratory research design allows for more open and free questions (Saunders, Lewis & Thornhill, 2019), we could easily gain more awareness and new information about our research topic. Saunders, Lewis, and Thornhills (2019) describe that the questions that are asked to collect the data that is needed to investigate an issue or phenomenon also usually begin with the words *"What"* or *"How"*. When we collected the data to investigate our issue, the majority of the questions were formulated with *"how"* and *"what"* which matches the description of exploratory questions (see appendix 1). The reason why we chose to formulate our interview questions in an exploratory way was to be able to collect as broad and useful data as possible. The formulation of the questions helped the participants to talk freely and broadly about the research topic, which contributed to that we were able to collect a large amount of data that was of value to get answers to our research purpose. A more detailed description of the interview questions are described in section 3.5.4 (Formulation of questions).

3.5 Data collection

In this part we will discuss the chosen data collection methods. For this research, both primary and secondary data has been collected. These types of data will be explained in more detail below.

3.5.1 Primary data

To get a clear answer to the purpose of this research, it was a matter of course that we wanted to collect primary data. According to Easterby-Smith, Thorpe and Jackson (2015) primary data is "new information that is collected directly by the researcher" (p. 339). Data that is seen to be primary can for example be collected through doing interviews, observations, or questionnaires (Saunders, Lewis & Thornhill, 2019).

We first investigated whether we should make observations in different fashion stores to see how customers behave when they would use a self-checkout to pay for their clothes. We then thought about making a so-called "complete observation" where we as researchers would have avoided all contact with the area that were to be researched (Easterby-Smith, Thorpe & Jackson, 2015). In this case it would have been to observe how customers use self-checkouts in fashion stores. We then would have observed this from a distance in the store. However, we quickly realized that this would not give us all the in-depth data we needed to be able to get answers to the

purpose of this research. This is due to the fact that it is very difficult or rather almost impossible to observe attitudes and loyalty.

Instead we decided to conduct interviews, as we considered that this would give us the most detailed and broad information. We thought about whether these interviews should be conducted in the fashion stores that have self-checkouts and then ask customers on the way out of the store who just used the self-checkout if they would be willing to participate in an interview. But we quickly realized that these people would probably have the time to stay and talk for about half an hour about such a specific thing as self-checkouts in fashion stores. We also considered that it could have been a disadvantage to ask customers for an interview after they had finished their shopping trip in the store as they probably intended to move on to the next store or the next errands after this, which could then make them annoyed if we stopped them from doing this.

Instead, we began to consider whether semi-structured interviews with carefully selected participants would give us the most valuable and detailed data. Therefore, we finally came to the conclusion that the most advantageous way to collect the data would be by conducting semi-structured interviews. By conducting semi-structured interviews, we would be able to gather rich data that can give a clear and distinct answer to the purpose of this research.

3.5.2 Semi-structured interviews

Semi-structured interviews have the purpose of gaining in-depth insights into a topic from the participants perspective (Bell, Bryman & Harley, 2019). This data collection method is considered to be more flexible as the researcher follows an interview guide that includes a list of themes with some key questions that are to be answered (Saunders, Lewis & Thornhill, 2019). However, the questions do not have to be asked in the same order due to their unstructured approach and the interviewer can also add questions to get clearer and deeper answers to their questions (Bell, Bryman & Harley, 2019).

Because of the exploratory nature of this research, interviews were considered to be the most relevant to use when collecting primary data as interviews are seen to be more flexible and are advantageous to use for collecting rich data (Saunders, Lewis & Thornhill, 2019). Semi-structured interviews are also a favorable choice based on our abductive approach as we have collected both already existing theory (which is more structured) and also collected new data through our interviews that do not exist in previous theory (which is considered to be more unstructured). According to Saunders, Lewis & Thornhill (2019) semi-structured interviews are advantageous to use when conducting exploratory research to obtain important background material and information. As this research aims to gain a deeper understanding of the research issues from a customer perspective, semi-structured interviews were the most appropriate type of interview method to use.

This allowed us to gain a deeper understanding of the participants' attitudes of self-checkouts in Swedish fashion stores due to the fact that the participants could speak more freely during the interviews. It also allowed us to adapt our questions according to what the participants answered and permitted us to either exclude or add questions based on their answers. If we felt that the participants did not give us sufficiently developed answers, the semi-structured interview method allowed us to ask follow-up questions so that we could get a clearer and more in-depth answer to the questions. This meant that at the end of the data collection we had received broad and valuable data that gave us a favorable opportunity to be able to give a clear and in-depth answer to our research purpose.

3.5.3 Interview guide

After the literature review and the theoretical framework were completed, an interview guide was created based on these parts. The questions in the interview guide have also been formulated in such a way that the answers from the participants would provide relevant information to be able to answer our research questions. The interview guide served as a tool for the interviewers to be able to guide us in a simple and flexible way through the topics that were of importance for this research. The questions were asked with an open structure so that the participants could answer on their own terms and to get as detailed answers as possible. However, some of the questions were linked to theory in order to be able to investigate whether the theory that applies in other retail contexts also applied in a fashion context.

Below is an illustration of how our interview guide has been designed (see table 1). Here, the questions have been divided into seven different categories for it to be easier for us to separate the answers that we received from the participants to the different questions. In the right-hand column of the table, there is a description belonging to each category that describes the purpose of the questions and why they were asked to the participants. To see all questions that were included in the interview guide in detail please see (appendix 1).

Table 1, *Description of interview questions*.

Concepts	Interview questions	Reasoning
General questions	1-9, 30	These questions were asked to get personal information about the respondent that was of value for the researchers to know. These questions were also asked to get general information about the respondent's relation to fashion stores and their overall feelings and attitudes towards technology.
Self-service technology	10-13	In order to get an understanding about the respondent's relation to technology and their general attitudes towards self-checkouts these questions were asked.
TR	14	This question was asked to get to know if the respondents would be comfortable with using self-checkouts in fashion stores.
Individual differences	15	This question was asked to the respondents to get their views on how they think that they would have handled a self-checkout.
SST characteristics	16-20	The purpose of these questions was to gain an understanding of the participants' attitudes towards self-checkouts in fashion stores and also to understand what they considered to be the biggest differences between self-checkouts and regular staffed checkouts.
Situational factors	21-23	Here we wanted to get an insight into which situational factors the participants considered influenced them to use or not to use a self-checkout in a fashion store.
Customer loyalty	24-29	These questions were asked to get an insight into how the implementation of self-checkouts in fashion stores can affect respondents' loyalty to the store.

3.5.4 Formulation of questions

In this section, we will discuss our thoughts behind our choice of questions and how these questions impact the answers to our research purpose. The formulation of the research questions is an important part of the research process to discuss in order to increase credibility and trustworthiness of the study through exposing how we investigated the primary concepts of this research, which is customer attitudes and customer loyalty. In our research, the semi structured interviews consisted of questions that were carefully chosen and purposely formulated to answer the purpose of this study by using our theoretical model. With our abductive approach in mind, we formulated questions that could bridge the gap between the theory and our collected data. Due to the abductive approach, our questions did not only have to test the parts in our theoretical framework, but also the unknown factors (See appendix 1).

In order to test, and possibly expand, the theories and models related to research on SST in connection to customer attitudes and customer loyalty, questions related to the factors influencing these two concepts were formulated to understand the participants' thoughts and experiences on self-checkouts in fashion stores. As an example, we used the factors in the TAM, such as perceived usefulness and perceived ease of use (Lin & Chang, 2011), to formulate

questions related to the utilitarian aspects of the shopping experience, such as *"Do you think that this type of payment method would have facilitated your shopping in a fashion store in any way? Why/why not?"*.

To explore if there are any additional factors in the fashion store context that are influencing customers' attitudes, we decided to also ask wider and more open questions. In this way, the interviewees were able to discuss and describe their own thoughts more freely, which created an opportunity for us to identify new factors that are affecting customers' attitudes towards the use of self-checkouts in fashion stores. For example, we asked questions like *"After watching the movie, what are your spontaneous thoughts about this type of payment method?"* and *"Do you have anything else you want to add about the topic that we have not been asking about?*.

Finally, in order to gather as rich data as possible, we asked the participants to elaborate on interesting topics and thoughts that were relevant for answering the purpose of the research. As an example, we asked questions like *"would you like to develop your answer further?"*. By doing this, we were also able to make the participant answer the question in a more focused way, which prevents misunderstandings. However, we were careful to not overuse this kind of questions since that can make the participants feel uncomfortable if they are not having anything more to say.

3.5.5 Sampling

Once we had decided that the data collection would be conducted through semi-structured interviews, we began to think about what type of individuals we thought would be most appropriate to interview in order to get as in-depth answers as possible. From the very beginning, we were determined that we wanted to investigate this phenomenon based on a broad target group to get as many perspectives as possible on this topic. With this in mind, we considered that a purposive sampling strategy would be the most favorable to use when selecting the participants. According to Patton (2014), the main differences between sampling approach in qualitative and quantitative research is that sampling in qualitative research is often based on purposeful or purposive sampling, while quantitative research often is based on non-probability sampling. To clarify, the sample in quantitative research is usually selected randomly and is often done on a larger part of the population. Meanwhile, in qualitative research the sampling is often done on a smaller sample size and is used to collect rich and broad data (Patton, 2014). As this research applies a qualitative research strategy, a purposive sampling method was considered relevant to use when selecting the participants for the data collection.

According to Patton (2014), a large diversity of participants would contribute to a large selection of opinions and insights. Therefore, we tried to get as much variation in the selection of the participants as possible by being careful to have an even distribution between genders and ages. We also wanted the participants to have a slightly different background so that we could get as

broad insights and opinions as possible on the subject. However, since this research is intended to focus on customer attitudes towards the implementation of self-checkouts in Swedish fashion stores, it was of the greatest relevance to choose to interview people who have Swedish citizenship and who usually shop in Swedish fashion stores.

Since we could see in previous research that a lot of focus had been placed on examining the younger generation's attitudes and thoughts about SST in fashion stores, we considered it interesting to also get an insight into the older generation's attitude to this topic. Therefore, we decided that the target group for this research would include both younger people and older people in order to gain a greater holistic perspective on the research purpose. To begin with, we discussed about dividing the interviewees into three different groups. A younger group, a middle-aged group, and an older group of participants. However, we quickly realized that it would be difficult to get hold of a greater number of people who are part of the older participant group, due to that they were less willing to participate in an interview where the main area to be discussed was technology and digitization. Therefore, we started thinking about whether we should focus on a single large customer group with mixed ages instead as we were still interested in having a large variety of ages and genders to see the differences and similarities in their attitudes.

We then began searching for people who wanted to participate in an interview. After much searching for suitable participants, we were able to determine that the final selection could be divided into three different customer groups anyway. The participants were mainly found through our school and job networks. However, due to difficulties in finding older participants and lack of time, these were chosen within the family remnant. The three customer groups resulted in one group with younger participants between 20-35 years, one with middle-aged participants between 50-60 years and one with older participants between 70-80 years. However, due to difficulties in finding older people who wanted to participate, only three participants are included in the older customer group, which makes it difficult to draw clear and strong conclusions based on that older customer group. Thus, we still felt that despite the low number of participants in the older group, it was worthwhile to get their insight into how they view the implementation of self-checkouts in fashion stores. Due to lack of time, we were unable to find any participants between the ages of 35-50 and 60-70. Nevertheless, we were able to determine that we could still get a clear and valuable answer to our research purpose even though the age distribution was not quite as varied as we had expected.

Unfortunately, the gender distribution did not manage to be completely even as the final group of participants included more women than men. The final sample included 12 women and 7 men. However, we still considered that we could obtain valuable data from the existing group of participants despite the uneven number of men and women and the inequality within the ages. The final sample of participants are presented in a table further down in this chapter (see table 2).

3.5.5.1 Participant selection criteria

When we were selecting the participants, there were three criteria that needed to be met for the participant to be included in the sample. Firstly, it was a requirement that the participant should have shopped in a physical fashion store during the last year as we considered it important that the person in question should know how a clothing store is structured and that they should have experienced paying at a checkout in a clothing store quite recently. This was considered important as we wanted the participants to have experience of how a payment process usually works in a fashion store so that they could speak in an unhindered way about their previous experience of paying in a fashion store.

However, there was no requirement that the participants would have used a self-checkout earlier as we already knew that self-checkouts had not been implemented in Swedish fashion stores for very long. Therefore, we could not demand that the participants would have experienced paying at this type of checkout before. Secondly, as this research is delimited to the Swedish market, we had a criterion that the participants should be Swedish citizens. The third and final criterion was that the participants should have varied ages and genders so that we could get an insight into how customers' attitudes differ depending on their different genders and ages.

3.5.5.2 Overview of the participants

The following table below (see table 2) demonstrates the overall information about the people who participated in the interviews. This table presents the participants' gender, age, occupation, date of the interview, and also how long each interview took to complete. The data collection consisted of 19 interviews that lasted approximately around 15-30 minutes.

Table 2, *Overview of the participants*

Number	Participant	Sex	Age	Occupation	Date of interview	Time
1	Participant A	Male	25	Student	25/4	33 min
2	Participant B	Male	53	IT Consultant	25/4	25 min
3	Participant C	Female	52	Nurse	25/4	20 min
4	Participant D	Female	57	Preschool teacher	26/4	20 min
5	Participant E	Female	26	Receptionist	27/4	18 min
6	Participant F	Female	24	Student	27/4	16 min
7	Participant G	Female	75	Pensioner	28/4	20 min
8	Participant H	Female	28	High school administrator	28/4	23 min
9	Participant I	Male	33	Teacher	28/4	17 min
10	Participant J	Female	53	Hairdresser	25/4	15 min
11	Participant K	Male	26	Store manager	25/4	22 min
12	Participant L	Male	55	IT Consultant	27/4	20 min
13	Participant M	Female	28	Student	27/4	20 min
14	Participant N	Female	29	Digital marketing communicator	27/4	25 min
15	Participant O	Female	25	Student	27/4	15 min
16	Participant P	Male	77	Pensioner	25/4	11 min
17	Participant Q	Male	25	Financial assistant	26/4	19 min
18	Participant R	Female	25	Student	26/4	19 min
19	Participant S	Female	77	Pensioner	25/4	16 min

3.5.6 Video viewing

As we knew from the beginning of this research that self-checkouts are relatively new in Swedish fashion stores, we could conclude that the majority of the people that were going to be interviewed would probably not have used a self-checkout in a Swedish fashion store before. As one of our main criteria when selecting the interviewees was that it would be people who had bought clothes in a physical fashion store within the last year, this led to the fact that it could not be ruled out that all participants would have used a self-checkout before. Due to this, we considered that it would be most appropriate to show a video that demonstrates how a self-checkout works in a fashion context to all participants. Our main goal in showing a video to the participants was to demonstrate to those who had not used a self-checkout before in a fashion store environment, how this type of SST works. However, the purpose of the video was also to demonstrate and refresh the memory of those participants who had used a self-checkout in a fashion store before. This was to make it easier to have a more natural and fluent conversation during the interview and for the participants to feel more comfortable discussing the subject.

Shrum, Duque and Brown (2005) define digital videos as "… an ensemble of technologies for visual and audio documentation, editing, and presentation" (p.2). Gibbs, Friese and Mangabeira (2002) also explain that digital videos are a well-established technology used to facilitate the establishment of new data. For this thesis, it was our aim to create our own video that would take into account the research matter. However, there were problems with permission to record in the fashion store that we were intending to record it in and this had to be respected. We then had to rethink and then instead decided that we would use an already existing video that demonstrates how a self-checkout functions in a fashion store.

In order for the video to be suitable for showing to our participants, we had some requirements that had to be met before we decided which video we would choose. The requirements were that it would demonstrate in a simple and clear way how a self-checkout in a fashion store works from the beginning to the end of the user experience. The video that we later chose to show to our participants had also been used in a similar research purpose. It is a YouTube video called "*Zara self check out A Coruña*" and is made by Lozano Flores and Zhou (2017). In this video made by Lozano Flores and Zhou (2017), they show the steps and describe in text what to do during each step of the payment process. Since the video made it easy to follow along the whole user process of the self-checkout, we considered this video to meet the requirements that we considered important to include in the video.

As the video was not our own, we considered it important to ask for permission to use this video for our research purposes. So, for ethical reasons and so that no misunderstandings would arise, we contacted Lozano Flores and Zhou to ask for permission to show their video to our

participants. Shortly afterwards, we received a response with their approval to show their video. The presentation of this video was considered a beneficial complement to our semi-structured interviews, and it gave the participants a favorable insight into how a self-checkout in a fashion store can work, which facilitated the discussion on the subject considerably. To see the video, please see (appendix 2).

3.5.7 Secondary data

As mentioned earlier, secondary data have also been used to conduct this research. Secondary data implies that the researcher collects already conducted and published data within the same research area (Saunders, Lewis & Thornhill, 2019). Secondary data contains of "… company and government reports, archival data, advertisements, newspaper articles, books, and blogs" (Easterby-Smith, Thorpe & Jackson, 2015, p. 130). According to Easterby-Smith, Thorpe, and Jackson (2015) secondary data can be seen as a support for primary data collection. For this study, we used secondary data by exploring already existing research within the field of customer attitudes towards SST in a fashion context. We also investigated in what research that already exists within the field of customer loyalty in relation to SST.

To begin with, when searching for secondary data we needed to agree on where we would search for relevant and trustworthy sources and also what keywords that we mainly should search for. We decided on mainly using *Lubsearch* as a database as we considered this database as a credible and secure search engine to find relevant sources from. The keywords we agreed on to mainly use to find the theory were *self-service technology in retail, self-service technology in fashion stores, self-checkouts, attitudes towards SST, and customer loyalty in relation to SST*. To determine if these were credible sources, we made sure to always use *Lubsearch* as a search engine and before each search we also made sure to click in that it would be peer reviewed articles. We were also careful to try to find as new sources as possible as we considered that this would provide the most relevant and up-to-date theory for our research.

When we considered that we had found a valuable and credible source, we gathered all the sources in a common document to facilitate the search for valuable sources for each other. When we then thought that we had collected enough relevant sources in our joint document, we began to sort out the best sources which were later collected and written down in a theory chapter (see Chapter 2). The purpose of collecting this secondary data was to find already existing research that could act as a support for us to be able to answer our research purpose and to expand this research area with the new findings that emerged through our study.

3.6 Data analysis

Data analysis is a complex process in qualitative research (Bryman & Bell, 2015). However, it is one of the most important processes. In the following paragraphs, we will describe how we have analyzed our collected data through an abductive course of action. As explained earlier, our

theoretical framework has been used as a base for the collection of our empirical data and for the data analysis that will be explained in the following paragraphs. The data analysis has then been used to find additional factors that influence customers' attitudes and loyalty towards self-checkouts in a fashion context.

According to Bryman and Bell (2015), the first challenge with analyzing qualitative data is that a huge amount of data usually is gathered, which makes it demanding to analyze. The second challenge is that there are no clear instructions on how to analyze qualitative data (Bryman & Bell, 2015). To manage our large amount of data, we have been using the *General Content Analytic Process Model* (Flick, 2009). By following the four steps in this model, we have been able to reduce data and identify important concepts that help us achieve our research purposes.

The first step in the model and our process was to *define the material*, which means that we have been identifying vital parts in the material that can help us answer our research purpose. As mentioned before, our theoretical framework has been used as a base for the collection of empirical data that is connected to the two central concepts, customer attitudes and customer loyalty, in our research purpose. By doing this, we have been able to identify in the empirical findings if factors that have been found to have an influence on customers attitudes and loyalty in other contexts, such as the grocery sector, also have an influence on customers attitudes and loyalty in our chosen context, the fashion sector. In the process of transcribing, selecting and organizing the empirical findings, we have also been able to identify recurring as well as new factors influencing the two concepts that have not previously been mentioned in the theoretical framework. When the interviewees' answers mentioned factors that could not be found in the theoretical framework, they were coded as unknown at the beginning. However, when we went through the codings again, the unknown factor was given a name. This will be described more in detail below.

The second step in the content analytic model was to *analyze the situation of data collection* (Flick, 2009). To avoid demographic biases, we have in this step of the process been looking at the context of our data collection, the background information of all the individuals participating in the interviews, as well as fact-checking the sources of our data. The third step in the process is to *formally characterize the material* (Flick, 2009). We have applied this step in our research by recording all the interviews and carefully transcribing every word and expression made by the individual that was interviewed. We were then only editing the grammar so that it was as correct as possible. In order to make the participants feel comfortable with expressing themselves, we did the interviews in their native language, which is Swedish. When the transcribing of the interviews were done, we translated it into english together.

The fourth, and last step, in the content analytic model was to *determine the direction of the analysis* (Flick, 2009). In our research, the analysis of the data was directed to answer the

theoretical points found in earlier research as well as to answer our research purpose. The theoretical points, that also can be seen in our theoretical framework, refers to relevant academic concepts such as technology readiness, individual differences, SST characteristics, situational factors, customer attitude and customer loyalty. These concepts were later on used while coding the empirical data.

Both researchers of this study were participating in the process of coding the collected data. Due to this, we were able to compare and discuss our interpretation of the data and make sure that we did not miss any information that was of value for the research. Since an abductive approach has been applied to this research, the coding process consisted of both *selective coding* (deductive approach) and *open coding* (inductive approach). In our research, selective coding was used to categorize findings connected to the theory-based concepts in our theoretical framework. See example below.

Table 3, *Example of selective coding*

Selective coding	Keywords
Ease of use	Easy, difficult, confusing, complicated, smooth

Open coding was then used to categorize the findings that could not be matched to the concepts in the theoretical framework (Bryman & Bell, 2015). For example, open coding was used when we found factors in the transcription from the interviews that did not match the theoretical framework but were repeatedly something a participant, or several participants, discussed during their interviews. If the factor was repeatedly discussed during the interview, we identified this as a new factor that was unique for the fashion stores context and therefore could extend the theoretical framework in connection to this specific context. When we could identify a new factor, we gave it an appropriate name and discussed where it fits into the theoretical model. See example of open coding below.

Table 4, *Example of open coding*

Open coding	Keywords
Store context	Premium store, fast fashion store

3.7 Quality of research and methodological limitations

In the following paragraphs, the quality of this research and its methodological limitations will be discussed. According to Bryman and Bell (2015), quantitative research and qualitative research are evaluated on different quality criterias. In quantitative research, the criterias that the

study is evaluated on are called *reliability* and *validity*. However, in qualitative research, the primary criteria to be evaluated on is called *trustworthiness*. The trustworthiness criteria is then divided into four sub criterias called *credibility, transferability, dependability and confirmability* (Bryman & Bell, 2015). Since this research is qualitative research, it will be evaluated based on those four criteria in the following sections.

Firstly, and corresponding to internal validity, is *credibility*. This criteria refers to that the authors of the research present the participants' answers and social reality as the participants would like to communicate it (Saunders, Lewis & Thornhill, 2019). According to Bryman and Bell (2015), there is a technique called triangulation that can be used to ensure the credibility of a research. Triangulation means that the researchers are using several theoretical perspectives and more than one source of data in order to avoid intrinsic biases (Bryman & Bell, 2015). Accordingly, we have used both primary and secondary data in our research. As an example, we have used secondary data as a source to review earlier research within the field in order to find out what is already known about our chosen subject. To complement this action with an additional source, we have conducted interviews with both users and non-users of self-checkouts in Swedish fashion stores to gather new and current information on the subject. By using both primary and secondary data we have been able to ensure an acceptable level of credibility in our study.

Secondly, and corresponding to external validity, is *transferability*. This criteria examines whether the findings of the research can be applied in any other context (Saunders, Lewis & Thornhill, 2019). In this respect, we have in our research focused on adhering to our relativist ontology position, which means that we have been concentrating on capturing several experiences, opinions, aspects and realities of the unique context of self-checkouts in fashion stores. In order to do that, we have conducted 19 interviews with individuals with different backgrounds and characteristics such as gender, age, technical habit and occupation. The findings in the interviews has resulted in some new insights and factors within the subject of SST, attitude and loyalty, which can be used in future research within other contexts. In connection to transferability, it is also appropriate to discuss the *generalizability* of the study, which means if the findings are possible to generalize beyond a specific study (Easterby-Smith, Thorpe & Jackson, 2015). In our study, it is difficult to generalize the findings since the research is made in a very unique context within a specific topic. Furthermore, our interviewees were divided into three different age groups to get insights on the topic from people with varying ages. However, due to the time-limit, we were not able to find more than three participants in the oldest age-group. This means that the findings from this age-group can't be generalized since the low number of participants can not represent the whole age group. Therefore, the generalizability of the findings could be considered as a limit in this study.

Thirdly, *dependability* refers to whether the findings in the research are consistent and repeatable at another time (Bryman & Bell, 2015). According to Bryman and Bell (2015), this criteria is

fulfilled if the study's researchers are adopting an 'auditing' approach. In our research, we have adopted the auditing approach by controlling our responsibility as researchers in several ways through all different stages in the research process. Firstly, several drafts of our study have been controlled by our supervisor Ulf Johansson. On a three week basis, Ulf has read and given us feedback on the progress we had made so far, which implies that the research has been documented and undergone a progressive process. Secondly, we have controlled our responsibility as researchers by making sure that the participants know the terms of participating in the interviews by recording their answer of their acceptance of recording and fulfilling the participant criterias. Furthermore, we have documented all the interview transcripts as well as our analysis of the data. By doing these procedures, the 'auditing' approach could be considered to be met.

Finally, the *confirmability* criteria refers to "that the researchers can prove that they have acted in good faith" (Lozano & Zhuo, p. 41) by not letting their personal values influence the research (Bryman & Bell, 2015). Even if it is not possible to reach complete objectivity, this is a criteria that is challenging for all researchers to prove that they have achieved. In our research, we have acted in good faith to the greatest extent possible. For example, we have avoided interacting more than necessary with the participants during their interviews in order to reduce the risk of influencing their answers on the questions. Furthermore, we have been careful to transcribe every word that has been said during the interviews and to make sure that we have understood the participants answers correctly by asking them right away if they can explain their answer more precisely if there was anything that was unclear. In addition, we were translating the transcriptions from Swedish into English together to enable the most correct and credible translating of the answers as possible. Finally, we were also analyzing the collected data together in order to be able to compare our pretations of the material and in this way reduce the risk of bias.

3.8 Ethical considerations

When conducting a research study it is important to have ethical considerations in mind during the whole research process. Saunders, Lewis, and Thornhill (2019) describe that ethical considerations concern everything that involves human contact during all steps of the research process. According to Easterby-Smith, Thorpe, and Jackson (2015) there are ten key principles in research ethics. The ten principles are demonstrated in the table beneath (see table 5). The first six principles are about protecting the participants by showing them respect, doing them no harm and valuing their dignity (Easterby-Smith, Thorpe & Jackson, 2015). All these six principles were taken into consideration when we conducted the interviews with the participants. We always made sure that the participants felt comfortable during the whole interview session so that they were not harmed. We were careful to inform all participants about the aim of this research. Furthermore, we also asked about their permission to participate in the interview and if we were allowed to record the interviews for transcription purposes. We were also careful to inform them

about their rights to be anonymous to protect their privacy. In order not to violate any of the participants' privacy, we chose to anonymize all 19 participants in our study by excluding their names and using pseudonyms instead.

The last four principles refers to the protection of "… the integrity of the research community, through ensuring accuracy and lack of bias in research results" (Easterby-Smith, Thorpe & Jackson, 2015, p. 122). In this research, these principles were followed by clearly informing the participants about the purpose of the research and what their participation will contribute to. Throughout the compilation of the data collection, we have been honest in what has been written and have in no way tried to mislead the reader about the results that have emerged. We have been completely honest with the material that has been presented in our findings and analysis and have only presented the data that emerged through the interviews to not in any way mislead or present false research results.

Table 5, Inspired by; Table 5.2 *Key principles in research ethics*
(Easterby-Smith, Thorpe & Jackson, 2015, p.122)

1.	Ensuring that **no harm** comes to participants
2.	Respecting the **dignity** of research participants
3.	Ensuring a fully **informed** consent of research participants
4.	Protecting the **privacy** of research participants
5.	Ensuring the **confidentiality** of research participants
6.	Protecting the **anonymity** of individuals or organizations
7.	**Avoiding** deception about the nature or aims of the research
8.	Declaration of affiliations, funding sources and **conflicts** of interest
9.	Honestly and **transparency** in communicating about the research
10.	Avoidance of any **misleading** or false reporting of research findings

4. Empirical Findings

In this chapter, all collected data will be presented. The chapter will begin with presenting a part that we chose to call attitudes (4.1), where we present the participants' general thoughts about shopping in fashion stores and their general attitude towards technology. Thereafter, the chapter follows the same structure as our theoretical framework where the data that has been collected within *TR, individual differences, SST characteristics, situational factors and customer loyalty* are presented. In the following sections, the quotes are chosen to represent a specific finding because they are clear and typical for the context.

4.1 Attitudes

To get a general insight into the participants' shopping behavior and experiences of shopping in fashion stores, the interviews began with some general questions to get an overview of each participant's relationship to shopping in fashion stores. Here questions about the participants' general attitude towards technology and thoughts about the implementation of self-checkouts in fashion stores were asked to get an insight into their opinions about this. Since we did not require the participants to have used a self-checkout in a fashion store before, we considered it relevant to ask if they had used this type of payment system in a fashion store before. Out of the 19 participants, ten people had never used a self-checkout in a fashion store before and nine people had tried it earlier.

The interviews showed that the participants have quite different visiting patterns in physical fashion stores. Many of the participants mention that they no longer shop as much in regular fashion stores due to the internet and online stores. As this was mentioned by many participants, online trading could be stated as a new factor that affects customers' attitude to self-checkouts. The new factors that have been identified will be explained further in the next chapter.

However, there are some participants that are more likely to shop in a physical fashion store and these people often shop for clothes in a store several times a month. One participant mentions that he prefers physical fashion stores over online: *"I have always preferred physical clothing stores over online often because I do not trust the fit" (Participant A)*

When we asked the question what a good shopping experience for the participants is, many thought that it is important that there is a wide range of clothes and that there is good structure and large space in the store. Many of the participants also mention that friendly and accommodating staff is important for them in order to get a positive experience in the store.

To get into the subject of technology and SST, we asked what the participants' attitude was towards the digitalization of society. Many participants had divided opinions about this and thought that digitalization both has advantages and disadvantages. Many believe that it becomes

more impersonal when more stores get digitized which results in the customers losing the personal contact in the store. One participant states like this:

> *What I think is a disadvantage is that you must not lose the social contact in the store too much. For example, to go to a fashion store and pay directly myself, I have no problem with, but I still prefer that there is some type of service where they welcome or ask if you need help finding sizes and things like that. It may not disappear, but the experience itself is not made worse by the fact that you can pay for it directly or that I can use the watch to pay for such things it does nothing, so that digitization is generally good, but we must not lose the human presence with people, with customers in store. (Participant I)*

However, many of the younger participants believe that the digitalization of society is good. But on the other hand, some of the younger participants point out that digitalization can have a negative effect on the labor market and that digitalization can lead to fewer jobs being offered as they are replaced by technology. For example, one participant mentions:

> *So, I think it's good in a way that we can digitize and that makes everything much more efficient. But at the same time, you are a little worried about what will happen to those professions if they just disappear? So in the best of all worlds, it would be the case that the staff might be out in the store instead and do nicely and fix, but you do not know if it works that way or if they might think that okay a computer took over as in industrialization as well. Now we are kicking people and you do not want that to happen (Participant O)*

The older participants mostly have a positive attitude towards digitalization, but believe that it can be more difficult for their generation to learn how to use technology and to adapt to the digitized world. One participant mentions: *"I think that is positive. It's very good but it's a little difficult for us older people to keep up, but it's very, very good" (Participant P)*

When we asked the participants what they think about that more fashion stores are installing self-checkouts, there were divided opinions. Some thought it was great as self-checkouts help to streamline their shopping and make it smoother. One participant explains this: *"I think it's just good and overall I like the self-scanning technique, it makes it easier, it goes faster and it gets a better flow" (Participant B)*

At the same time, some of the participants did not appreciate the implementation of self-checkouts at all. One of the interviewees explains why she is negative about it:

> *No, I do not like that digitization. ... I think it will be more and more difficult for the customer and it will take longer. Maybe I'm at H&M, there's a long queue, I'm going to*

get one sweater, well then maybe I would have chosen self-scanning instead, eh but if I had had several garments, I would have stand in the queue regardless to not having to mess with all that myself (Participant N)

Some other participants had a positive attitude towards it, but said that it depends on the store context. When it comes to fast fashion stores, one of the participants thought that it was positive with the implementation of self-checkouts, but explained that it would not have been as appreciated in a premium store where one expects a higher level of personal service. He explains:

... I like it in terms of when it's, what to say more fast fashion, like H&M, Zara and so on, when it's a little what to say not inferior quality but that a little cheaper price range. If I had done it at Zara, it would have been really nice. I would never have gone to Louis Vuitton, however, for self-scanning cash registers. (Participant Q)

The store context was also identified as a completely new factor that influences customers attitudes towards self-checkouts. This new factor will be discussed more in-depth in the analysis chapter.

4.2 Technology Readiness

A customer's ability to use technology can be matched to four different concepts: *optimism, innovativeness, discomfort and insecurity* (Lin & Chang, 2011). In order to get a perception about if and how these four factors impact the participants' formulation of attitudes towards self-checkouts in fashion stores, we asked questions connected to their ability to use technology.

4.2.1 Optimism

In order to get a perception about how the participants perceive their own ability to use self-checkouts and if this is affecting their attitude towards self-checkouts in fashion stores, we asked them if they feel comfortable about using self-checkouts in fashion stores.

All of the participants, regardless of attitude, answered that they felt comfortable using self-checkouts in fashion stores. However, they mentioned different reasons for why. Some participants explained that since the technology has been around for a while, they felt comfortable using it. For example, participant D explained: *"Yes. And that can be said, it is because it is already in the warehouse. It is already available at Ikea. It is already in the grocery store so there is no new system that has come to our world"*

Some of the other participants mentioned that their feeling of comfortableness of using self-checkouts was based on that the technology often is easy and smooth to use and since there

often are clear instructions on how to use it. One participant mentioned: *"Yes, but as I said, because it's smooth and easy hopefully" (Participant C)*

In the empirical material, it could also be found that even the participants who explained that they generally had a negative attitude towards self-checkouts in fashion stores mentioned that they can see and understand the benefits with it. Some participants explained that it is beneficial for the company since they can minimize the cost and since they can reallocate the personnel to help customers on the floor instead. The majority of participants also said that they can understand that self-checkouts are a fast and smooth payment method for the customers that want to buy a few products and want a quick visit.

4.2.2 Innovativeness

In the empirical findings, both some innovative and less innovative participants could be identified. For example, Participant B was a participant who showed innovative characteristics. He explained that he likes the implementation and self-checkouts in fashion stores since it facilitates the shopping process and makes it go faster. When we asked about his relationship towards technology he said: *"Very good and positive. I think it's fun with technology, so it's good" (Participant B)*

Participant B also believed that the self-checkout could contribute to a positive shopping experience where the personnel was important during the shopping and the self-checkout was important when ending the shopping. He explained:

> *I probably think I would have been positively affected, or I'm convinced it would have been positive. So that you both have access to staff to ask for advice while I shop. But then when I'm done, I can handle myself. (Participant B)*

There were also some participants that were less innovative. Those did in general have a more negative attitude towards the implementation of self-checkouts, described themselves as less into technology and did not believe that the self-checkouts would affect their shopping experience positively.

4.2.3 Discomfort

Even if all participants expressed that they were feeling comfortable with using self-checkouts, they still pointed out some concerns. As an example, one participant expressed that she does not hesitate on her ability to use the self-checkout, however she felt a concern about using it in the wrong way and therefore destroying the product she is buying. She specifically mentioned the alarms on clothes as a factor that makes her feel a bit insecure about the use of self-checkouts. Participant M explained:

Yes. Both yes and no then. It's not that I doubt that I would not be able to do it, but, or it's probably these alarms that lock the stuff that makes me a little.. so that I do not break the garment instead or something ...

Participant O also explained that she would be able to use the self-checkouts. However, she mentioned that she sometimes felt discomfort while using it since she got a feeling that someone could believe that she had been stealing the clothes because there were no personnel controlling that she had paid. She explained:

Yes, I have tried it once, but it also feels a bit like stealing the clothes, I think. That it like, there is no one who sees what you do. It feels like it's easy that you might be able to, of course not there is an alarm on the clothes, but still, I do not know, it feels, I think it feels like you are stealing the products, because no one sees you shopping. (Participant O)

Furthermore, one participant explained that using self-checkouts was too complicated since all stores use different systems and that she therefore becomes confused. The participant said:

... All stores have different systems, so I can sometimes think that it becomes too complicated because it does not really explain exactly how to do and then it takes too long. Then you get annoyed. It should go quickly and smoothly. (Participant H)

4.2.4 Insecurity

The participants were also asked to discuss if the use of self-checkouts in some way can influence how they perceive their general shopping experience. When the participants were answering the question, they shared some unpleasant experiences with self-checkouts that affected their shopping experience negatively and that shows that the participants sometimes get insecure about the technology's functionality. One participant explained:

Yes, I have experienced that. I shopped in a grocery store and sometimes these machines crash and you have to go through a control, I guess that happens in fashion stores too, that someone have to check your bag with the receipt so that you have paid for everything. And as I said, If you have chosen to use a self-checkout because it should go fast with self-service and it does not go fast, then you will get annoyed ... (Participant L)

Another participant explained:

As long as you do not have to enter a lot of codes here and there and that gets wrong and wrong, so that comes up 'wrong code, wrong code' or yeah.. That kind of stuff I think is difficult. (Participant S)

One participant made a detailed explanation of the relationship between self-checkouts and the shopping experience both in positive and negative terms. He stated:

> *It depends on how well it works. If it is completely flawless, nothing strange happens and I do not have to wait for anyone, then it is a positive experience. But as soon as I do not, as soon as it does not work, I will leave a store with my last impression, and that is that I hate self-checkouts. (Participant K)*

However, several participants also explained that the self-checkout could contribute to a better shopping experience if the expected functions by using it goes as they expect it to. One participant answered: *"Yes, but positive if it had gone faster and smoother than putting myself in a cash queque ..." (Participant B)*

4.3 Individual differences

Individual differences are important to evaluate when investigating customers' acceptance and attitude towards technology (Wang, Harris & Patterson, 2012). Individual differences can be divided into two categories existing of demographic factors, which consists of age and gender (Wang, Harris & Patterson, 2012), and psychographic factors, which consists of self-efficacy, computer anxiety, personal innovativeness (Lin & Chang, 2011) and human interaction (Dabholkar & Bagozzi, 2002; Dabholkar, 1996; Wang, Harris & Patterson, 2012).

4.3.1 Psychographic factors

To explore the participants' individual differences we asked them about how they thought they would handle using a self-checkout in a fashion store. The majority of the younger participants mentioned that they thought they would handle it smoothly since they expect that the self-checkouts are designed to be easy to use. Participant A explained:

> *Yes, it would have certainly been easy. They are designed to be simple and flexible, so if they had not been, then it would have been completely unnecessary. There is no reason why it should exist if it were complicated, so I guess, I guess it's easy to use and that it's smooth.*

Also the middle-aged participants had divided thoughts around handling the self-checkout machines. While some thought that it would be easy, exciting and were not feeling any type of anxiety, others were more concerned. One participant said:

> *That is, as I said, as long as it flows on, because I can say that I can read the instructions and do as it says. But if it should encounter problems like that something flashing that I*

have done wrong, then it will be a little, then I get frustrated and I get angry on myself for not understanding the concept ... (Participant D)

The older age group had an overall positive attitude towards how they thought they would handle the self-checkouts. Some of them mentioned that the alarms would be the most difficult task. However, they explained that they probably would have some problems in the beginning but that it would get easier every time they would use it. The participants' previous experience of using self-checkouts seemed to affect their primary attitude towards its implementation in fashion stores. This factor will be discussed further in chapter 5. Participant G explained: *"Maybe it's a little difficult in the beginning, but when you have done it a couple of times, it usually works well"*

Some of the younger participants also expressed some concerns over their first time using self-checkouts in fashion stores. Participant F explained: *"Yes, the first time may have been scary as I said, but then I think I would be easy"*

Some of them specified what exactly in the self-checkout process that they feel anxious about, which is the alarm on the products. Firstly, they were concerned that they would forget to take it off so that the alarms would go off when they left the store, which would make them feel embarrassed. Secondly, they feel uncertain on how to take off the alarm. Lastly, they were afraid of taking off the alarm in the wrong way which could destroy the products they want to buy. One of the participants explained: *"It would have required some thinking maybe the first time, I do know... especially when it comes to the alarm thing, because you may not have been doing that so many times." (Participant E)*

Another participant that has been using self-checkouts in the fashion store also thought that the alarms were difficult to handle, which created unpleasant feelings. She explained: *"From what I remember, the alarm was very difficult and it is not something that a regular customer is used to" (Participant N)*

The participants in the middle-aged group also expressed the alarms as a fair during their use of self-checkouts in fashion stores. Participant J said: *"You do not really dare [to handle the alarms] because you are afraid that you will destroy something"*

Commonly, the majority of participants in all age groups and genders seemed to express human interaction as an important part of their shopping experience in fashion stores and that this is a factor that they miss when using self-checkouts. One participant explained:

Yes, but I like.. usually it goes pretty fast for the people [personnel] who are at the checkout and work with this daily. They know this and it is quick and easy for them to

scan everything, pack it down, and charge, and plus I can think it is a little bit nice. Me, who has worked with service a lot, can think that it is pretty nice to get a hello, get a smile and some personal contact with someone at the store, so.. Yes, I prefer to pay over the counter with a cashier behind it. (Participant H)

When comparing the experience of self-checkouts, participant H continued: *"You do not meet a single staff member. You do not get a single personal contact to anyone in the store. It feels a little impersonal"*

Another participant explained:

And no, I do not get in the mood on such a screen. If I go shopping, if I now chose to shop in a physical store, I would probably still have chosen a face in front of a screen. I do not get very motivated. ... I can perhaps imagine that people who are socially afraid, they they might prefer the difficulties with a screen, but I prefer to stand with a human being. (Participant N)

4.3.2 Demographic factors

What also could be found in the participants' answers to the questions, even if they were not asked about it, is that they talk about their age as an advantage and disadvantage depending on which year they were born. In general, the younger participants explained that their age made it easier for them to keep up with the technology since they were born in a time where technology was already used to a great extent. When they were asked to explain their thoughts around the increased use of technology, one participant expressed: *"... we are kind of born into technology, so that's why it's very good for us ...." (Participant R)*

In contrast, some of the middle-aged and older customers talked about their age as something that is a disadvantage since they were not born in a time where technology was not used a lot. *"It's certainly the passage of time, but I can think it's a bit difficult actually because you're the age you are. You have a little more difficult to grasp all the technology, actually" (Participant S)*

What could be found in the answers connected to the participants' discussion of human interaction, is that some of the males did not care if they met any personnel at the check-out when they were going to pay. They explained that when they decided to buy some clothes and products, they just wanted to pay and leave and did not really care if they got any interaction with the personnel in the check-out or not. However, they also explained that they wanted to have human interaction before they came to the payment stage of the shopping experience. Summarized, the personnel was only important during the shopping experience before the payment stage. When we were asking about how the self-checkout would impact the shopping experience, participant B explained:

I probably think I would have been positively affected, or I'm convinced it would have been positive. So that you both have access to staff to ask for advice while I'm shopping. But when I'm done, I can handle myself.

While talking about the attitude towards the implementation of self-checkouts in fashion stores, another participant explained:

I only see it [self-checkouts] as a last step after you have made your choice and picked my clothes and then I should just pay and go out. It does not affect anything if it is a self-checkout or if it is a physical person. I can understand, if you compare it with the food industry, that you may want this little conversation with the cashier you have met for 20 years, but at H&M maybe, you don't have that relationship because you don't visit it so frequently, so then it does not matter at all. (Participant K)

4.4 SST characteristics

There are seven SST characteristics that are interesting to evaluate on when it comes to attitudes' towards self-checkouts, those are: perceived ease of use, perceived usefulness (Lin & Chang, 2011), perceived risk, perceived control (Wang, Harris & Patterson, 2012), perceived enjoyment, perceived aesthetic appeal, and perceived stimulation (Park, Ha & Jeong, 2020). To get a perception on which of these factors are relevant for creating an attitude in a fashion store context, all the participants were asked about all of them.

4.4.1 Ease of use

When we asked the participants whether they thought that the use of self-checkouts would, in some kind of way, facilitate their shopping experience, we both got the answers yes and no. The participants that believed that the self-checkouts would facilitate their shopping process came from all different age groups and genders who explained it as that the payment process would go smoother and quicker and were therefore seen as a useful tool during the shopping process. Participant Q explained:

Oh yes, but I think so. I can really see that, because yes, but as I said, it is that you want to go in and buy something quickly, or that you are stressed. But everything comes back to the time perspektive. Then I would say that it would have made it easier.

Another participant said: *"Yes, I can imagine that there will be less queue, and go faster" (Participant K)*

However, some participants disagreed that it would go faster to use the self-checkout since it is a more complex payment method. Participant M explained:
"... since I see a step in this process [the alarms] as more challenging, I prefer to go to a regular one because then I experience that it will go much faster"

Another participant explained that she does not think that the shopping process would be facilitated in the context of fashion stores. She believes that the personnel would do the payment process faster than herself. Additionally, she mentioned that the packing surface at the self-checkout is too small which would make her drop products and make her feel frustrated. She said:

> *Not when it comes to fashion stores no. It would in that case be if there is a long queue on the traditional. But at the same time, I experience that if everyone has to stand and fix the clothes themselves and take off the alarm, it takes so much longer than just taking a traditional checkout where a professional person does it for you. Then I also experience that often the place where we checkout is way too small so you have almost no place to be able to put up the garments or there is no, like, space. So if you have bought more than two garments, well then it is difficult to put them up nicely and something might end up on the floor and so on, and you do not want that. (Participant O)*

4.4.2 Usefulness

When the participants discussed what the differences were between a traditional cash register and a self-checkout, we found some interesting recurring factors. Some of the participants described the differences by telling us that the self-checkout was smoother and that you have to service yourself. Participant B explained it like:

> *I think it's flexibility again. If you handle the simple digital part of scanning your products yourself and paying yourself and then checking out from there, I generally experience it as a smoother way to do the right thing for me, pay and leave the store instead of standing in a queue and waiting for one or two cashiers to handle my errand.*

Some of the participants point out that the difference is that you get no interaction when using the self-checkout. However, this was not only considered a bad thing since some of the participants like to try out new things. Participant E explained:

> *The big difference is that you are not meeting someone that you can get help from on the spot, so that's probably the biggest difference. But I'm not the one who is, I like to test myself too and I like new things so it would have been fun to try.*

4.4.3 Risk and control

It was also found that the participants could identify several risks with the use of self-checkouts in fashion stores. Almost all participants said that the alarms system on clothes is a risk where they feel less control over the situation. The risk with the alarms was that they were easy to forget to remove, it was difficult to know which products that have alarms as well as where on the product you should look for them. Several participants were also afraid of destroying the product if they removed the alarm in the wrong way. Since the alarms were a very discussed subject during the interviews, we identified this as a new factor unique for the fashion context. This will be discussed further in chapter 5. Other risks that were identified by the participants were that you more easily forget to pay for your products and that you sometimes dubble scan the barcode. Participant A explained:

> *Risks? Yeah I would say that it is to forget the tags [alarm] or something. It's a lot that all the responsibility falls on me. Before, you could assume that the clerk or cashier knows how the process looks like, in case one would forget to pay for something. ... I have discovered that it is a bit annoying when you happen to double-scan something in a grocery store and then you can not remove it yourself so you have to call for someone who works there. ... and then you realize that yes now the self-scan probably took 2 minutes longer than it had taken to stand in the regular checkout because now this light flashes red, so now I have to stand and wait as well.*

Another participant explained that if you do the self-checkout process in the wrong way you can miss important parts of the process that, for example, make the alarms go off when you walk out of the store, which would create a lot of embarrassment:

> *Yes, in that case it would be if I miss and pay something so that it flashes when I go out the door, because it's embarrassing and then you are taken as a thief. I would think very very badly of that, yes. (Participant D)*

One participant explained that she was afraid of the risk of increased skimming, which means that other people steal your pay card information etc without you noticing it. She believed that that risk is increased by the use of self-checkouts since there are no personnel who always control the checkouts. In addition, one participant pointed out that it is a big risk for the company to use self-checkouts since the probability of theft should increase. Participant C explained:

> *So the risks are, it must be based on trusting the customer. To be real, one should be able to fool the store a lot because you have several items and you take off the alarms yourself and you scan by yourself. So what is it that says that you will scan everything? I think the risk of theft should be greater because, as I said, you also take off the alarms yourself.. So that's what I think*

4.4.4 Enjoyment

Common for all participants, it was found that neither of them believed that the use of self-checkout would make their shopping experience more fun, exciting or enjoyable. The participants explained that the type of self-checkouts do not have an impact on the experiential aspect of the shopping experience. They meant that every element during the shopping experience until you are going to pay is what makes it funny and enjoyable to shop, not the type of self-checkout. One participant expressed it like:

> *No, I can probably answer that for sure. If my shopping experience should change, then it should be something that happens when you choose the clothes and test it etc. How the cash register looks like, self-checkout or staffed checkout, it does not matter that much. I do not think so. (Participant A)*

Participant C explained it like: *"No, it's not. It's not the most fun part to pay. It's more fun to go and watch and try and yes. As I said, no, I do not think so. No, I'm pretty sure of that"*

One of the participants also mentioned that it would get the opposite effect, that she in fact would rather be stressed by using the self-checkout. She said: *"No, on the contrary, I just think I would be stressed" (Participant O)*

4.4.5 Aesthetic appeal

None of the participants mentioned the visual attraction of the self-checkouts as a factor they reflect about during their shopping experience. In fact, the participants only mentioned disadvantages with how the self-checkouts in fashion stores are designed to function. For example, participant N explained:

> *Eh, what I remember, it is a very small area you have to work with. It is rare that I buy one garment, but say, no but I might have 10 garments. I have nowhere to put my things, or not like a checkout counter, you have a tiny little surface you can work with.*

This is identified as a completely new factor relevant in the shopping context, which will be discussed in chapter five.

4.4.6 Stimulation

In the empirical findings, no statements related to the participants perceived hedonic stimulation of self-checkouts could be found. As mentioned before when presenting the findings connected to other factors, no participants believed that the self-checkouts contribute to a more joyful shopping experience or any part of the use of self-checkouts that offer the participants stimulation. Therefore, the findings under this factor were few.

4.5 Situational factors

In the situational factors *waiting time* (Dabholkar, 1996; Dabholkar and Bagozzi, 2002), *task complexity* and *companion influence* (Wang, Harris & Patterson, 2012) are included. As previously mentioned, it has been proven that all these factors affect customers 'attitudes towards SST and therefore it was of interest to us to investigate whether these factors also match customers' attitudes towards self-checkouts in a fashion store context.

4.5.1 Task complexity

To get an insight into which situational factors that influence the participants' attitude towards self-checkouts in Swedish fashion stores, we started by asking if there were any environmental factors that could affect their attitude about how easy or complicated the self-checkout is to use. Many responded that a major situational factor that affects their attitude towards using a self-checkout to pay for their clothes is the number of items that they are intending to buy. One participant explains:

> *... Then it's also if I should buy one garment or 20, I do not really do that but in that case, but eh if I were to buy then 20 garments, let's say, then I would have preferred help and go to a traditional, it would have felt easier than if I would have scanned everything myself. Yes then in contrary if you only have a single thing to buy, then it feels very smooth and easy to go in the self-scan. (Participant Q)*

The participants believe that a situational factor that can be decisive for them when choosing a payment method in a fashion store has to do with the number of garments that they are intending to buy. They mean that if they have a large number of garments to purchase, they prefer to go to a staffed cash register to get help with the payment process. This is because they think it will be too complicated if they have to scan in and take off all the alarms on the garments themselves. On the other hand, many of the participants explain that if they only are going to buy a smaller amount of items, then they would have preferred to go to a self-checkout to pay as the handling of fewer items is considered an easier task to solve on their own.

However, one of the participants considered that regardless of how much clothing he would buy in a clothing store, he would still always choose to use the self-checkout as a payment method due to its flexibility and efficiency. He stated like this: *"No, absolutely not, it does not matter. If I buy one or 10 garments, I choose if I can and if I'm allowed to always a self-checkout anyway." (Participant B)*

The participants were also asked to compare a traditional check-out and a self-checkout and explain which of them they prefered. What could be found was that, except for human interaction, the type of products they were buying played a big role in the decision about which

check-out they prefered to use. Overall, the participants explained that if they wanted to buy a few smaller products, they preferred the self-checkout. However, when they are buying larger products, such as clothes, they prefer the traditional check-out to get service and to interact with the cashier. Participant J explained:

> *I think it (self-checkouts) is a good alternative, maybe with small things, if I should buy small things, but not otherwise. Like, if you should buy a pair of socks, a clip, a tassel, then I can understand it. But not if you are going to buy a little more.*

4.5.2 Waiting time

Another situational factor that is brought up by the participants that would influence their attitude towards using a self-checkout in a fashion store is the waiting time. They believe that the time that they must stand in line and wait to pay for their items is a major determining factor in what type of payment method they would have preferred to use in a fashion store. However, the waiting time that the participants had to stand in line was not a decisive factor that made them prefer to pay in the self-checkout instead. What could be stated through the interviews was that regardless of whether there is a long queue for the staffed cash register or the self-checkout, this did not make the participants more inclined to choose the self-checkout instead. Instead, long queues, regardless of the cash register, could cause that some participants would have neglected to purchase the items they had intended to buy as they did not have the patience to stand in line. One participant describes in this way:

> *I think it's awful, the worst thing I know is queues so it could definitely have been that I put my stuff away and left if there are long queues up to them and especially if it then gets stuck and someone stands in front of me and cannot or have done it for the first time and it hangs up. I could go almost crazy, because I want those pieces to just roll on. (Participant J)*

Many of the participants also mentioned that it does not matter which checkout they choose when they are going to pay for their clothes. They choose the checkout that has the shortest queue, regardless of whether it is a staffed checkout or a self-checkout. One of the participants explains like this:

> *No, as I said, it does not matter for the queues, of course it is clear, it is, if there is no queue for the staffed cash register and a long queue for the self-service. Yes, then I would have chosen the one who is staffed, of course. I do not stand or stand in the self-service checkout line or the queue to wait there for me to do it myself. Then there is a choice, but if there is no choice then it would not have mattered if it has been staffed or not. (Participant C)*

Another participant saw the waiting time from a different perspective. She meant that if she used a self-checkout in a fashion store that she is not used to using, it may take a little longer for her to figure out how it works. Then the time she spends at her self-checkout can affect that the queue for the self-checkout becomes longer, which becomes stressful for her and affects her view of using self-checkouts negatively.

To get an even clearer insight into whether waiting time is a contributing factor that affects customers' attitudes towards self-checkouts in fashion stores, we also examined whether participants thought they would spend more or less time in the store if they used a self-checkout to pay with. The majority of the participants felt that the use of a self-checkout would not affect their total time spent in the store either more or less. For example, one participant describes: *"No, I do not think so, I do not think I would have spent more time in the store, I do not think so." (Participant G)*

Many of the participants also believe that it is not the payment process that determines how long time they spend in the store, but what affects the total time spent in the store the most is to walk around in the store and find something that is of interest. When it comes to the payment process the participants do not place any greater emphasis on how long the actual payment takes, but the majority believe that it would take about equally as long to pay in a staffed cash register as in a self-checkout. For example, one of the participants describes:

> *No I do not think so. No, of course. Again, is there a lot of queuing. Of course I dedicate more time in the store. Instead of what, I instead of going to a self-checkout that is empty. Of course it goes faster, but otherwise I do not think I would have spent more or less time actually. It can also be faster to pay in a staffed cash register because they are more experienced and scan everything faster and charge faster and packs down everything faster than I do so I think it goes a little plus/minus. (Participant H)*

However, there were a few participants who felt that they should spend less time in the store.

> *I think it would have been shorter, overall. I would not have chosen my clothes faster, but I would have come from the store faster. And it suits me who does not love to run in stores, so I like that the flow is faster. (Participant B)*

Nevertheless, the majority of the participants who thought they would spend less time in the store only thought this if the number of items they would buy was few. For example, one participant described:

> *No, but if I would have had a few things, I think it would have been much faster to do it myself. But if you have more things that are on gallows, perhaps with double hangers or*

longer garments where you need to find, look for the alarm, then it might have taken a little longer time. If there is not a very long queue, then it is of course much faster if you just check out yourself. (Participant R)

4.5.3 Companion influence

Some of the participants were also positive to the idea that if they had a company with them to the fashion store that is more technical than they are, this could encourage them to want to try a self-checkout and feel more comfortable using this payment technology. Many of the participants believe that if they had a technical company with them the first time that they were going to try a self-checkout in a fashion store, they would have felt more comfortable using it themselves the next time.

It could well have made you want to use more if they are more technical than I am and use it faster because that's probably what it's about. ... If they then show how smooth it is and how fast it can go. So if you catch it up, you would have been positive to use it yourself next time. Sometimes it is the case that you refrain from using such technical innovations because you do not know how it works, but when someone else who is more technically savvy shows how it actually works and how to do it, you become quite comfortable with it and do it yourself next time. Because it's almost like you're ashamed the first time you do it because you stand there and watch and investigate how this works and then maybe you ignore it then because you think it seems complicated, but do not dare to stay too long. (Participant H)

However, many of the participants did not consider that a technical company would influence their attitude to want to use a self-checkout. They explained that if they had already tried a self-checkout a few times, they have already gained an insight and experience of how the system works and would not have been that affected to use a self-checkout or not just because they have a technical company with them. Participant A explains like this:

I do not think so. I think I'm technical enough myself that it probably would have no impact. Even though they are much, much more technical than me, so it's still just blipping, scanning and paying for my things.

4.6 Customer loyalty

This research has also been about investigating whether the attitudes that customers create towards self-checkouts in fashion stores then would have any impact on customers' loyalty to the store. To get an overview of this, we examined whether the participants' experience would be positively or negatively affected by using this type of payment method in a fashion store. What could be demonstrated from the interviews was that a large proportion of the participants felt that

the use of self-checkouts in a fashion store would not affect their experience at all. One participant explains: *"No, it would probably not, I do not think." (Participant M)*

Other participants believe that the use of self-checkouts would rather affect their experience of the store visit negatively. Participants J describes:

> *For all the things that I'm saying, it's going to be difficult. I'm getting hot. I'm going to put my bag down. My other shopping bags, eh, at the same time as I have to work by scanning my own stuff and remove the alarm on mine and down with it in my bag and then I have to pay. No, it's going to be difficult. Tough procedure that I do not want to do.*

Then there was also a third group of participants who thought that the use of self-checkouts could affect their experience positively as long as everything works flawlessly. A participant describes in this way when answering the question:

> *It depends on how well it works. If it is completely flawless, nothing strange happens and I do not have to wait for anyone, then it is a positive experience, but as soon as I do not, as soon as it does not work, I will leave a store with my latest impression and that is that I hate self checkout. (Participant K)*

One participant also points out that it would have a positive effect on her experience due to the time savings and flexibility. On the other hand, she believes that it is a negative experience in the aspect of losing the social contact with the staff:

> *Yes, but positive if it had gone faster, faster, and smoother than standing in a cash queue and. But negative on it, so if you look at the aspect that you do not meet. You do not meet a single staff member. You do not get a single personal contact with anyone in the store. It feels a little impersonal. (Participant H)*

We also asked if the participants had continued to shop in a fashion store if they had only offered self-checkouts as a payment method. The majority of the participants believed that they had continued to shop in the fashion store even though they had only offered self-checkouts as a payment service. They mean that it is not the method of payment that determines whether they will continue to shop there or not. If the store has clothes that the participants like and that they want, not only do self-checkouts as a means of payment stop them from continuing to shop in the store. One participant explains: *"Had there been clothes that I wanted; I would have continued shopping*." *(Participant D)*

On the other hand, there were some participants who had a more negative view on that fashion stores would only offer self-checkouts as a payment method. These participants explain that they

would not have continued to shop in a fashion store if they only had self-checkouts as a payment option as they believe that the personal contact disappears, and it does not become as personal to shop in the store anymore. One participant describes in this way:

> *It feels like you are losing, losing something there. I do not really know what, but. Yes, all of a sudden that choice disappears ... Feels just like a strange development because it feels natural that there is a cash register where someone is standing and receiving one. Just having self-scanning feels odd. (Participant A)*

Some participants describe that if fashion stores would only offer self-checkout as a payment alternative they would probably begin to shop more online instead.

4.6.1 Behavioral approach

What also emerged from the interviews was that many of the participants did not consider that their consumption of items and how often they would shop in the fashion stores would increase if the store had self-checkouts. Many believed that their buying patterns would be the same, although many felt that it would be easier and smoother to pay for their clothes once they shopped in the store.

However, some of the participants thought they would shop fewer things but, on more occasions, if they would have used a self-checkout when shopping in a fashion store. One participant explains in this way:

> *I think I would have bought a smaller number of products every time I had shopped, but maybe more times and I also think it will be a bit then that you are not ashamed that you go there again and again and again because no one will remember that because no one is there and sees you and, but it can feel awkward to buy several products at the same time that like, that you are the only one who does all the work. (Participant H)*

To get an insight into whether their attitudes towards self-checkouts can affect loyalty to the store, we also asked if the implementation of this payment system had affected their general opinion of the store. Some of the participants thought that it probably would not have a particularly big impact on their opinion of the store. Many of the participants mean that it is not the payment system that is a deciding factor if they like the store or not. Participant A explains in this way when answering the question:

> *I do not know if it would have had such a huge impact either. I think there are so many other things you value a fashion store or a chain. So what kind of clothes do they have? What's the price? Are they stylish or good quality? all those things. So it says in the choice and qualifier between Zara and H&M, I will make the decision based on my*

knowledge and like what the clothes look like? It suits my style as well. That whole thing. Then if one of those stores has self-scanning and the other does not have an impact so much because I still think that Zara's shirts are nicer or that H&M's shirts are cheaper or something like that. So I think other aspects are much more important.

Other participants believe that they positively influence their opinion of the store as they believe that it is good that the stores follow the digital development. For example, a participant describes as follows:

I can think that is positive. I think that the store wants to move forward, that they want to use the technology and that frees up staff who can do other things that are more important, for example to help the customer instead, i.e. out in the store and be able to give advice and tips in the store instead of just standing and doing one boring manual job and get paid. (Participant B)

This participant explains that the implementation of self-checkouts can make the staff more helpful to the customer out in the store, which he believes has a greater value for him to be able to get help in the store rather than at the checkout.

Others are more negative about it as they believe that it will be less personal and that the stores risk losing their service-minded staff if they invest too much in self-checkouts. One participant mentions this:

Yes, absolutely, it probably also depends on then maybe, but it is noticeable that they may not be as service minded anymore, but they want more efficient assembly line that they may think less about their customers and more about the money. It feels like it does not feel like if you go to Dior that there should be a self-scanning cashier, but there instead is like the personal meeting. (Participant O)

Another participant also mentions: *"You may lack this personal contact with the staff. It can be something you miss when it comes to buying fashion clothes."(Participant P)*

4.6.2 Attitudinal approach

We also asked if participants would be more likely to recommend a fashion store if it had self-checkouts. The majority of the participants felt that the self-checkouts would not affect whether they would recommend people to shop there. They believe that it is not the payment system that determines whether they will recommend someone to go to that store, but rather it is about the clothes and products that they have to offer. One participant explains:
"Yes ... I do not recommend a store because they have self-scanning checkouts, but I recommend them in that case for the sake of the clothes." (Participant F)

However, there were a few participants who felt that they could recommend people to go to a fashion store just because they have self-checkouts. They say that because it will be a smoother and more efficient way of shopping, this would make them more likely to recommend people to go to that store because they got such a good experience with their payment system. Participant C explains as follows:

> *Yes, maybe, just because it seems smooth that what you can, as in a more efficient way, shop yourself so that yes, it is possible that it would have been so that you had said that it works so heavenly well and it is so easy to shop, as well. Yes, so it is very possible that I would have thought it was good that you, like recommend it to others then.*

Finally, to frame the participants' thoughts and feelings about customer loyalty towards self-checkouts, we asked the question whether they felt that the use of self-checkouts could have influenced their loyalty to the store either positively or negatively. Almost all participants answered that they did not consider that the implementation of self-checkouts in fashion stores would affect their loyalty to the store either positively or negatively. They mean that it is not how they pay for their clothes that determines whether they become loyal to the store or not. Here other factors play a greater role, such as the clothes that are sold in the store and the personal service. One of the participants mentions this:

> *Yes, so as I said, again. I think I have said it before in fact that the payment system is not what affects or matters to me in the store but it. It's the store I like to shop in, it's what matters, so I do not think I would have shopped more or less depending on how I pay for my goods. I'll pay for my goods no matter what. So I actually do not think so, but I shop in the stores that I like. (Participant C)*

However, there were a few participants who actually considered themselves being able to become more loyal to the store if the store had offered self-checkouts as a payment service. They mean that if the store can deliver a smooth shopping experience to them, this can affect their loyalty to the store positively. For example, participant B mentions this:

> *Absolutely, yes, again if I get a smooth shopping experience then I will be more loyal to that store and will probably come back there again. Then if it only has self-checkouts or self-payment cash registers to do, it may not be, but the more positive experiences in a store, the greater the chance that I will come back and recommend it to others.*

5. Analysis

In this chapter, the empirical findings will be analyzed and discussed in relation to the previous theory that already exists in the field. The chapter is structured in the same order as our theoretical framework where each factor in the model will be discussed and ascertained whether they also fit into a fashion context or not. In the last part of the chapter, a presentation of the new factors that arose from our findings will also be given, which will then be followed by a presentation of our new revised theoretical framework.

5.1 Attitudes

As presented in the finding chapter, we started by asking general questions to get into the topic of SST and self-checkouts in fashion stores. What was demonstrated in our findings was that the participants had divided opinions that society is becoming more digital and that more fashion stores are installing self-checkouts. They meant that it becomes more impersonal to shop in the stores when the staff is replaced with technology. This is in line with what is mentioned in the theory that implementation of SST in stores can lead to less integration between the customer and the staff (Sharma, Ueno & Kingshott, 2021). This is confirmed by our participants and is one reason why they are skeptical that society and the retail industry are becoming more digital. The theory also mentions that the implementation of SST in stores can lead to a perceived technical anxiety and increased stress for the customer due to lower technical knowledge and technical inexperience (Lee and Coughlin, 2015; Sharma, Ueno & Kingshott, 2021). This is also confirmed by some of our participants, especially the older participants who believe that it is more difficult for the older generation to keep up and understand the new technology due to lower technical knowledge.

However, there are also a large number of participants who are positive to the technical development in society and believe that the digitalization and implementation of SST in the retail industry contributes to making the shopping experience more efficient and smoother. This is in line with what Sharma, Ueno and Kingshott (2021) mention that SST can help the customer save time and that it is more convenient for the customer.

Previous studies also describe that the benefits of SST for companies are that they can reduce staff costs and increase the service quality (Demirci-Orel, & Kara, 2014; Sharma, Ueno & Kingshott, 2021). This is something that is considered negative by some of the interviewed participants as they believe that there is a risk that the implementation of SST in stores may cause fewer job opportunities as those jobs are replaced by technology instead. As previously mentioned, other participants are also skeptical about the implementation of SST in fashion stores as they believe that it will be more impersonal as the staff in the stores decrease when they are replaced by technology. Therefore, the expected increase in service quality that is mentioned in previous research can be questioned in a fashion context.

5.2 Technology Readiness

Technology readiness (TR) is a concept that explains how customers perceive their own ability to use new technology in order to reach a specific goal, such as buying a specific product in a fashion store (Lin & Chang, 2011). As mentioned in the literature review, TR can be divided into four concepts: *optimism, innovativeness, discomfort and insecurity.* In the following paragraphs it will be discussed which of those four concepts are relevant in the fashion store context and if those contribute to a specific attitude towards the implementation in self-checkouts in fashion stores.

5.2.1 Optimism

Optimism refers to a customer that has positive feelings towards technology and can see the benefits of using it (Lin & Chang, 2011). Several of the participants in this study expressed positive feelings towards the implementation of self-checkouts in fashion stores. They explained that if the self-checkouts were fulfilling its function of being a faster way to pay for their goods, the benefits with them was that they were often easy and smooth to use as a payment method at the end of their shopping trip. Some of the participants also explained that since they are getting used to that other retailers, such as grocery retailers, are using self-checkouts, it was not an overwhelming news that this type of technology is established in other retail contexts as well. The participants meant that since they already have used some kind of self-checkout in other retail stores, they could see the benefits of it within the fashion context as well. These findings are in line with how Lin & Chang (2011) explained an optimistic customer. Therefore, it can be argued that some of the participants had an optimistic approach to the implementation of self-checkouts in fashion stores, which makes the term optimism relevant in the fashion store context.

However, not all participants were happy with the implementation of self-checkouts in this experimental environment. Nevertheless, our findings showed that even the participants with an overall negative feeling towards fashion retailers' use of self-checkouts could sometimes use the self-checkout technology themselves and also see several benefits with using it, such as that the checkouts are efficient and easy to use. According to Weijters, Falk and Schillewaert (2007), the benefits of efficient and easy use are connected to the utilitarian aspect of the shopping experience. Therefore, it seems like the participants with negative feelings still can see the benefits of self-checkouts in the fashion context that are connected to the utilitarian aspect. However, this does not always result in a positive attitude towards it.

According to Park, Ha and Jeong (2020), optimism is a factor that has a positive influence on TR which results in a positive attitude towards the technology. This is knowledge that can be confirmed through our findings. However, it could also be found that even if the customer uses the technology sometimes and can identify benefits with the use of it, this does not always result

in a positive attitude towards its implementation. Either way, Lin and Chang's (2011) definition of an optimistic customer can be confirmed in the findings of this study, which make the optimism a factor relevant for influencing customer attitudes towards self-service technology in a fashion context.

5.2.2 Innovativeness

The term innovativeness refers to a customer that is an opinion leader when it comes to technology (Lin & Chang, 2011). Earlier research has found that an individual who is innovative likes to try new technology and is better at handling the uncertainty of trying new things (Park, Ha & Jeong, 2020). In the findings of this study, a few innovative participants could be identified. Those participants explained that they had a general positive attitude towards the implementation of self-checkouts in fashion stores since they, for example, like to try new technology. Those participants could also not see any remarkable problem with starting to use self-checkouts in the fashion context and seemed to have an 'it dissolves' kind of attitude. This is in line with the description that Lin and Chang (2011) gave of an innovative customer, which therefore also can be argued to be a term relevant for exploring customers attitudes in a fashion store context.

Park, Ha and Jeong (2020) mentioned that innovativeness has a positive influence on TR which results in a positive attitude towards the technology. Since none of the participants that were considered to fulfill Lin and Chang's (2011) definition of an innovative customer seemed to have a negative attitude towards fashion stores implementation of self-checkouts, this study's findings can confirm that an innovative customer most likely obtains a positive general attitude towards the technology's implementation.

Previous research has also found that optimistic and innovative individuals perceive more hedonic value by using new technology since they perceive the use as joyful, exciting and entertaining (Park, Ha & Jeong, 2020). However, this could not really be confirmed by our findings. When the participants were asked whether the self-checkout would contribute to a more joyful shopping experience, the majority of participants explained that the self-checkouts were not a factor that were considered in that situation. The participants meant that it was other factors during the shopping experience that had an opportunity to make the shopping experience more joyful, such as good service from personnel, but that the payment method was just a way to pay and leave. Therefore, the findings in this study contradicts what Park, Ha and Jeong (2020) found about perceiving more hedonic value by using new technology.

5.2.3 Discomfort

The discomfort term refers to a customer that is feeling discomfort when they are feeling overwhelmed or loss of control when using technology (Lin & Chang, 2011). There were several participants in this research that expressed that they were feeling discomfort when using

self-checkouts in fashion stores. For example, some participants explained that shopping clothes, where you have to remove big security alarms, is a situation where they feel uncomfortable and uncertain. The participants were scared of removing the alarms in the wrong way and therefore destroying the product or just simply forget about it and walk out the store with the alarms on and then have to endure the humiliation of people thinking that they were thieves. Some of the participants expressed that this step of the self-checkout process could sometimes feel too complex and make them not want to use the technology.

According to Park, Ha and Jeong (2020), individuals who feel insecurity and anxiety towards using technology are more likely to adopt a general negative attitude. This is a pattern that could be seen in the findings of this research which therefore also can confirm that discomfort is a term relevant to consider as a factor that influences customer attitudes towards self-checkouts in the fashion store context. However, it is also worth mentioning that even participants who had a positive attitude towards self-checkouts in fashion stores pointed out the removal of the alarms as a difficult and complex part of the use of self-checkout in fashion stores.

5.2.4 Insecurity

Insecurity is connected to a customer's distrust and skepticism about whether the technology can function properly (Lin & Chang, 2011). This is also a term that can be found in the findings of this research. The participants expressed several times that they have experienced, or were afraid of possibly experiencing, technological errors when using self-checkouts in fashion stores. The participants explained that they were afraid of the feeling of choosing a self-checkout that is supposed to go faster but does not because of technological problems. They explained that this would lead to a feeling of frustration which has impacted their view of the use of self-checkouts negatively. One participant also explained that he would rather wait in a queue to a traditional cashier than to a self-checkout since you, as a customer, at least can see that something is making progress in a traditional cashier. These findings are in line with the findings made by Park, Ha and Jeong (2020), who found that a customer's feeling of insecurity leads to a negative attitude. Therefore, the insecurity term can be considered as a factor influencing customer attitudes towards self-checkouts in a fashion context.

5.3 Individual differences

According to previous research, individual differences are an important factor to consider when investigating customers' attitudes towards technology (Lin & Chang, 2011; Wang, Harris & Patterson, 2012). As mentioned in the literature review, the individual differences can be divided into two categories, *demographic factors* and *psychographic factors* (Wang, Harris & Patterson, 2012). The demographic factors that were investigated in this research, and could be confirmed relevant in the fashion context through our findings, are *age* and *gender* (Wang, Harris & Patterson, 2012). The psychographic factors that were explored in this research, and also could

be confirmed relevant in the fashion context through our findings, are *self-efficacy, computer anxiety,* and *personal innovativeness* (Lin & Chang, 2011). Each factor will be discussed below.

5.3.1 Demographic factors

To begin with, the demographic factors could be confirmed through our findings to have an influence on customers' attitudes towards self-checkouts in a fashion store context. Firstly, without asking the participants about their age's impact on their view on and ability to handle self-checkouts, their age's impact was something they discussed by themselves. The younger participants meant that they were born into the use of technology which makes it easier for them to understand how to use it. Therefore, they do not have any strong reactions to the implementation of new technology, such as self-checkouts, they meant. In the same way the older participants explained that the use of technology is still new to them, which makes it more difficult for them to understand and use it correctly. They also explained that since it takes longer time for them to use self-checkouts, it is also easier for them to feel stressed and anxious while using it, which can affect their general attitude towards it.

Secondly, the impact of gender is another demographic factor that could be confirmed through this research to impact customer attitudes. However, this factor was more difficult to explore and analyze. By looking at the findings in this research, there was only one thing that seemed to differ between the genders, which was the opinions connected to human interaction. The majority of females expressed that a conversation with an employee at the cashier could increase their feeling of a pleasant shopping experience at a physical store, which was something they miss when using self-checkouts. In contrast, the majority of males expressed that they only care about interaction with the employees during the shopping experience up until the payment stage and that when they were paying they just wanted to pay and leave. The male participants meant that whether they paid at a traditional cashier or self-checkout did not matter for their general impression of the shopping experience and their attitude towards the technology. In contrast, the females thought the opposite, which was that the interaction with an employee at the cashier was nice and therefore they were more likely to have a negative attitude towards the self-checkout. Due to these findings, the age and gender factors, as an influencing factor on customer attitudes towards self-checkouts (Wang, Harris & Patterson, 2012) in a fashion store context, can be confirmed.

5.3.2 Psychographic factors

Moving on to the psychographic factors, all four factors seemed to have an impact on the participants' attitudes towards self-checkouts. Firstly, it could be found in the empirical findings that self-efficacy, which refers to customers' perception of their own ability to implement a behavior and their motivation to do so (Lin & Chang, 2011), was a factor that the participants had divided thoughts about. Some of the participants expressed that they believed that they would have some difficulties in the beginning of their use of self-checkouts in fashion stores but

that they after a while would figure it out. Other participants explained that the technology is supposed to be easy to use, which is why they believe they could handle it. There was not a single participant who thought that they could not handle using a self-checkout. However, not all participants were convinced that they had the motivation to start using self-checkouts in fashion stores. Some of them explained it with their insecurity that the self-checkout would function as it should, others explained it with the lack of interaction with employees, while some explained it with the unattractiveness of paying through a screen. Either way, the findings of this study could confirm that self-efficiency was a factor that had an effect on their general attitude towards the implementation of self-checkouts in fashion stores.

Secondly, computer anxiety, which refers to the fear and concern a customer feels when thinking about or using the technology (Lin & Chang, 2011), could be identified in many of the participants' statements. Regardless of a general positive or negative attitude towards the implementation of self-checkouts in fashion stores, all participants felt some kind of computer anxiety. Some felt anxiety because of the step in the self-checkout process that involves removing the alarms from the products. Others felt anxiety because they think that we are losing the contact between personnel and the customer. Nevertheless, computer anxiety can be confirmed to negatively impact customers' attitudes towards the implementation of self-checkouts in fashion stores.

Thirdly, personal innovativeness, which is when customers are willing to try new technology (Lin & Chang, 2011), could be found in the majority of participants. All participants, regardless of a general positive or negative attitude towards the implementation of self-checkouts in fashion stores, expressed that they were willing to try it or already have tried it. Therefore, personal innovativeness could be confirmed as a factor positively or negatively impacting customers' attitudes towards the implementation of self-checkouts in fashion stores.

Finally, some researchers have found that human interaction is a factor that is influencing customer attitudes (Dabholkar & Bagozzi, 2002; Dabholkar, 1996; Wang, Harris & Patterson, 2012). As mentioned earlier in the discussion, the majority of participants wanted to have interaction with personnel during their shopping experience and meant that a short and nice conversation can influence their attitude towards the experience positively. However, they also pointed out that the interaction with employees is a positive factor that disappears when using self-checkouts, which they expressed affected their attitude negatively. The findings also showed that males were more interested in having human interaction during their shopping experience instead of at the payment sage. Therefore, their loss of human interaction did not affect their attitude towards technology negatively or positively. Summarized, the impact of human interaction on customers' attitudes towards self-checkouts in fashion stores can be both neutral and negative. Either way, the findings of this study can confirm that human interaction is a factor influencing customer attitudes in a fashion context.

5.4 SST Characteristics

According to Lin and Chang (2011), the TAM is a useful model to use when exploring customers' attitudes and acceptance of new technologies. In this study, the TAM, and some of the developed versions of the TAM, have been used to explore customers' attitudes towards the implementation in self-checkouts in fashion stores. The factors that have been investigated in and will be discussed in the following sections are *perceived ease of use*, *perceived usefulness* (Lin & Chang, 2011), *perceived risk*, *perceived control* (Wang, Harris & Patterson, 2012), *enjoyment, aesthetic appeal and stimulation* (Park, Ha & Jeong, 2020).

5.4.1 Ease of use

One of the two factors in the original TAM model is called perceived *ease of use* and is described to measure the level of an individual's beliefs about that the use of the technology will be free of mental and physical efforts (Lin & Chang, 2011). The factor perceived ease of use is found by Weijters, Falk and Schillewaert (2007) to be connected to the utilitarian aspect of the shopping experience, which means that the customer wants an easy and efficient shopping experience. In the findings it was found that the customers had divided thoughts about how easy the self-checkouts are to use. In all age-groups, there were participants who thought that the self-checkouts were easy to use, which contributes to a positive attitude towards its implementation. However, there were also other participants in all age groups who thought that some parts in the self-checkout process were difficult. As an example, some participants explained that the surface where the products are placed is too small which makes the usage more difficult. In addition, some participants also thought that the removal of alarms on the products was difficult. The participants meant that these more difficult parts of the usage of the technology could lead to frustration, which has a negative impact on their attitude towards the self-checkouts.

According to Weijters, Falk & Schillewaert (2007), the customer's perceived ease of use has an impact on a customers attitude toward the technology, which later will result in an intention to use it (Weijters, Falk & Schillewaert, 2007). With the findings in mind mentioned above, it seems like the participants had different levels of free mental and physical efforts while using the self-checkouts. Since it also could be confirmed that the perceived ease of use has an impact on the participants attitude towards the self-checkouts, these findings can validate what was found by Lin and Chang (2011) and Weijters, Falk & Schillewaert (2007).

5.4.2 Usefulness

The second of the two factors in the original TAM model is called *perceived usefulness* and is explained to measure the degree to which an individual thinks that the use of the technology will enhance a particular task (Lin & Chang, 2011), such as shopping (Park, Ha and Jeong, 2020). According to Weijters, Falk and Schillewaert (2007), this factor is also connected to the

utilitarian part of the shopping experience and to create an easy and efficient visit. In addition, this factor is found to decide a customers attitude toward the technology, which results in an intention to use it (Weijters, Falk & Schillewaert, 2007).

By looking at the findings in this study, it can be confirmed that usefulness is a factor that affects customers' attitudes towards self-checkouts in a fashion context. The majority of the participants believed that the self-checkouts could be a useful system to use to pay for their goods since it is fast and easy to use and therefore makes the shopping experience go more smoothly. The participants mean that if the self-checkouts function as they should, their attitude will stay positive. However, some of the participants express anxiety about using the self-checkouts due to reasons such as their inexperience of using it, their ability to use it and their skepticism that it actually functions as it should and is as easy to use as it should. This anxiety affects their attitude negatively and makes them rather use a traditional cashier with personnel in it since they then know that everything will be done correctly.

According to these findings, it could be confirmed that the findings made by Lin and Chang (2011) and Weijters, Falk & Schillewaert (2007) apply also in a fashion context. The factor perceived usefulness seems to affect customers' attitudes towards self-checkouts in fashion stores both negatively and positively.

5.4.3 Risk

As mentioned in the literature review, the TAM was expanded to include more factors since the orginal TAM was considered to not fully reflect customers attitudes and acceptance of technology (Lin & Chang, 2011). Therefore, the TAM was developed to also include the factor called *perceived risk* (Lin & Chang, 2011). This factor did not get any specific description by the authors, but in this thesis it will simply include any risk that the participants can think of when it comes to using self-checkouts in fashion stores.

In fact, the participants could think of several risks with using self-checkouts in fashion stores. Firstly, Almost all participants mentioned the alarms on the products as a risk since the alarms were easy to forget to remove, it was difficult to know which products that have alarms and where on the product you should look for the alarms. Several participants were also afraid of destroying the product if they removed the alarm in the wrong way. Other risks that were identified by the participants were that you more easily forget to pay for your products and that you sometimes dubble scan the barcode. The participants meant that the different risks with the alarms could result in different situations where they felt embarrassed for doing it wrong. Secondly, one participant mentioned that she was afraid of increased risk for skimming since there were no personnel who control the self-checkouts. Finally, one participant was also concerned for the companies using self-checkouts since she believes that it is more easy for people to steal.

Of the risks mentioned above, the alarm risks seemed to have the biggest effect on the participants' attitudes. As mentioned before, many participants believe that the alarm part of the process is difficult and can therefore have a negative impact on their attitude towards the implementation of self-checkouts in fashion stores. The level of perceived risk seemed to differ between the participants. However, the findings can confirm that a higher level of perceived risk is a factor that can impact their attitude negatively.

5.4.4 Control

Another factor that expanded the TAM to measure customers attitudes and acceptance of new technology is *perceived control* (Lin & Chang, 2011). Perceived control is not defined by the authors but is in our research referring to whether the customers feel like they have control over the usage of the technology, which in this case is self-checkouts. In the findings of this research, it could be found that participants in all age groups sometimes felt like they had control over the self-checkout process and sometimes they felt like they did not have control. If the participants expressed that they felt like the process of using self-checkouts were easy and smooth, we have it like they have felt like they were in control. However, if the participants expressed that some parts of the self-checkout process were difficult, we perceived it like they were not in control of the situation. For example, the participants explained that the self-checkout system does not always function as it should and that the participants then needed help from personnel to move on with the buying process. The participants meant that getting help from the personnel in self-checkouts often takes time and that they therefore felt frustration when the traditional cashier goes faster than the self-checkout. Even if the participants felt different levels of control over the situation, this seems to be a factor that affects their attitude towards the technology. Therefore, Lin and Chang's (2011) finding that perceived control affects customer attitudes can be confirmed through the findings in this research.

5.4.5 Enjoyment

To cover the attitudes connected to the hedonic aspect of the shopping experience, the factor called *perceived enjoyment* was included in the TAM (Park, Ha & Jeong, 2020). According to Park, Ha and Jeong (2020), perceived enjoyment is whether a customer perceives the use of SST to be fun and pleasant, separate from achieving the shopping goals. By looking into the findings of this research, it was found that none of the participants thought that the use of self-checkouts in fashion stores would create a funnier or more pleasant experience. As mentioned earlier, some of the participants said that the use of self-checkouts can lead to a better shopping experience since it makes the visit faster and smoother. However, this pleasantness is connected to achieving the goal of the shopping visit and is therefore connected to the utilitarian aspect of the shopping experience and not to the hedonic aspect of the shopping experience that Park, Ha and Jeong (2020) refers to. In addition, the participants expressed that the way to pay for your goods is not

a factor that makes the overall shopping experience more pleasant or fun, it is other factors during the visit that affect the hedonic aspect of the experience.

According to Park, Ha and Jeong (2020), fashion retailers that are incorporating SST into their customers' shopping experience are enriching a pleasant shopping experience, which in turn lead to that their customers are developing a positive attitude toward SST technology. However, the finding made by Park, Ha and Jeong (2020) can not be confirmed by the findings of this research. The findings of this research points towards that self-checkouts are not the kind of SST that enhance a customer's shopping experience. In fact, it seems like perceived enjoyment is not a factor that affects customers' attitudes towards the implementation of self-checkouts in a fashion store context in any age group.

5.4.6 Aesthetic appeal

Another factor that was developed to cover the hedonic aspect of the shopping experience in the TAM is called *perceived aesthetic appeal* (Park, Ha & Jeong, 2020). Perceived aesthetic appeal is described as a factor that checks if the customer thinks that the SST is visually appealing (Park, Ha & Jeong, 2020). According to Park, Ha & Jeong (2020), this factor is connected to the sensory value where the customers decide if the aesthetic of the technology is visually attractive and pleasurable, which impacts their attitude towards it. Whether the visual appeal of the self-checkouts was an influencing factor in the participants' formation of an attitude, was not discussed a lot by the participants. None of the participants expressed that the self-checkouts in fashion stores were visually attractive and that it leads to an enhanced hedonic experience. However, they did mention some negative aspects of its design. For example, some participants expressed that the surface where you put the products to pay is too small, which makes the participants drop products on the floor etc. The participants meant that this leads to frustration when using the self-checkouts in fashion stores which affect their attitude negatively.

With this finding in mind, it can be confirmed that the perceived aesthetic appeal is a factor that impacts customers' attitudes towards technology. However, in this case, it seems like this factor is nothing that the customers really are thinking about when shopping, if it is not something negative and frustrating with the design. Therefore, it seems like the perceived aesthetic appeal mostly can influence the attitudes towards self-checkouts in fashion stores negatively.

5.4.7 Stimulation

Finally, the third factor that is connected to the hedonic aspect of the shopping experience in the TAM is *perceived stimulation* (Park, Ha & Jeong, 2020). This factor is described by Park, Ha and Jeong (2020) as "product qualities that have the potential to offer new impressions, opportunities and insights, which are usually provided by novel, interesting and stimulating elements" (p. 374). In our research, the 'product' in the definition refers to the self-checkout. The perceived

stimulation factor is found to encourage positive feelings in customers and therefore lead to positive attitudinal responses (Park, Ha & Jeong, 2020).

By looking into the findings of this research, it can not be confirmed that the participants feel stimulation in connection to the hedonic aspect of the shopping experience when using self-checkouts in fashion stores. As mentioned earlier, several participants have pointed out that it is not the paying method that makes the shopping experience more pleasant in connection to the experimental and hedonic part of the experience. However, some participants have expressed that the self-checkouts contribute to a faster and smoother shopping experience, especially when it comes to buying just a few products or small products. However, this is connected to the goal of the visit and is therefore connected to the utilitarian part of the shopping experience.

Due to the findings mentioned above, it can be stated that the self-checkouts do not offer any stimulation that is connected to the hedonic aspect of the shopping experience in a fashion store context. Therefore, the findings in this study can not confirm the findings about perceived stimulation made by Park, Ha and Jeong (2020).

5.5 Situational factors

In earlier studies three different situational factors that affect customers attitudes towards SST have been identified. These factors consist of *perceived waiting time* (Dabholkar, 1996; Dabholkar & Bagozzi, 2002), *perceived task complexity* and *companion influence* (Wang, Harris & Patterson, 2012). These factors were considered relevant to examine whether these also fit into a fashion context.

5.5.1 Task complexity

Many of the participants considered that a situational factor that could be decisive for them when choosing a payment method in a fashion store has to do with the number of garments they intend to buy. They felt that if they only bought a small number of clothing or items, they would have found it convenient and convenient to use a self-checkout. But if they were to buy a larger number of items of clothing, they would have preferred to go to a staffed cash register as it would be too complicated to manage on their own. This agrees with what Wang, Harris, and Patterson (2012) describe that customers mostly want to use self-checkouts if the task is simple, for example, when the customer is only buying a few products.

Some participants also felt that their attitude towards using a self-checkout in a fashion store had to do with the type of product they were going to buy. If they were to buy smaller products, such as a pair of socks, they considered that a self-checkout would be easier to use to pay. However, if they were to buy larger products such as larger items of clothing, they would prefer to go to a staffed checkout and get help with the payment as a larger product was considered more

complicated to pay in a self-checkout. This can be compared with what Wang, Harris and Patterson (2012) suggest that task complexity also includes the type of products that the customer purchases. They explain that what the product looks like, for example its size, can affect the customer's attitude to wanting to use a self-checkout or not when purchasing the product (Wang, Harris & Patterson, 2012).

Therefore, we can state that task complexity is a factor that also influences customers' attitudes towards the use of self-checkouts in a fashion context. This is because customers believe it will be too complicated to use a self-checkout when they are buying a larger amount of clothes if they have to scan in and remove all alarms on the garments themselves. They believe that it will be difficult to keep track of all items that have already been scanned and that they are afraid that they will forget to remove the alarms from one of the garments, which would make the customers feel a great shame and irritation when they leave the store. They also believe that depending on what type of product that they are intending to buy is also a crucial factor that influences their attitude towards using a self-checkout in a fashion store.

5.5.2 Waiting time

The second situational factor that we examined was perceived waiting time. The interviewed participants believe that waiting time is something that affects their attitude to using a self-checkout in a fashion store. However, the participants explain that the waiting time is not a decisive factor that would make them prefer to use a self-checkout instead of a staffed checkout to pay for their clothes in a fashion store. What could be stated through the interviews was that regardless of whether there is a long queue for the staffed checkout or the self-checkout, this did not make the participants more inclined to choose the self-checkout instead.

According to Weijters, Falk and Schillewaert (2007), waiting time refers to the length of the queue to the self-checkout and is a situational factor that customers generally want to minimize. The participants believe that it does not matter which cashier they choose to pay for their products. The decisive factor lies in which cashier that has the shortest queue, regardless of whether it is a self-checkout or a staffed checkout. This contradicts somewhat what Collier and Kimes (2013) and Lee and Leonas (2020) state that customers today are less likely to choose a traditional cash register as they believe that it takes longer time to stand in line for a staffed checkout to pay for their goods. This has led to many people preferring to use a self-checkout to pay instead. This is according to our participants not right as they believe that it does not matter which cash they choose as long as they do not have to stand in line. They believe that it takes equally as long to pay at a staffed checkout as at a self-checkout as the checkout staff is more experienced than the customer is. If there was a long queue for the self-checkout, they would rather choose to pay at a staffed cash register and vice versa.

Van Riel, Semejin, Ribbink and Bomert-Peters (2012) explain in previous theory that customers' lack of knowledge and experience of SST may possibly cause a longer waiting time in the cue for the customers as it can be perceived as a complicated payment method. This can be linked to what one of the participants mentioned in the interviews when she explained that if she uses self-checkout in a fashion store that she has not used before, this can contribute to taking a longer time to figure out how it works. This can then lead to that she spends more time at the self-checkout, which makes the queue for the self-checkout longer. This can also be a reason why customers then instead choose the traditional cash register as they believe that this type of payment technology becomes too complicated and that the queues for self-checkouts then risk becoming very long. This can contribute to people going to the staffed checkout instead as they do not want to stand in ques for too long.

Therefore, we can state that waiting time is a situational factor that affects customers' attitudes towards self-checkouts in a fashion context. However, what can be stated is that regardless of whether there is a long waiting time for both a staffed cash register and a self-checkout, this does not make the participants more likely to choose to pay in a self-checkout instead. Thus, we can conclude that waiting time affects the customer's attitude, but that it does not affect it either negatively or positively. This is because it does not matter to the customer which payment method they use to pay for their clothes as long as they do not have to stand in a long queue.

5.5.3 Companion influence

The third and final situational factor that we investigated if it is also a factor that influences customers' attitudes towards self-checkouts in a fashion context was companion influence. According to Wang, Harris and Patterson (2012), companion influence means that the customer is influenced to want to use the SST of the company that they bring to the store. For example, there may be older customers who are more likely to consider that self-checkouts are too complicated for them to use, but that they are influenced by the younger company they have with them who have a greater technical competence to dare to try this type of technology (Wang, Harris & Patterson, 2012).

Our findings show that many of the participants do not believe that a more technical company would influence their attitude to wanting to use a self-checkout. On the other hand, many were positive about the idea of it and believe that it would be a nice support to have with you the first time you try this type of payment method. Many of the participants also said that if you had a more technical company with them the first time they tried a self-checkout, this would help them feel more confident and comfortable using it themselves the next time they have to pay in a fashion store.

Thus, it can be stated that companion influence can be a factor that can influence customers' attitude to wanting to try and use a self-checkout in a fashion store if they have not tried such a

checkout before. Otherwise, the participants do not consider it to be a factor that influences their attitude to wanting to use self-checkouts in fashion stores more or less.

5.6 Customer loyalty

To get a clear answer on whether the implementation of self-checkouts in fashion stores can affect customers' loyalty to the store, it was important for us to get an insight into how customers experience the implementation of self-checkouts in fashion stores and if this would change their general attitude against the store. Yuen and Chan (2010) argue that “loyalty is an attitude” (p. 225) which means that the customer creates positive feelings for a company or brand and leads to the customer being willing to repurchase goods from the brand again. Therefore, it was important for us to investigate what feelings the implementation of self-checkouts in fashion stores creates for the participants.

Our interviews showed that the implementation of self-checkouts in fashion stores would not affect the participants' experience either positively or negatively. Some participants described that the implementation of self-checkouts would positively affect their experience as long as everything works as it should. They mean that they would positively affect their experience as the self-checkout can facilitate their payment as it is quick and easy to pay. This can be compared with what previous literature describes about how easy SST is to use will affect how pleased a customer will be with a product or service (Ayodeji & Rjoub, 2020; Wang, Harris & Patterson, 2013). When the customer is satisfied with the ease of use of the technology it will contribute to the customer considering repurchasing the product or service again and therefore also becoming loyal to that company (Ayodeji & Rjoub, 2020; Wang, Harris & Patterson, 2013). This is in line with what the participants explain that as long as the self-checkout works as it should, they will be satisfied with their user experience of it, which could have resulted in them being willing to use a self-checkout in that store again.

What could be ascertained from our findings was also that even if the fashion store that the customers usually shop in only would have offered self-checkouts as a payment method, this would not have affected them to stop shopping there. They would have continued to shop there as they explain that it is not the payment method that makes them want to shop in that particular store, but it is what the store has to offer and if they have clothes that they like that is the main reason if they would want to shop there or not. This contradicts what Shahid Iqbal, Hassan, and Habibah (2018) explain about how SST contributes to increased customer loyalty and customer satisfaction. As the participants in the interviews mean that it is not the implementation of SST that makes them want to continue shopping in the store, this can be questioned in a fashion context.

Although many of the participants generally have a positive image of fashion stores implementing self-checkouts, many believe that if this type of SST takes over too much in the

stores, there is a risk that the shopping experience becomes more impersonal. They mean that it is part of the shopping experience that disappears if the technology takes over too much and replaces the staff. This can be compared with what previous theory states about that the use of SST within retail stores can result in less personal and social contact between the customer and the staff (Elliot, Meng & Hall, 2012; Sharma, Ueno & Kingsshott, 2021). This can affect customers' loyalty to the store negatively as they do not get that personal interaction as they do when they pay at a staffed cash register (Sharma, Ueno & Kingsshott, 2021). When the stores implement self-checkouts, this leads to less staff being required at the checkout line, which will then also result in customers having less social contact with the staff. This is something that the participants in the interviews pointed out as something negative and that could lead to a deterioration in the loyalty to the store.

5.6.1 The behavioral and attitudinal approach

Since we have chosen to examine customer loyalty through the behavioral approach and the attitudinal approach (Rahman et al., 2022) in this study, it was of interest to investigate whether the implementation of self-checkouts would affect the amount of products that customers buy and whether it would increase or decrease the number of visits to the store. This was of interest to investigate as Yuen and Chan (2010) explain that a loyal customer is a customer who repurchases the same brand and from the same company for a long time. What could be ascertained from our findings was that the majority of the participants did not consider that they would buy more products and visit the store more often simply because they have installed self-checkouts. Many believed that their buying patterns would be the same, although many felt that it would be easier and smoother to pay for their clothes once they shopped in the store.

However, some of the participants thought that they would buy fewer products on more occasions. They did not think that their consumption would increase but that they might shop a little less each time and instead visit the store a little more often. Therefore, we can suggest that the implementation of self-checkouts in fashion stores does not affect customers to shop more, but that it can contribute to them visiting the store more often as they shop for fewer items during each visit.

The attitudinal approach means that customers "… are willing to provide recommendations to others, as well as refusing to buy from competitors (Rahman et al., 2022, p. 59). This was also of interest to investigate in this study to get a clearer answer on whether the implementation of self-checkouts in fashion stores affects customers' loyalty to the store. Yuen and Chan (2010) explain that customer loyalty is also related to positive word-of-mouth as customers who have had a positive experience of a brand or company tend to recommend the brand to other people around them. Our findings show that the majority of participants did not believe that the implementation of self-checkouts would have affected if they were to recommend the store to people around them. They mean that it is not the payment system that decides whether they will

recommend the store to anyone or not. It is rather the clothes and products that the store sells that are a decisive factor if they were to recommend the store to people around them.

However, there were some participants who felt that they could recommend others to go to a fashion store just because they have self-checkouts. They explain that because it will be a smoother and more efficient way of shopping, this would make them more likely to recommend people to go to that store because they got such a good experience with their payment system.

In order to finally frame the participants' thoughts and opinions regarding whether self-checkouts in fashion stores can affect customer loyalty, the question was asked whether they considered themselves to be more or less loyal to the store if they used self-checkouts. Almost all the participants said that the implementation of self-checkouts in fashion stores does not affect their loyalty positively or negatively to the store. They believe that it is not how they pay for their clothes that determines whether they become loyal to the store or not. Here, other factors play a greater role, such as the clothes sold in the store and the personal service. Therefore, we can state that the implementation of self-checkouts in fashion stores does not have any major impact on customers' loyalty to the store. However, there were a few participants who felt that they could become more loyal to the store if they offered self-checkouts as a payment service. They mean that if the store can deliver a smooth shopping experience to them, this can affect their loyalty to the store positively.

The analysis shows that the implementation of self-checkouts in fashion stores does not have any major impact on customers' loyalty to the store. However, if the store can deliver a smooth and efficient shopping experience through offering self-checkouts as a payment system it could for some customers that have a greater technical interest increase their loyalty to the store. Therefore, it cannot be completely ruled out that SST and self-checkouts are not a contributing factor that can affect customers' loyalty to the store.

5.7 New factors

Through our findings, we also found some new factors that affect customers' attitudes towards self-checkouts in fashion stores. The new factors that emerged from our findings are Store *context, Online competition, Practical design, Previous experience, and Security alarms*. These will be discussed and explained more in-depth further down in this chapter.

5.7.1 Store context

The first new factor that was identified we have chosen to call *store context*. This factor aroused through that some of the participants pointed out that they were positive to the implementation of self-checkouts in a fast fashion context but if it would have been in a premium fashion store it would not have been appreciated and would have negatively affected customers' image of the

brand. These participants argued that if premium brands such as Louis Vuitton and Dior were to implement self-checkouts in their stores, it would contribute to losing the sense of luxury that the customers feel when getting the personal service that the customers expect to receive in a premium store. They explain that in a premium store the customer wants to get that personal service throughout the whole customer journey, and if the store then would have installed self-checkouts where the customer can handle the payment themselves, they would have considered that it does not feel as exclusive to shop in that store anymore. This is because the payment itself and getting your products wrapped in fine paper and nice bags is part of the experience when shopping in a premium store.

Therefore, we considered that this was an important new factor to add to our theoretical framework as this is a new factor that was thought to affect customers' attitudes towards self-checkouts in fashion stores. Depending on the store context whether it is a fast fashion store or whether it is a premium store, this affects customers' attitudes to wanting to use a self-checkout or not. What can be stated is that if the customers are in a fast fashion store that has self-checkouts, they can get a more positive attitude towards this by believing that it is a smart and flexible way to pay for their goods. However, if they were in a premium store that has self-checkouts, they would get a sense of cheapness and that there is something that negatively affects their attitude towards this type of payment method.

5.7.2 Online competition

The second new factor that arose from our findings is a factor that we have chosen to call *online competition*. This factor was considered important to include in our new theoretical framework as many of our participants pointed out that if the use of self-checkouts in fashion stores feels too difficult and complicated to use, many of the participants thought that they would have preferred to shop on the internet instead. This is because when they order on the internet, they do not have to worry about removing the alarms of the clothes themselves and that they do not need to keep track of everything that has been scanned in and paid for correctly.

They considered that today it is more convenient to shop for clothes online than in a fashion store, and if the stores also install self-checkouts where the customer handles the payment themselves, this will be another reason why it is more convenient to shop for clothes online instead. Therefore, online competition was considered an important new factor to include in our theoretical framework. This is because online clothing shopping is something that affects customers' attitudes towards self-checkouts as they consider it more convenient and easier to order their clothes online than having to scan in, remove alarms and put all items in their bag themselves.

5.7.3 Practical design - part of SST characteristics

The third new factor that we could identify by analyzing the findings in this research is named *practical design*. This factor is connected to the degree of which a customer perceives the physical design of the self-checkout as practical and functional. This factor could be identified in the material since the majority of the participants explained during their interview that the surface where you put your products to pay for them was way too small. When the participants were using the self-checkout the products did not fit on the payment surface, which resulted in the products falling down to the floor. The participants explained that this impractical design of the self-checkouts was making them feeling very frustrated, which negatively affected their attitude towards the self-checkouts in fashion stores. In addition, the participants explained that the frustration and the negative attitude toward the self-checkout resulted in them always choosing the traditional cashier over the self-checkouts.

Since the payment surface has not been mentioned in earlier research as a factor influencing customer attitudes, the practical design of self-checkouts could be identified as an specific factor influencing customers attitudes within the fashion store context. In our theoretical model, the factor is placed as its own category under SST characteristics since it was in combination with this concept that the participants mentioned the problem with the self-checkout payment surface. In addition, no other factor under this concept was described in a way that makes it reasonable to also include customers' perception of the technology's practical and functional design.

5.7.4 Previous experience

The fourth new factor that could be identified in the findings is entitled *previous experience*. This factor refers to the level of a customer’s previous experience and usage of a self-checkout. The participants in this research discussed their previous experience of self-checkouts as a tool to approach self-checkouts in fashion stores. Their previous experience of self-checkouts in other retail sectors had an impact on their attitude towards the implementation of self-checkouts in fashion stores. Participants who previously have had positive experiences of self-checkouts did in general seem to have a more positive attitude towards the self-checkouts in fashion stores from the beginning. Accordingly, participants who previously have had negative experiences of self-checkouts did in general have a more negative attitude towards the increased implementation of self-checkouts in additional retail sectors. Some of the participants who had never used a self-checkout before expressed that they felt anxiety over their first-time use, which automatically resulted in a skeptical and negative attitude.

As customers' previous experience of self-checkouts as a factor influencing their attitude has not been discussed in previous research, this is a factor that is considered as new in the fashion store context. Since customers' previous experiences of self-checkouts affect their primary attitude formation of self-checkouts in fashion stores, we identify this factor as an individual difference.

In our theoretical model, the previous experience factor is therefore placed under the concept called individual differences.

5.7.5 Security alarms

Lastly, the fifth new factor that could be found in this research to have an impact on customers attitudes is called *security alarms*. As mentioned earlier, the majority of the participants explained that the security alarms on the products are a difficult part of the process of using self-checkouts. The task to remove the alarms from the products seems to be a factor in the usage of self-checkouts in fashion stores that create anxiety and uncertainty among the participants. For example, the participants expressed that they were afraid of forgetting to remove the alarms. They were also afraid of removing them in the wrong way and damaging the product they wanted to buy. Since it is unique for the fashion store context to use alarms on the products, the security alarms are identified as a new factor influencing customer attitudes towards self-checkouts in fashion stores.

The security alarms factor is identified as a subcategory under ‘risk’ that is connected to the SST characteristic concept. The already existing risk factor is connected to what the customers perceive as risks during the use of self-checkouts. Since the majority of participants expressed the alarms as a risk when using self-checkouts in fashion stores, this factor is considered to be connected to the risk factor. Therefore, you will find the factor called security alarms under ‘risk’ in SST characteristics in our theoretical model.

5.8 Revised theoretical framework

According to the analysis, we can state that our theoretical framework needs to be changed based on what emerged from the empirical data. Below, a presentation and argumentation for the new revised theoretical framework will be given. To get an insight into the revised theoretical framework, please see figure 3. In the figure, the words marked in red are the new factors.

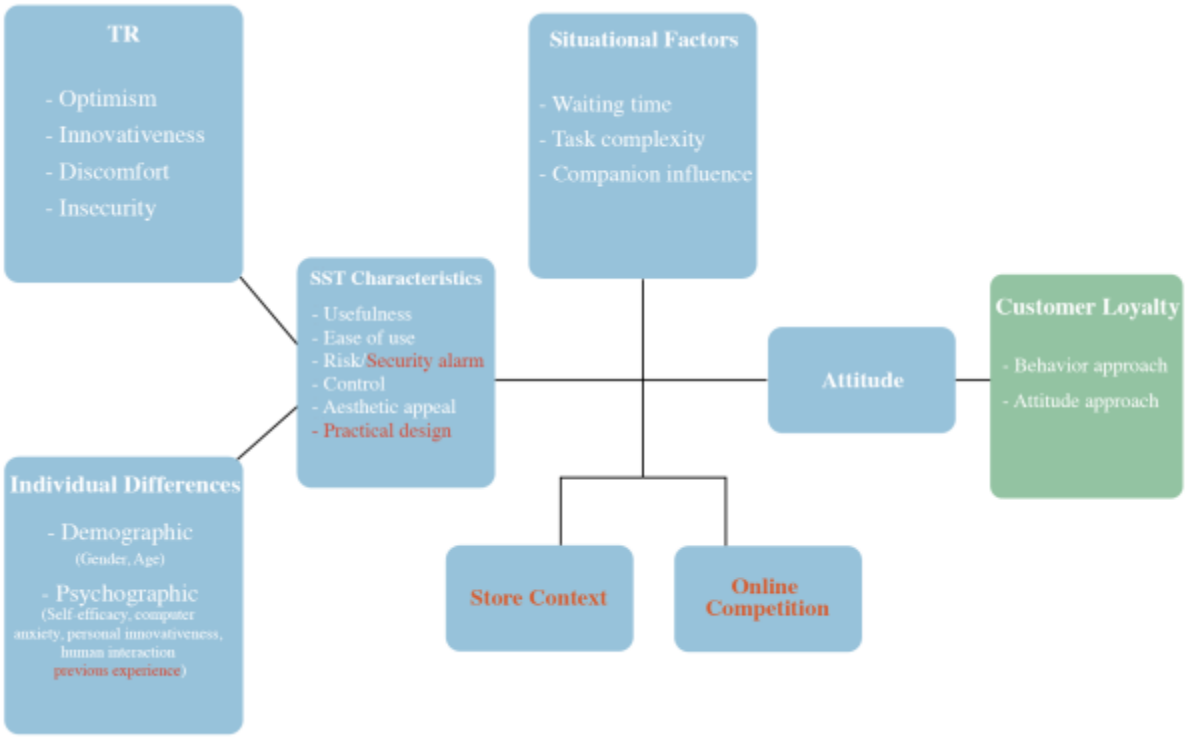

Figure 2, *Revised theoretical framework*

Our findings can confirm that all factors within technology readiness (TR) also fit into a fashion context. The only factor that could be questioned a bit was optimism as not all participants had positive feelings towards the implementation of self-checkouts in fashion stores. However, this factor was confirmed to have an influence on customers' attitudes towards self-checkouts in a fashion context, as the participants who had negative feelings towards this technology could still see the benefits of having self-checkouts in a fashion store context from a utilitarian perspective.

When it comes to individual differences, both the demographic factors and the psychographic factors could also be confirmed in a fashion context. However, a new factor was added to the individual differences that also was considered to influence customers' attitudes towards self-checkouts. As previously mentioned, this factor is included in the psychographic factors and we have chosen to call it '*previous experience*'. The name is based on the fact that the participants expressed that previous experience of using self-checkouts in other store contexts played a major role influencing their attitudes to using self-checkouts in a fashion context.

Moreover, within SST characteristics, all factors fit into a fashion context except for perceived enjoyment and perceived stimulation. Therefore, these will not be included in the new framework. However, from our findings, two new factors were discovered connected to SST characteristics. As mentioned above, we have chosen to call these factors '*Practical design*' and '*Security alarms*'. Practical design was considered relevant to add to SST characteristics as many

of the participants pointed out that the space available at a self-checkout is a decisive factor that can influence their attitudes towards self-checkouts. Many of the participants also mentioned that the security alarm is a factor that can influence their attitudes to use a self-checkout or not, which is why the security alarms factor could be identified.

The situational factors that consist of task complexity, waiting time and companion influence, can all be confirmed as factors that influence customers' attitudes towards self-checkouts in a fashion context. Therefore, all these factors will remain in the revised theoretical framework.

Based on our findings, we can state that the implementation of self-checkouts in fashion stores does not have any major impact on customers' loyalty to the store, both from a behavioral and attitudinal perspective. Thus, there were a few who felt that their loyalty could increase if the store offered self-checkouts. Therefore, it cannot be completely ruled out that SST and self-checkouts are not a contributing factor that can affect customers' loyalty to the store. Therefore, customer loyalty will remain in the revised theoretical model.

In the revised theoretical framework, two completely new categories have also been added, which we have chosen to call '*Store context*' and '*Online competition*'. Firstly, the store context factor refers to the participants' explanation that the context of the store, such as fast fashion or premium fashion, affect their expectations of the store and its service and therefore also their attitude towards self-checkouts. Secondly, the online competition factor refers to the participants' statements that online shopping is an easy way out if the self-checkouts in fashion stores are too complicated to use. Since these factors could be identified in our findings to influence customers' attitudes towards self-checkouts in fashion stores, these were considered relevant to add in the new model.

6. Conclusion

The first purpose of our research was to identify what factors that influence a customer's creation of an attitude towards the implementation of self-checkouts in an experiential context, such as fashion stores. The second purpose of our research was to explore if the implementation of self-checkouts in Swedish fashion stores is a factor that influences a customer's loyalty towards the store. By using an *abductive* approach to our study, we were able to achieve and answer these purposes. To fulfill our research purposes, we built the research on an *deductive* theoretical framework including theories and models connected to SST, customer attitudes (Dabholkar, 1996; Dabholkar & Bagozzi, 2002; Lin & Chang, 2011; Wang, Harris & Patterson, 2012; Park, Ha & Jeong, 2020; Weijters, Falk & Schillewaert, 2007), and customer loyalty (Rahman et al., 2022, Shahid Iqbal, Hassan & Habibah, 2018). In chapter five, we were then able to discuss these theories in relation to our phenomenon and also, *inductively,* identify new relevant findings in our empirical material. This resulted in that we could test and exclude some of the theories that were not relevant when exploring customer attitudes and customer loyalty in a fashion context and identify new relevant factors. Firstly, it can be concluded that the majority of factors mentioned in earlier research also applies in a fashion store context, except for the factors called '*enjoyment*' and '*stimulation*'. However, we could also identify five new factors relevant in the specific context of fashion stores, called *store context, online competition, previous experience, practical design and security alarms*. Summarized, these findings fulfill the first purpose of this research. Secondly, it can be concluded that self-checkouts in fashion stores, in the majority of cases, are *not* a major factor that influences customers' loyalty to a store, both from a behavioral and attitudinal perspective. This finding fulfills the second purpose of this research. In the sections below, theoretical and managerial contributions, limitations connected to this study as well as ideas for future research will be discussed.

6.1 Theoretical contributions

As discussed in our problem formulation (1.2), the majority of studies about customers' attitudes towards self-checkouts have been made in other retail contexts than fashion stores. Therefore, there was a need to investigate whether the attitudinal models can be applied in an more experimental and hedonic environment, such as the fashion stores, as well as if there were any other important factors influencing customer attitudes towards self-checkouts. In addition, there was not much research made that is connected to self-checkouts and customers' loyalty to the store, which emphasized the need for theory connected to this.

Our research contributes to fulfilling these needs of theory in connection to self-checkouts, customer attitudes and customer loyalty. Inspired by earlier theories and models such as the TAM (Lin & Chang, 2011; Wang, Harris & Patterson, 2012; Park, Ha & Jeong, 2020; Weijters, Falk & Schillewaert, 2007), TR (Lin & Chang, 2011; Park, Ha & Jeong, 2020), external factors (Dabholkar, 1996; Dabholkar & Bagozzi, 2002; Lin & Chang, 2011; Wang, Harris and Patterson,

2012) and behavioral as well as attitudinal approach within customer loyalty (Rahman et al., 2022), we developed a theoretical framework that was tested in an hedonic environment, fashion stores. By testing this theoretical framework, we could conclude that the majority of factors found by previous research to influence customer attitudes towards technology could be applied in a more hedonic environment as well, such as the fashion store context. However, Park, Ha and Jeong (2020) identified the factors called 'enjoyment' and 'stimulation' as two important factors influencing customer attitudes towards technology. In contrast to this finding, our research found that these two factors, which measure the hedonic aspect of a shopping experience, were not relevant in the fashion store context and could therefore be excluded from our initial theoretical framework.

Moreover, our empirical findings contributed to five new factors that are influencing customers' attitudes towards self-checkouts that have not been discussed in theory before. These findings point towards that the already existing theory within customer attitudes and self-checkouts have been inadequate in hedonic environments. The new factors, *store context, online competition, precious experience, practical design and security alarms,* contribute to a better understanding of customers' attitudes towards self-checkouts in hedonic environments, such as fashion stores.

Lastly, our research has also contributed to theory in relation to customer loyalty and self-checkouts. Rahman et al. (2022) has developed two types of customer loyalty approaches, behavioral and attitudinal approach. None of these approaches could be identified as relevant concepts when it comes to customer loyalty towards a store by using self-checkouts. In fact, this study contributed to the finding that, in the majority of cases, self-checkouts do not have enough of an impact on customers' shopping experience to influence the customers loyalty to the store either positively or negatively. In a few cases, some participants mentioned that the self-checkout can make the shopping experience smooth and fast enough to contribute to their loyalty towards the store. However, the self-checkouts would not make the customer change their buying behavior or make them recommend the store more often. Therefore, Rahman et al. (2022) two approaches could be decided as not relevant when it comes to the relationship between customer loyalty and self-checkouts in fashion stores.

Summarized, our research could contribute with a new framework that is relevant to use when investigating customer attitudes and customer loyalty connected to self-checkouts, based on previous theories within the concepts as well as new factors found in our empirical material (5.8).

6.2 Managerial contributions

Besides our theoretical contributions, our research has also contributed to some managerial contributions. Through our research, four managerial contributions have emerged that may be of value to fashion retailers to take part in. Firstly, our research can provide retailers with a deeper

insight into customers' attitudes towards self-checkouts in fashion stores and how it differs from other retail contexts. It can also provide relevant information to companies on how the implementation of self-checkouts in fashion stores affects customers' loyalty to the store. By examining this topic through three different age groups, it can help companies to provide a better overview of how customers in different ages view the implementation of self-checkouts in Swedish fashion stores. Through this, it can help companies know how to adapt their technology in the store according to the customers' attitude towards this which can result in more satisfied customers. It can also help companies develop their strategies to increase customer loyalty through their in-store SST.

Secondly, our research can provide an insight for fashion retailers on how to handle the removal of alarms in the best way at the self-checkouts. This emerged from our findings that the removal of alarms on clothes was considered a factor that could negatively affect customers' attitudes towards using a self-checkout in a fashion store. By clarifying this as a factor that can negatively affect customers' attitudes to self-checkouts and the fashion store in general, it can help retailers in the fashion industry to become more aware of this problem. This can help fashion companies develop a better strategy to facilitate the removal of alarms for the customers when they pay at a self-checkout, which can lead to more customers creating a positive attitude towards the store and their payment system.

Thirdly, this research can contribute with knowledge to retailers about the importance of still having staff at the checkout line as it could be stated from our findings that customers still place great emphasis on getting help from staff even though they use a self-checkout to pay for their goods. By doing this, the company can contribute to a higher customer satisfaction. The fourth and final managerial contribution that this research can contribute with is that it can provide a broader understanding for companies that there is a need from customers to develop the packing surface and the functionality of the self-checkout. By developing and improving the packing surface at the self-checkout, this can contribute to more customers having a positive attitude towards the store and becoming more inclined to use a self-checkout in the fashion store.

6.3 Limitations and suggestions for future research

As our research is limited to the Swedish market, there is still an opportunity to expand this research to a larger demographic area. However, the fact that we chose to limit the study to a small demographic area does not mean that we have not acquired new valuable knowledge within the subjects SST and customer loyalty. Nevertheless, the findings might be even clearer if the same type of research would be done in another demographic area as well. Therefore, a proposal for future research is to carry out this research in another demographic area. It could be of interest to compare similarities and differences between different customer attitudes towards self-checkouts in different countries. This research proposal would have been of value since it

can provide companies with favorable insights on how they should adapt the implementation of self-checkouts differently in their stores around the world.

Since the results from this research showed a somewhat divided result, another proposal for future research is to continue to develop the research area for how SST and self-checkouts can affect customers' loyalty to the store. We propose to conduct this research on customer loyalty in relation to SST again in a few years when self-checkouts and other types of SST have become more established in the Swedish fashion market and in the fashion market in general. This is to get an even clearer result on how SST in fashion stores affects customer loyalty to the store.

Lastly, one limitation connected to this research and the concept of customer loyalty can be identified. Since customer loyalty is a form of behavior, it is difficult to capture the full picture of the concept in this research by using interviews. This is because there is a risk that there is a difference between what the participants say they behave and how they actually behave. For this reason, there is also an opportunity for future research to examine customer loyalty, within the same topic as this research, by using another research method more suitable to explore customers behavior.

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Appendix

Appendix 1 - Interview questions

Here is a demonstration of all the questions that were asked to the participants.

General questions:

1. Do you allow us to record this interview?
2. What gender do you identify with?
3. What is your age?
4. What do you do for a living? Work/study?
5. Have you ever used a self-checkout in a fashion store?
6. How often do you shop for clothes in a physical store?
7. What is a good shopping experience for you in a physical fashion store?
8. What do you think in general about society's use of technology?
9. What do you think about the fact that more and more fashion stores are installing self-checkouts? Positive or negative attitude?

SST

10. How would you describe your relationship and attitude towards technology?
11. How technical do you consider yourself to be?
12. After watching the movie, what are your spontaneous thoughts about this type of payment method?
    - What feelings did arise when you saw the film?
13. If you are comparing a traditional cash register and a self-checkout, which would you have preferred to pay at? Why?

TR

14. Would you feel comfortable using a self-checkout when shopping at a fashion store? Why/why not?

Individual differences

15. How do you think you would have handled such a self-payment checkout when shopping at a fashion store? Difficult/easy? Why?

SST characteristics

16. What do you consider to be the biggest differences between using a traditional cash register compared to a self-checkout?
17. After watching the video, are there any steps that you think would have been easier for you to perform than others?

18. Do you think that this type of payment method would have facilitated your shopping in a fashion store in any way? Why/why not?
19. Do you think it would have been more fun to shop for clothes in a fashion store if you had used a self-checkout to pay for your clothes? Why/why not?
20. What risks do you think there is to use this type of payment method when shopping for clothes in a store?

Situational factors

21. If you imagine that you have shopped in a fashion store and are going to use the self-checkout to pay for your clothes, are there any factors in your environment that could have influenced your attitude about how flexible or complicated the use of self-checkouts is?
22. Do you think that you would have spent more or less time in the store if you had used a self-checkout to pay for your clothes?
23. If you had company with you that is more technical, how would it have affected your view of and use of a self-checkout?

Customer loyalty

24. How do you think this type of payment method would have affected your experience of shopping for clothes in a store?
25. Would you continue to shop in a fashion store if the store only had self-checkouts as payment method? Why/why not?
26. How do you think the use of self-checkouts affects the amount of goods you shop and how often you shop in a fashion store?
27. How does the implementation of self-checkouts in fashion stores affect your general opinion of the store?
28. If your favorite clothing store installed self-checkouts, would that make you recommend this store more or less to people around you?
29. Could the use of self-checkouts in fashion stores affect your shopping experience in a positive or negative way that could affect your loyalty to the store?

30. Do you have anything else you want to add about the topic that we have not been asking about?

Appendix 2 - Video viewing

Here is the link to the youtube video that was shown to all the participants before the interviews.

Self-service checkout: https://www.youtube.com/watch?v=alP4qDvzDvw