Exploring the Self-scanning Customer

Customer’s Situational Experiences with Self-scanning

Authors:
Arvid Schillerström
19901016
as222kh@student.lnu.se

Adam Kristoffersson
19920825
ak222zh@student.lnu.se

Group: C5
Tutor: Pär Strandberg
Examiner: Åsa Devine
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Authors: Adam Kristoffersson, Arvid Schillerström
Tutor: Pär Strandberg
Examiner: Åsa Devine
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Background: A self-service technology is a tool that enables the customer to have a more prominent role in the service process. In retailing, one such self-service technology is the self-scanner which the customer uses to scan items by themselves instead of going to the regular checkout. The use of self-scanners is determined through situational factors which also influences the way the customer perceives its experience.

Purpose: The purpose of this thesis is to explore how customers perceive the shopping experience when using a self-scanner and how situational factors influence usage.

Methodology: This thesis uses a qualitative approach with a cross sectional research design. The data was collected from four different focus groups, through convenience sampling, with participants who had previous knowledge with self-scanners.

Conclusion: The conclusions made in this thesis are that customers perceive their experience with a self-scanner as efficient and thus expect this as a result of using it. It was also concluded that the customers are influenced by all the situational factors when deciding to use the self-scanner. Most prominently they were influenced by the waiting time, the type items to purchase and finally if they were alone or shopping together with someone.

Keywords: Self-scanner, SST, customer experience, situational factor, customer journey
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Adam Kristoffersson Arvid Schillerström
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Introduction

The introduction chapter will briefly present the subject of this thesis and begins with a background of the chosen subject. This chapter will also present self-scanning and customer experience, which will be discussed further in the problem discussion. The background and the problem discussion will funnel down to purpose the research questions of this thesis.

1.1 Background

For many retailers today, it is common to use different technologies in order to deliver a product or service towards its customers (Weijters et al., 2007). The prevalence of technology in the retailing industry is done by retailers in an effort to increase productivity and service quality (Bobbitt and Dabholkar, 2001; Dabholkar et al., 2003; Weijters et al., 2007). When applying more technology to an existing service, the retailer is also able to differentiate its service compared to its competitors (Dabholkar et al., 2003; Weijters et al., 2007; Collier et al., 2014). Consequently, this has resulted in a change in the retailing market where the prevalence of self-service technologies (SST), has increased and as such given customers alternatives in regards to how the service can be delivered to them (Weijters et al., 2007).

The SST comes in many variations, but in common for all are that the customer has a prominent role to create the service process (Meuter et al., 2000). It allows the customer to choose when, where and how the service experience should take place, hence offering convenience to the customer (Weijters et al., 2007). Consequently, when using an SST the customer can partake in a service experience without directly interacting with an employee of the company (Meuter et al., 2000; Meuter et al., 2003; Weijters et al., 2007; Wang et al., 2012).

There are several uses of SSTs that has become standardized, such as self check-ins at banks and airports, which according to Cho and Fiorito (2010) has fueled other markets to also implement SST. One such SST is self-scanning systems at supermarkets, which allows customers to bypass the conventional waiting lines and instead complete their purchase at a check-out computer (Weijters et al., 2007). In order for the SSTs to work, the placement of these check-in and check-out computers are of importance as they should be visible for customers when entering and leaving the store (Cho and Fiorito, 2010).
According to Wang et al. (2012) and Collier et al. (2015) the decision to use the self-scanning depends on several situational factors which are decided upon when entering the store, such as the time available for the customer to shop, the length of waiting lines, difficulty to scan items and the number of items to purchase. When using self-scanning, the customer should have sufficient information presented from the company (Collier et al., 2015). This should be done so that uncertainty of how to use the technology is reduced as this influences the tendency to try the self-scanner (Marzocchi and Zammit, 2006). If the usage of self-scanning is made easy for the customer and a sense of independence is met, this has a positive effect on how the customer perceives its experience (Marzocchi and Zammit, 2006; Åkesson et al., 2014). The experience when using an SST is further mentioned by Åkesson et al. (2014) as that which the company needs to customize through accessibility and availability in order to give the customer an incentive to use the SST again.

Researchers have acknowledged that the use of SSTs influence the customer's experience process (Meuter et al., 2003; Weijters et al., 2007; Wang et al., 2012; Åkesson et al., 2014). According to Grønholdt et al., (2015) the customer experience is important to manage and develop for companies involved with services. Furthermore, customer experience is stated by Sharma and Chaubey (2014) to be the most important aspect for companies in order to become successful. Hence, to deliver meaningful experiences towards customers, gives companies advantages on a competitive market but also results in more satisfied customers (McColl-Kennedy, 2015; Bolton et al., 2014; Verhoef et al., 2009).

In a retail context, the process through which the customer experiences its shopping is known as the customer journey (Lemon and Verhoef, 2016). The customer journey describes the experience process through the three phases pre-purchase, purchase and post-purchase. Hence, what the customer experience before, during and after a purchase (Åkesson et al., 2014; Lemon and Verhoef, 2016). The phases are elaborated further by Lemon and Verhoef (2016), who states that the first phase involves the customer's decision prior to conducting a purchase, such as which store to visit and what items to find there. The second phase refers to the experience a customer has in the store such as what variant of a product to purchase, the order in which the purchase as a whole is conducted as well as interactions that occur throughout the visit. The third phase which
concludes the customer journey is the experience the customer has after the purchase in regards to the purchased items and the service the customer has received (Lemon and Verhoef, 2016).

1.2 Problem Discussion

The inclusion of self-service technologies has emerged as a focal point for companies wishing to differentiate their service offering towards its customers. This has raised interest within the retailing industry and particularly self-scanning which is of academic interest for this thesis (Anselmsson, 2001; Li and Zhou, 2011; Kokkinou and Crange, 2015; Kim, 2016). It is argued by Kokkinou and Crange (2015), that SST systems such as self-scanning are commonly applied to support time-efficiency, but also to provide the customer with an alternative way to receive the service. Hence, it is applied to assist current problems of waiting time customers experience in the waiting lines.

Existing literature on SST recognize how SST could change the outcome of the customer’s experience on different types of retailers and service providers such as supermarkets, airports and fast food restaurants (Kokkinou and Crange, 2015; Li and Zhou, 2011; Demirkan and Spohrer, 2014; Kim, 2016). It is further discovered and recommended, by Lee (2015), Kaushik and Rahman (2015) and White et al. (2012) that there is a need for exploration in the scope of SST and the influence on customer experience in retail settings with SST. According to White et al. (2012) and Collier et al. (2014) further research should be conducted on the customer’s experience in an SST context.

As mentioned earlier, one type of SST is the self-scanning technology that has been implemented in retailing stores (Marzocchi and Zammit, 2006; Dabholkar et al., 2003). Further, Marzocchi and Zammit (2006) argues for a need of further exploration on how customers experience the self-scanning when shopping. The link between self-scanning and its connection to customer experience is not explored throughout any recent research (Anselmsson, 2001; Dabholkar et al., 2003; Marzocchi and Zammit, 2006). This thesis acknowledges that there are three prior studies in retail settings, that has involved customer’s use of handheld self-scanners whereas most other studies concerning SSTs focus on self-checkout scanning where the customer has to scan its items during the end of the experience instead of during the experience (Anselmsson, 2001; Dabholkar et al., 2003; Marzocchi and Zammit, 2006).
Moreover, previous research of SST is commonly focused on usage on airports and banking (Meuter et al., 2000; Bitner et al., 2000; Marzocchi and Zammit, 2006). This provides an opportunity for a qualitative research of customer experience in the retail industry, where the use of self-scanning has become more common (Meuter et al., 2000; Bitner et al., 2000; De Matos et al., 2007; Liljander et al., 2005). This reasoning implies that there is a need for further exploration within this research field, with an emphasis on self-scanners and customer’s perception of the experience (Anselmsson, 2001; Dabholkar et al., 2003; Marzocchi and Zammit, 2006). Thus, the research has been conducted on outdated technology which therefore creates an opportunity to further explore the field but in current retail settings.

1.3 Purpose

The purpose of this thesis is to explore how customers perceive the shopping experience when using a self-scanner and how situational factors influence usage.

1.4 Research Questions

- How do the customers perceive the experience and usage of a self-scanner during the pre-purchase, purchase and post-purchase phase of the customer experience process?
- How are the customers influenced by the situational factors perceived task complexity, perceived waiting time and companion influence when using a self-scanner?
2.0 Theoretical Framework

First, this chapter begins with theory of customer experience and customer journey. Second, the chapter includes theory of self-scanning and situational factors. Third, the chapter ends with a model of the theoretical process, which describes the development of this thesis and how the theoretical material will be used.

2.1 Customer experience

The element of customer experience is created and established when there is an interaction between customers and a product or service. Thus, the experience can be described as the process where customers interact with the services or products provided by a company (Brakus et al., 2009; Grønholdt et al., 2015). The experience is furthermore, based on, the pre-purchase, purchase and post-purchase phase. All these phases are subject to the outcome of the experience that the customer obtains and how these are interpreted by the customer (Grønholdt et al., 2015; Verhoef and Lemon, 2016). Customers are conceptually different for companies which can define them as consumers, users, participants, guests or even actors of the customer experience. Despite this diverse view, they all share the same notion that experience is perceived individually and that customers interpret products or services based on their past experiences (Vargo and Lusch, 2008; Lusch, 2011; Bolton et al., 2014; McColl-Kennedy, 2015).

Customer experience according to Grønholdt et al., (2015) has become more important to manage and create in the service industry. The element of customer experience and its importance has become a large concern for both marketing academics and practitioners in modern society (Grønholdt et al., 2015; Lywood et al., 2009; Palmer, 2008; Pullman and Gross, 1999; Verhoef et al., 2009). Moreover, customer experience is claimed by Sharma and Chaubey (2014), to be a prominent aspect for companies in order to achieve success regardless of industry. It has further become a large interest for contemporary service research as well as management practice. Providing meaningful experiences for customers, can give a company advantage in a competitive market and can also result in more satisfied customers (McColl-Kennedy, 2015; Bolton et al., 2014; Verhoef et al., 2009). Further mentioned by Pine and Gilmore (2011), customer experiences that turn out successful are memorable, unique and most importantly, sustainable over time. It is further argued by Verhoef et al., (2009) that customer experience is holistic in nature and involves cognitive, affective, emotional, social and physical responses by the
customer. This indicates that customers consider several aspects of what they previously experienced, which in turn reflect how they perceive future experiences (Puccinelli et al., 2009; Lemon and Verhoef, 2016).

Through the differentiation, mentioned by Bagdare and Jain (2013), the experience a company can gain a competitive advantage since the customer will have a more personalized experience and as such feel that it is memorable. The differentiation hence, does not solely rely on the service quality and price but also how these are managed and formed into an experience (Pullman and Gross, 1999; Grønholdt et al., 2015). Bolton et al. (2014) argues further, that customer experience is not only created by service providers, but is also influenced by elements such as technology where its ease of use and efficiency also contributes to the experience for the customer.

2.1.1 Customer journey - The experience process

According to Lemon and Verhoef (2016), the customer journey describes the customers experience process separated into the three different phases pre-purchase, purchase and post-purchase. The first phase concerns a customer’s involvement with a brand or a retailer pre-purchase, hence, the activities conducted prior to a purchase which includes choice of items to purchase and in what environment and type of store to make these purchases (Lemon and Verhoef, 2016). In the second phase, purchase, Lemon and Verhoef (2016) state that this is where the customer’s interactions during purchase takes place, as well as decisions in regards to choice of items, order and payment. In the second phase the customer also goes through a choice of whether or not to proceed with the purchase. The third phase of the customer journey, post-purchase refers to the kind of interactions the customer is experiencing after a purchase has been done. It includes usage and consumption behaviors related to the items purchased but also the parts of the customer’s experience that are related to the products purchased and the received service (Lemon and Verhoef, 2016).

Customer experience is personal and therefore differs from other individuals perception, thus, customers perceives situations differently during a customer journey (Åkesson et al., 2014). Wang et al., (2012) argues that individual first-time experiences determine whether or not a customer will continue or avoid future use. Therefore, the customer journey in the stage of post-
purchase according to Lemon and Verhoef (2016) relates to customer experience in regards to how customers behave and use the product or service received.

2.2 Self-scanning

A self-scanner is a portable, handheld device that the customer picks up from a self-scanner station which is commonly situated at the entrance of the store. Its primary function is to scan product codes with the use of an optical reader and display information regarding current purchased items, including prices and quantity. It gives customers the ability to keep track of how much they have in their grocery inventory and display current total cost as well as each specific product’s price. Furthermore, the self-scanning device enables the customer to receive the service in an alternative manner with the possibility to avoid long waiting lines, since the customer then pays by the self-service counter, instead of the regular checkout counter (Marzocchi and Zammit, 2006; Dabholkar et al., 2003; Anselmsson, 2001).

The self-scanning in retail stores were a complex area to adapt during the beginning of the 2000s (Dabholkar et al., 2003). It is argued by Dabholkar et al. (2003) and Marzocchi and Zammit (2006), that the initial phase of introducing self-scanning was a failure but finally became recognized and accepted by customers in the modern retail industry. The major reason for this acceptance is believed to be because of the customer becoming more familiar with technology in general (Dabholkar et al., 2003; Marzocchi and Zammit, 2006).

There are advantageous elements from both a customer and retailer perspective. From the perspective of a retailer, the positive advantages are the savings on labor costs and the ability for the service provider to, more reliably, gain personal purchase information from its customers. The retailer receives information from the self-scanning devices regarding the customer's consumption pattern in real-time. Furthermore, it is possible for the retailer to create a profile account on behalf of the customer, keeping track of what the customer expects to purchase at the next interaction. This contributes to a personalized shopping service and creates efficiency for both the service provider and the customer (Marzocchi and Zammit, 2006; Dabholkar et al., 2003). According to Marzocchi and Zammit (2006), self-scanners allows customers to get greater details on products and offers. It further helps customers to maintain a budget and become more aware of prices of the products purchased (Marzocchi and Zammit, 2006).
Furthermore, it is discovered by Dabholkar et al. (2003), that customers who enjoyed using the self-scanner were those that used it on a regular basis and the ones who did not use it often had a more negative view. As previously mentioned, Dabholkar et al. (2003) and Anselmsson (2001) acknowledge that customers who were willing to use the self-scanning technology were those who held time-efficiency as the main concern when shopping.

2.2.1 Situational factors

One aspect, which researchers argue may influence customers use and evaluation of an SST are situational factors such as time of the day, waiting time and waiting lines. These are factors that influence the customer in particular ways during certain situations and as such are believed to be of relevance when researching influences that positively or negatively contribute to SST usage (Dabholkar, 1996; McMellon et al., 1997; Bobbitt and Dabholkar, 2001; Dabholkar and Bagozzi, 2002; Dabholkar et al., 2003). Wang et al. (2012) acknowledged three prominent situational factors when determining what influenced the customer’s choice of action in regards to SST. The first situational factor is perceived waiting time, which refers to the customers’ evaluation of how long the waiting time will be at the end of the shopping experience when paying for one's items. The second factor is perceived task complexity, which refers to how the customer perceives the usage of the SST in general, but also in regards to the amount and type of items purchased. Hence, this factor includes difficulties that may arise during usage of the SST, such as weigh-ins, scanning of certain items and how these aspect influences the customer’s choice to use or not use the SST. The third situational factor is companion influence, which refers to how a customer is influenced by others, such as friends, family and associates when deciding to use or not use the SST. Hence, when customers are about to make a purchase in a store they can be influenced by people in its surroundings and depending on who it is will also contribute to how the customer makes a decision in regards to using an SST (Wang et al., 2012).
2.3 Conceptual model of the theoretical framework

Figure 1- This figure displays the chosen theoretical framework and the scope within which this thesis will explore. Self-generated.
3. Methodology

The methodology chapter explains how the structure and what how the thesis was conducted. The chapter further explains each method, approach and strategy used in the thesis along with a justification and reasoning for that specific choice.

3.1 Research approach

3.1.1 Deductive research

According to Bryman and Bell (2011), within research there are two main approaches of viewing theory which are inductive and deductive approaches. The inductive approach is based on that the hypothesis derives from the material collected. However, it is stated by Bryman and Bell (2011), that the most commonly used approach in research is the deductive approach. The deductive approach furthermore, tests already existing findings where theory guides the research which steers the collection of data. This contributes to opportunities to generate new findings that could be further applied into theories (Chambliss and Schutt, 2010). The deductive approach attempts to identify patterns and relationships out of the collected data to build the theory. Hence, the type of reasoning would be based on subjectivity and formulating open-ended questions to enable the analysis of being in a state of constant comparison (Lodico et al., 2010; Bryman and Bell, 2011).

This thesis will take the form of a deductive approach, and this is due to that the theories used will work as a base for the thesis. The theory will provide the researchers with variables that are used to guide the collection of data. Hence, the theories will provide the researchers with an understanding of the concepts.

3.1.2 Qualitative research

When conducting research there are two dominant strategies and characteristics that are quantitative and qualitative research (Bryman and Bell, 2011). These two different research approaches entail different perspectives on collecting and interpreting data. It could be argued that quantitative research focuses on the numerical data and exhibiting a view of the relationship between theory and research. In contrast to quantitative research the qualitative research emphasizes words and the deeper understanding of the data rather than the quantity of the analysis. Qualitative research is the relationship between theory and research where theory is derived from data collection (Bryman and Bell, 2011). Furthermore, Chambliss and Schutt
(2010), argue for the common approach of applying participant observation, semi- and unstructured interviewing and focus groups are commonly used in qualitative research methods. The approach of this method is to gather rich deep data that is collected from participant’s views and ideas of a topic.

Qualitative research, focuses on the understanding and process of the topic. By collecting data creates the possibility for the researchers to delve deeper into the field of customer experience and self-scanning. In a qualitative research approach it is common to use open ended questions. This is to create an atmosphere for the participants to continue into the subject and avoiding yes or no answers from the participants. Thus, creating rich deep data and meaning of what the empirical data is collecting and furthermore, providing the opportunity of contextual understanding (Chambliss and Schutt, 2010; Bryman and Bell, 2011).

According to the structure of this study the appropriate and chosen strategy is a qualitative research method. Furthermore, the researchers believe that collecting rich deep data is obtained from focus groups could be examined and explored from different angles will result with a greater understanding of the participants experience with a self-scanner. Therefore, according to the layout and desire of obtaining information from focus groups the ideal approach is to continue in a qualitative research to examine words rather than numbers (Bryman and Bell, 2011).

3.2 Exploratory Research design

The exploratory design to research is generally found in research of a qualitative nature (Shukla, 2008). It is acknowledged by Christensen et al. (2010) as the type of research where the researchers have no knowledge beforehand about their chosen subject. This sort of research allows the researchers to form an opinion throughout the research process, as more knowledge is gathered the researchers can evaluate where this journey of discovery will take them. From this information the researchers can then emphasize current problems and make their own hypotheses (Christensen et al., 2010). The exploratory design is related to the questions how, what and why and to answer these questions the researchers must be curious about their topic of research as well as be creative and attentive. This is significant due to the fact that, during exploratory research the researchers are personally responsible as the reliance on systematic technique and statistical calculation is not used. Hence, the researchers need to consider the data that has been collected and form an understanding from this, by noticing differences and patterns that can
emphasize the understanding of the research (Shukla, 2008; Christensen et al., 2010).

The purpose of this thesis is to explore how customers perceive the shopping experience when using a self-scanning device. This field of research, in regards to self-scanning being conducted by a handheld self-scanner, is a field in the research on SST which often includes several different SSTs and aims to make comparisons on usage rather than focusing on a single type of SST (Meuter et al., 2000; Meuter et al., 2003; Liljander et al., 2006; Weijters et al., 2007; Wang et al., 2012; Zhu et al., 2013; Åkesson, 2014; Lee, 2015; Kim, 2016). This reasoning implies that there is limited previous research in a qualitative setting with a focus on one certain SST. Therefore, an exploratory research design is the most suitable and thus the methodological process is aligned thereafter.

3.3 Research strategy

When conducting research there are different strategies to choose from and according to Zikmund et al. (2010), it is up to the researcher to decide which one to implement based on what will suit the research the most. The research strategy facilitates the overall research process since it enables the researchers to gain a framework to follow. From this framework the researchers can then structure the study and decide how to collect data and answer the chosen research questions (Bryman and Bell, 2011).

3.3.1 Cross sectional design

A cross sectional research design is defined as the collection of data on more than one case and collected at more than one occasion. Furthermore, it collects quantitative or qualitative data that connects between two or more variables. The data collected guides the researchers to explore a pattern of associations and relationships between variables (Bryman and Bell, 2011). The cross sectional strategy is suitable for a qualitative approach since it focuses on data that is collected from focus groups or in-depth interviews from one specific point in time. Furthermore, cross sectional design is commonly referred to as a social survey design, but does not implicitly, mean that it does not cover other areas than questionnaires and structured interviews. The design depicts both quantitative and qualitative data and provides the researcher with patterns of association (Bryman and Bell, 2011; Appannaiah et al., 2009).
A cross sectional design focuses on providing general findings since it collects data on more than one case at a single point in time (Bryman and Bell, 2011). This design is therefore suitable for this thesis, where the questioned participants will be asked to recall previous experiences with a self-scanner.

### 3.4 Data sources - Primary and secondary

Researchers can collect data from either primary or secondary sources. Primary data is what the researchers themselves collect for the specific thesis through procedures such as case studies, focus groups, interviews or observations (Bryman and Bell, 2011). Hence, this data according to Zikmund et al. (2010) can be seen as more useful than secondary data since it has been collected in regards to the purpose of the thesis. Although the primary data can provide accurate information the time invested to collect this type of data is time-consuming and costly (Zikmund et al., 2010; Bryman and Bell, 2011).

Secondary data is data that has been collected by other researchers for another study, but that still hold value for other researchers within the same field of expertise. To use secondary data for one’s research will reduce the time and cost to collect relevant data as well as secure data which is of high quality that stems from experienced researchers that have conducted their research on a large sample (Bryman and Bell, 2011). Both primary and secondary data can offer the researchers valuable input for the research and according to Zikmund et al. (2010) it depends on how the researchers chooses to conduct the research. The same authors also argue that it is important to first collect and analyze data from secondary sources in order to gain an understanding of the chosen field of research and then begin to collect primary data.

For this thesis both primary and secondary data have been collected. The primary data is collected through four focus groups to specifically provide information regarding the research. Secondary data is used to inform and clarify concepts of the theory. Hence, the majority of the resources collected from secondary data is collected from external sources.

### 3.5 Data collection method

When collecting data for research there are different methods that can be utilized, such as content analysis, focus groups, interviews, observations and surveys. To decide on which of these methods are most suitable, the researchers need to consider whether to conduct a qualitative or
quantitative approach (Bryman and Bell, 2011). Due to the fact that this current thesis has a qualitative approach it is argued by Bryman and Bell (2011) to use either observations, interviews or focus groups to collect data since these methods result in a vast amount of data that the researchers then can analyze. From these the most frequently utilized is the interview which according to Bryman and Bell (2011) is due to the fact that it allows for a flexible collection of data. The same authors further state that the most common types of interviews are unstructured and semi-structured. When conducting either of these the goal is to gain insight into the respondents way of thinking and what the respondent consider to be of importance and relevance in regards the topic of discussion (Bryman and Bell, 2011).

3.5.1 Focus groups
A focus group is a type of group interview with a focus on a certain theme chosen by the researchers. The questions used during a focus group are made so that discussion may emerge among the respondents. During these discussions the researchers should consider how each respondent react to one another, how they argue for their opinion and if this then ends up changing the opinion of another respondent. In order to conduct a focus group there needs to be a moderator, whose purpose is to guide the respondents throughout the interview and facilitate the questioning of the respondents in a non-intrusive manner (Bryman and Bell, 2011). According to Christensen et al. (2010) the role of the moderator is of significance for the results of the interview since it can have an influence over the respondents and how they choose to answer and discuss a question. The moderator also needs to be attentive how the questions are asked so that it does not become a leading question as well as make sure that the respondents understand the question thoroughly (Christensen et al., 2010).

When conducting a focus group it is also important to consider the number of respondents during each interview session. Due to time and resources this number can vary but it is recommended to not have focus groups with more than eight respondents (Bryman and Bell, 2011). This recommendation stems from the fact that as the number of respondents increases the depth of the answers given decrease and as such yields unwanted results. In order to gain as exact results as possible from the focus group Bryman and Bell (2011) argues that all interviews should be recorded. This is done to ensure that the researchers can go through the collected material several times to decipher each discussion that has emerged and also enable the researchers to pinpoint
certain aspects that have been brought forth.

This thesis will therefore have focus groups that will follow a semi-structured framework that will allow for open ended questions. The questions are put down in an interview guide that acts as the framework for the focus groups. The guide is used to gain a structure to the questions asked during the focus groups, but, the researcher should be responsive towards the respondents’ answers and ask follow up questions which are not included in the guide (Bryman and Bell, 2011). This type of focus groups allows for the authors to receive insight when needed, as well as spur on a discussion to gain more responses and opinions (Barriball and While, 1994). Furthermore, Bryman and Bell (2011) explains that focus groups can support the researchers with a better understanding on how the participants reached its conclusion. Hence, the optimal research method for this thesis will be to conduct focus groups.

3.6 Data collection instruments

3.6.1 Interpretation of data collection from focus groups

Both researchers of this thesis are native Swedes with good experience in Swedish and English language. However, the thesis is written in English and the majority of participants that will be included are Swedish and therefore, the authors decided to translate the questions to Swedish. This is with intention to create an atmosphere in the focus groups where the participants can speak freely in their native language. The questions are translated by the two authors and furthermore revised and corrected by our given examiner. This is performed to ensure that the questions are translated and interpreted correctly by the participants in the focus groups. If for any reason a translated question deviates from the original question the authors will adjust or change the question accordingly.

Moreover, the answers that are given at the focus groups will be translated to English so that the coding procedure can commence. Translation will be conducted in a certain manner to ensure that the translated answers given in the focus groups does not deviate from the original response. Therefore, the translation procedure is divided into two stages being first phase and second phase. The first phase entails that during the different focus groups follow-up questions will be asked to ensure that the answers are interpreted correctly. This further attempts to ensure that the answers received from the participants does not deviate from the actual answers given. Hence, the
translation of the sentences becomes more accurate when ensuring correct interpretation. The second phase regards the translation of the Swedish focus groups into English. The researchers translated the same answer independently and compared the translation between them to discover if any indifferences where to be found. If the translation would have deviated between the authors a third member would be taken into account. The third member in this instance would be the tutor to revise and correct any misinterpreted information.

### 3.6.2 Operationalization

<table>
<thead>
<tr>
<th>Concept</th>
<th>Sub-concept</th>
<th>Theoretical definition</th>
<th>Measures (Questions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer experience</td>
<td><strong>Customer journey</strong></td>
<td>1. Describes the customers experience process that is separated into three stages of pre-purchase, purchase and post-purchase phase (Lemon and Verhoef, 2016)</td>
<td>1. Describe your last visit to a department store?</td>
</tr>
<tr>
<td></td>
<td>1. Pre-purchase/ Purchase/ Post-purchase phase</td>
<td>2. Customers involvement with a brand or a retailer pre-purchase phase. Activities that are conducted prior to a purchase which includes choice of items to purchase and what environment and type of store makes the purchases (Lemon and Verhoef, 2016)</td>
<td>2. If you reflect upon your last visit, was it anything in particular that caught your attention?</td>
</tr>
<tr>
<td></td>
<td>2. Pre-purchase phase</td>
<td>3. Post-purchase phase refers to the kind of interactions the customer is experiencing after a purchase has been done. Furthermore, how their previous experience influences their future behavior (Åkesson et al., 2014; Lemon and Verhoef et al., 2016)</td>
<td>3. How are you influenced by your previous experience in the grocery store when returning to the same store again?</td>
</tr>
<tr>
<td></td>
<td>3. Post-purchase phase</td>
<td>4. Where customers interacts during the purchase phase. Connected to the purchase process, choice of items, order and payment method (Lemon and Verhoef, 2016)</td>
<td>4. When using a self-scanner how do you expect your experience to be?</td>
</tr>
<tr>
<td></td>
<td>4. Purchase/ Pre-purchase phase</td>
<td>4.1 Post-purchase phase refers to the kind of interactions the customer is experiencing after a purchase has been done. Furthermore, how their previous experience influences their future behavior (Åkesson et al., 2014; Lemon and Verhoef et al., 2016)</td>
<td>4.1 Do you feel that these expectations are met when using the self-scanner?</td>
</tr>
<tr>
<td></td>
<td>4.1 Post-purchase phase</td>
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<tr>
<td>Concept</td>
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</tr>
<tr>
<td>Self-scanning</td>
<td>Situational factor</td>
<td></td>
<td>1. What are your main reasons for using a self-scanner?</td>
</tr>
<tr>
<td></td>
<td>1. Perceived task complexity, perceived waiting time and companion influence</td>
<td>1. Refers to what kind of items purchased by the customer. This becomes an evaluation of one’s chosen items (Wang et al., 2012)</td>
<td>2. What is your opinion about the self-scanners in terms of usage?</td>
</tr>
<tr>
<td></td>
<td>2. Perceived task complexity</td>
<td>2. Refers to how the customer perceives the usage of the self-scanner and how amount and type of items purchased influence the customer’s choice to use the scanner (Wang et al., 2012).</td>
<td>3. Would you use the self-scanner in all situations or do you avoid using it in certain situations?</td>
</tr>
<tr>
<td></td>
<td>3. Perceived waiting time, task complexity and companion influence</td>
<td>3. <em>Perceived waiting time</em> - Evaluation of how long the waiting time will be at the end of the shopping experience Wang et al., 2012). <em>Task complexity</em> - Refers to how the customer perceives the usage of the self-scanner and how amount and type of items purchased influence the customer’s choice to use the scanner (Wang et al., 2012). <em>Companion influence</em> - How the customer is influenced by friends, family and associates when deciding to use a self-scanner (Wang et al., 2012).</td>
<td>4. What are your thoughts on waiting lines when using a self-scanner?</td>
</tr>
<tr>
<td></td>
<td>4. Perceived waiting time</td>
<td>4. Evaluation of how long the waiting time will be at the end of the shopping experience Wang et al., 2012).</td>
<td>5. Describe how current grocery inventory and total cost influences you when using a self-scanner?</td>
</tr>
<tr>
<td></td>
<td>5. Perceived task complexity</td>
<td>5. Refers to what kind of items purchased by the customer. This becomes an evaluation of one’s chosen items (Wang et al., 2012).</td>
<td></td>
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</tbody>
</table>
3.6.3 Pretesting of questions for focus groups by semi structured interviews

Pretesting is done prior to the real focus groups as a way to test how well the questions are received by respondents and to determine whether a question needs to be removed or rephrased or moved to an earlier or later stage of the focus group. This streamlines the interview guide so that when it is used during the real thesis the chances of confusion or respondents being unable to answer a certain question are reduced (Bryman and Bell, 2011). The pretesting also allows for the researchers to become more experienced as moderators of the focus group and helps the researchers to navigate the interview guide more naturally. It is moreover a possibility for the researchers to check if the research instrument that has been applied to the thesis works as intended. Hence, pretesting is vital for researchers as it enables them to produce a more structured focus group without interruptions and consequently deliver questions to the respondents that are fully understood (Bryman and Bell, 2011).

In this thesis all the questions were revised and examined by the researchers’ tutor. Furthermore, two pretests and one participation of a focus groups were applied. The pretests were conducted on two individual people at two separate locations and time. Thus, the participants were well informed of what the test was regarded. The participants were provided with questions which were later interpreted by the researchers so that they could in their term consider which questions to withdraw or keep for this thesis. Furthermore, both the researchers participated in a focus group to gather information and knowledge how to improve or apply similar tactics to this thesis. It was observed in the focus group that the two researchers were acting as moderators. This was according to the researchers not the ideal tactic for the choice of this thesis. Therefore, this thesis will be conducted with one moderator keeping the conversations moving while the other researcher is passive and writing down comments and make sure that the moderator is receiving the correct information.

3.6.4 Conduction of focus groups

The focus group sessions began as the moderator welcomed and expressed gratitude to all the respondents for participating. After a general presentation of the role of the moderator the other researcher explained his role as a transcriber that would take notes and find keywords of interest for the study. The respondents were then made aware of the fact that the focus group session would be recorded and that their responses would be used as material for analysis. The
participants were also informed that they have the opportunity to withdraw from the focus group at any given time. Furthermore, the moderator briefly explained the purpose of the thesis as well as mentioning the general topics of Customer experience and self-scanning in relation to department stores and also stated that if the respondents had any questions they should feel free to ask them. After this, the participants were given a minute and asked to recall their latest visit to a department store. They were also asked to write down a couple of notes for further discussion which would occur when the minute of recollection was over. This minute long recollection was done in order to make the respondents feel comfortable with the subject, as well as begin to think about how their experiences in department stores has influenced them. Then the participants were asked to elaborate to the rest of the group what they had written down in relation to their last visit in a department store. This summarizes how the initial phase for each of the focus groups were conducted.

When the initial phase had been completed, the moderator explained that the respondents now would not have to take any more notes and instead could directly elaborate their answers and discuss them further with the other respondents. With this exhortation the moderator then proceeded to ask the respondents questions, in order of how they have been structured in the operationalization.

### 3.7 Sampling

According to Bryman and Bell (2011) a sample is the segment of a population which the researchers has decided to conduct their study upon. According to Chambliss and Schutt (2010) the sample is referred to as a subcategory of a population which is used to illustrate the whole population.

In qualitative research convenience and opportunistic sampling is commonly used and for this particular thesis, the authors have chosen to use the latter to form a sample (Bryman and Bell, 2011). The convenience sample is further elaborated by Bryman and Bell (2011) as the sampling method, which apart from being convenient, allows the researcher to save time and be cost efficient. Since the sample chosen is constituted of individuals which are available to be part of the study, subsequently, the convenience sample allows the researchers to select participants due to their accessibility (Bryman and Bell, 2011). The authors of this thesis chose convenience sampling with the regulation that those who decided to participate had to have prior experiences.
with self-scanners. This prior awareness of the subject of discussion, was set to gain deeper and rich data out of the sample.

3.7.1 Sampling frame
Sampling frame is described as an umbrella that incorporates and lists all participants selected in a sample of a population. It further entails the elements of which are used to identify a selected target population or representation of it (Bryman and Bell, 2011; Malhotra, 2010). Further argued by Bryman and Bell (2010), stresses the importance that the selected population should be to the largest extent representative of the population. Moreover, if the selected sample does not concur with the population it will not be regarded as representable (Bryman and Bell, 2010).

Non-probability samples are elements that are not known prior to the study. The non-probability samples are commonly applied with qualitative research methods because of its possibility on selecting participants for the sample (Christensen et al., 2010; Chambliss and Schutt, 2010; Bryman and Bell, 2010). Hence, non-probability further entails the exclusion of random selection methods were participant are chosen randomly in the population. Therefore, this implies that some participants obtain a larger possibility being selected based on the criteria set by the researchers. In non-probability sampling there are quota, snowball and convenience sampling. Convenience sampling is the method that is based on focusing on accessibility (Bryman and Bell, 2011). Further mentioned by Bryman and Bell (2011), convenience sampling is suitable to obtain results based on a specific subject that the researchers are attempting to explore. However, this sampling method is restrictive to its representation of the population and hence becomes difficult to generalize. This is due to, researchers choosing participants on a selected basis and obtain knowledge of that specific area rather than the population in whole. Although, the results and data collected does not determine that it is generalizable or not. The data obtained from these participants provide great detail on the niche selected and therefore brings valuable content to the study (Zikmund et al., 2010; Bryman and Bell, 2011).

For this thesis a convenience sample was mainly used in order to reduce the efforts to find possible candidates for the focus groups. It was also done in consideration to the time given for this particular thesis and its costs, since convenience samples are considered to be time-efficient and inexpensive for the researcher (Bryman and Bell, 2011). The participants chosen by the researchers have to fit certain criteria in order to be able to participate in the focus groups. Since
the researchers of this thesis wants to explore the customer’s experience of using a self-scanner, the participants are chosen thereafter. If a possible participant responds that he or she does not have prior knowledge of self-scanning, the participant will not be selected for the focus group. This is done in order to secure that the focus group will be able to discuss experiences when using a self-scanner and that the information gained from the focus groups is relevant and contribute to this thesis.

3.8 Data analysis method

When conducting qualitative research the researchers usually collect a large amount of data to use as material for the analysis (Bryman and Bell, 2011). The researchers should according to Christensen et al. (2010) aim to find patterns within the collected data and see what variables are influencing these patterns. From these patterns conceptual categories can be made that summarize the data that has been collected. The categories can be in terms of key concepts or keywords that have emerged from the data itself or taken from the theoretical framework (Christensen et al., 2010). According to Bryman and Bell (2011) the most frequently used method to categorize and analyze qualitative data is through the use of coding. The coding should be conducted throughout the data collection process in an effort to reduce the amount of coding when the collection is finalized. It is also important to be attentive when coding, to search for patterns within the codes and also remove or connect closely related codes (Bryman and Bell, 2011). When coding the data Bryman and Bell (2011) recommend that researchers follow a coding frame and schedule which facilitates the coding process as it supplies the researchers with a framework of how to code and pair codes together.

3.9 Quality criteria

3.9.1 Reliability

Reliability in qualitative research is to what extent a study can be replicated or the consistency of a measure. Furthermore, reliability focuses on how well the study can be repeatable and if the results or measurements are consistent when replicated (Chambliss and Schutt, 2010; Bryman and Bell, 2011). In the situation where the study is replicated and the results are similar it is said to be of high reliability. Consequently, if the results deviates from the previous study the reliability would be low (Bryman and Bell, 2011).
In qualitative reliability there are two major terms known as Internal reliability and External reliability. The Internal reliability is where the authors or observers interpret the responses or results given at a situation of collecting data. Interpreting the data among authors could vary and therefore it is of great importance to agree upon what is interpreted. This further highlights the importance that the authors agree upon what is seen and heard from the focus groups (Bryman and Bell, 2011). External reliability on the other hand focuses on the possibility of replicating a setting in future situation. However, it is argued by LeCompte and Goetz (1982), that it is impossible to freeze a social setting and exactly replicate it in the future. Furthermore, Bryman and Bell (2011) acknowledge the importance of attempting to replicate the social role in ethnographic research as similar as possible to measure if there is a consistency or not.

The authors of this thesis attempted to ensure a high level of reliability by conducting four separate focus groups. Hence, the reliability is of higher significance when more than one focus group would be held. However, in qualitative research measurements and observations are hard to replicate since it is not possible to preserve a social setting (Bryman and Bell, 2011). Therefore, the authors will ensure that the questions asked in the focus groups are understood correctly to increase the level of reliability.

3.9.2 Validity

There are various approaches of establishing validity, these are qualitative research most commonly known as internal and external validity. However, validity itself is used to determine what is actually being measured and what is the intended measure supposed to be (Ghauri and Grönhaug, 2005; Bryman and Bell, 2011). Furthermore, Bryman and Bell (2011) mentions that validity includes the research concepts and if the data obtained meet the requirements of the research methods. The two major terms of internal and external validity encompass if there is a match with observations and also if there are possibilities of generalization. Internal validity does however connect the observations performed by the authors and if these are appropriate with the theoretical ideas developed. LeCompte and Goetz (1982) argues for the strength of internal validity in qualitative research especially in ethnographic circumstances. In the situation of observations performed in ethnographic research provides the authors with high level of congruence between observations and concepts (Bryman and Bell, 2011). External validity rather focuses on the possibilities of generalizing the findings on other social settings. Measuring the
probability of apply the results on other groups and settings. However, external validity in qualitative context is rather vague since qualitative research is commonly based on small groups and specific case studies with low number of participants. Although, the data obtained does provide rich and deep data but is difficult to apply to other settings due to above mentioned (Bryman and Bell, 2011).

This thesis uses a cross-sectional design that will conduct four focus groups at separate times. Furthermore, the external and internal validity of the thesis will increase since the data collected is based on more than one case and different people. However, the generalizability of a qualitative research is difficult and therefore multiple focus groups consisting of five participants each is conducted to increase the level of validity. Moreover, during the focus groups the authors will ensure to measure that the answers meet the requirements of the research methods. This is conducted by constantly going back and forth between sub-concepts to secure that the participants are answering what is actually being asked.

3.9.3 Credibility
Credibility according to Bryman and Bell (2011), is the trustworthiness of the social reality and if it is acceptable or not. This means that if the information collected from the source is trustworthy enough for the researchers to take it into account in the study. However, if there are larger amounts of conducted samples this increases the credibility of the study. It is further advised to look over and communicate with the respondents used in the focus groups to validate if they have understood the social setting correctly (Bryman and Bell, 2011). As previously mentioned, it is recommended to conduct multiple focus groups in order to increase the credibility of the study. By conducting more than one focus groups with participants with different ages, backgrounds, identity and gender provides greater credibility towards the study (Bryman and Bell, 2011).

The authors of this thesis has chosen to conduct four focus groups and by having several focus groups to collect data from, this will contribute to increase the credibility of the findings. Furthermore, differences in the respondents chosen for each focus group such as age, background and gender also contribute to making the collected data more credible. When considering this thesis secondary sources, the authors have made sure to only collect sources which are trustworthy such as scientific articles found in academic journals and books from academic publishers in order to maintain a strong credibility. Finally, the authors have chosen to include
multiple secondary sources for statements, facts and theories which also contributes to increasing the credibility of the thesis.

3.9.4 Transferability
Qualitative research is based on rich deep data based on participants’ opinion and thoughts rather than breadth. This becomes troublesome to apply findings in qualitative date onto other contexts that are not directly connected to the study or timeframe (Bryman and Bell, 2011). It is further suggested by Geertz (1973), to produce thick description, which is providing the reader with greater input in form of details and culture so that the reader can judge the transferability of findings onto other areas by themselves. The collected data from focus groups regarding self-scanning should therefore provide greater possibility of adapting transferability onto similar areas within this category.

3.9.5 Dependability
According to Bryman and Bell (2011), state that dependability is closely related to reliability. This is due to the fact that dependability is based on trustworthiness and that all complete records should be kept for later disposal. The records that are saved from the research process could be reviewed by the researchers to follow-up if the assumptions and results are correctly based on the answers. Moreover, all saved data strengthens and supports the study if questions or further research is required (Bryman and Bell, 2011).

In the four conducted focus groups a recorder was placed in the middle of the table to record all comments. This was to ensure that the authors have the possibility of going back and reviewing that their answers are in line with what is transcribed. Furthermore, the transcription is written down and added to the appendix of this thesis for both the reader but mainly the authors to review any missing data or revision.

3.9.6 Confirmability
Stated by Bryman and Bell (2011), confirmability is the process of which the researcher considers the objectivity of the thesis. However, complete objectivity is impossible in qualitative research and therefore, the researcher should act in good faith. Personal values or theoretical inclinations should therefore be excluded to largest possible extent to ensure that the findings do
not deviate from the original research. Thus, the researchers should take into consideration the importance of being objective and not let personal values affect the study.

3.10 Ethics

3.10.1 Harm to Participants
In business research it is important to carefully plan the procedures of what kind of interview/focus group or observation that is planned to be conducted. Harm to participants is unacceptable and should be voided at all costs. Furthermore, harm entails different facets such as; physical harm, harm to participants, lowered self-esteem, stress, harm of career prospects and other harms that could mentally injure the participant (Bryman and Bell, 2011). Researchers obtain no obligation to violate the above mentioned rules/principles in subject to a study (Bryman and Bell, 2011; Diener and Crandall, 1978).

3.10.2 Lack of Informed Consent
According to Kumar (2011), it is significant that the respondents are made aware that the researcher wishes to collect information and from that standpoint is allowed to make a decision of whether to participate or not. The respondent should also be informed of how the information will be used by the researcher as well as how this could potentially affect the respondent. Bryman and Bell (2011) state that consent can be given in both verbal and written format where the researcher decides what is the most appropriate. If the interview is being recorded the researcher can ask for formal consent in the beginning of the interview instead of asking for written consent. Although, it is becoming more common to use the written consent where the respondents fills out a form to give consent and gain an additional information sheet to gain a more detailed view of how the researchers wish to use the collected data (Bryman and Bell, 2011).

3.10.3 Invasion of Privacy
The invasion of privacy is according to Bryman and Bell (2011), known to be regarding the issues related to what degree the invasion of privacy can be condoned. Furthermore, personal feelings and privacy are sacred and should not be intruded by researchers. The participants have the right of privacy and by violating these rules is not regarded as acceptable. Moreover, participants have the right to avoid questions that they feel intrude on their privacy. In the circumstance that a participant is informed and accepted to attend the interview does not entail
their responsibility to answer any question. Hence, once again, researchers may not know beforehand which questions are sensitive and should therefore, proceed with sensitively and providing the participants with the option to withdraw at any given time (Bryman and Bell, 2011).

### 3.10.4 Deception/ Fraud

In some research deception or fraud is implemented to receive natural responses. This violates the code of conduct that states that all respondents participating should be informed prior to the interview if specific observation techniques or recording devices are to be used. However, some interviews may require the participants to not be informed prior to the study so that natural results could be collected. Although, in that situation, it is required that the participants are informed after the interview and that the participants have the possibility to remove/ delete parts or everything recorded. The researchers have therefore, the responsibility of explaining and informing the participants at the beginning or at the end of a study to minimize deception (Bryman and Bell, 2011; Kumar, 2011).

### 3.10.5 Justification of ethics and its application in the focus groups

When the focus groups were conducted the researchers used the four abovementioned ethical standpoints to collect information in such a way that it would not be unpleasant for the participants. Prior to the focus group session the researchers presented themselves and what the thesis entailed. Furthermore, the researchers explained and clarified what the thesis will be used for and that there answers will be anonymous. Once again, when questions arose these were directly dealt with and the researchers proceeded with caution to ensure that participants understood the meaning of the thesis to exclude the possibility of deception. In terms of privacy issues, the researchers proceeded with caution to not intrude or violate any form of integrity or privacy related concerns. Thus, all participants were entitled to avoid questions and had the possibility of withdrawing from the focus group at any given time.

Therefore, the researchers took consideration to if the questions could mentally harm participants in any way. In the situation if a question could possibly be interpreted or understood to be harmful these questions would be disregarded. Hence, prior to the focus group the researchers made sure that all participants were informed regarding what the thesis would entail. This was done in order to assure that the participants gained thorough insight into how the collected
information would be used within this thesis. When the participants had been given an explanation and agreed to participate in the focus group, they were also asked to give formal consent which was then recorded by the researchers who proceeded to begin the focus group session.

Furthermore, the participants were informed after the focus groups that they obtain the right to disregard any information that they have shared in the focus group. Moreover, they have the right to exclude any or all the information they provided in the recording. All recordings of the information will only be used for this thesis and no information will be shared to a third party or institution. Furthermore, after this thesis has been submitted the recordings will be deleted. The participants were also informed that they may contact the researchers at any given time if they have any questions regarding their participation.
4.0 Empirical data

The empirical chapter consists of summarized findings from the four focus groups. Keywords are selected and emphasized from each question in the focus groups which is used to describe the answers to each question. Moreover, the questions are answered and presented in the same manner as the operationalization.

4.1 Customer Experience

The figure 1 below illustrates the process and structure conducted on the empirical chapter. It presents the concept (Customer experience) and the sub-concepts and questions connected accordingly. E.g. questions connected to pre-purchase phase are questions 1, 2 and 4. These questions are further presented in 4.1.1 Pre-purchase phase.

![Figure 2 - Outline of the Empirical chapter; Customer experience. Self-generated.](image)
4.1.1 Pre-purchase - Questions 1,2 and 4

**Question 1:** Describe your last visit to a department store? There were discoveries obtained from the focus groups that presented a pattern of resemblance. The four groups presented various opinions on their previous experiences when visiting a store. All participants did not share a common experience on their previous visit to a store. However, they did share thoughts and experiences such as reconciliation, calm, nice, harmonious, efficient, quick and smooth. The participants’ opinions were not solely based on a visit to a grocery store but rather towards their recent visit to any store. Discussions on negative perceptions was commonly discovered among the four groups regarding reconciliation and stress. Which can be seen in the two quotes below from focus group three that indicated a mixture of positive and negative experiences:

“Quick and structured. But I must say it was annoying to be involved in a reconciliation this affected my experience”

This participant had a negative experience from a self-scanner due to a reconciliation. This can be compared to another participant from the same group which expressed the opposite although having had to stand in a long waiting line from group three:

“Ok, it was quick and efficient. There were helpful personnel that helped me locate an item that I did not find. However, there was a long waiting line at the regular checkout, but overall the experience was good in my opinion”

The participants’ answers regarding experience was moreover short and precise. They were given time to write down their thoughts on a piece of paper which they could explain. Although, the answers from group one and four were narrow and not as detailed as the the other two. Group two and three were by far much more detailed considering their answers.

**Question 2:** If you reflect upon your last visit, was it anything in particular that caught your attention?

The answers discovered in question 2 was listed down to four keywords: Crowded, early visit, nothing unusual and accommodating personnel. These four keywords represent the major similarities and also differences among the groups responses. The question asked was if there was anything that caught their attention a little extra. The participants answers varied since some of
the participants were at different stores or experienced something different. When the participants further reflected on their previous visit it was common among group one, two and three that waiting lines and amount of people were an issue. That if the store is crowded it would become a hassle. That sometimes, during specific hours of the day, the store would be crowded because the customers wanted extra assistance, purchase help or other issues that would delay the checkout procedure. The participants further explained that their choice of time was to avoid long waiting lines. That normally there is no issue with a lot of people but in some situations there could be more people and this would be annoying. Quote from the second focus group presents their experience of waiting lines:

“There was not a lot of people. I usually believe that there is a lot of people in grocery stores but this time it was very little people. I was there around 8 o'clock so that was early. But I would easily go there again at that time to avoid the long waiting lines”

This was one of the participant’s answers regarding their view on waiting lines. It was discovered that the participants all agreed upon avoiding waiting lines.

**Question 4: When using a self-scanner how do you expect your experience to be?**

When asking the question how they expect their experience to be when using a self-scanner the four groups provided similar answers. They all agreed upon that it should be quick, smooth and efficient. By using a self-scanner would be more efficient than using the regular cashier check-out. However, they mentioned that they must put effort in weighing fruits and vegetables. That this would become time consuming and that it was a problem. This was stated by a participant in group two:

“It should not be that you need assistance to scan some items, so that you have to ask for help anyway”

As the quote above emphasizes, it was common that the participants shared the same view that the scanning could be troublesome at some situations. For example, knowing before they would go to the store and their intention is to purchase fruits and vegetables they would rather prefer purchasing it in the normal check-out.
The participants did mention that they did not expect to receive a reconciliation. That they are aware of the possibility of receiving a reconciliation and that this could influence their experience. Thus, the keywords collected from this question are, quick, smooth, efficient, reconciliation and outperform regular shopping.

4.1.2 Purchase - Questions 4 and 4.2

**Question 4: When using a self-scanner how do you expect your experience to be?**

When asking the question how they expect their experience to be when using a self-scanner the four groups responded with similar answers. By using a self-scanner it would be more efficient than using the regular cashier checkouts. However, they mentioned that they must put effort in weighing fruits and vegetables. That this became time consuming and that it was a problem. This was stated by a participant in group one:

“On the other hand, it's bad when you need to weigh fruit and vegetables and look for the right product on the computer.”

This was observed in focus group two:

“If I go to Willys and I have already picked up a self-scanner and I'm going to buy fruit, I usually think it's ridiculous that it's so hard. It may happen that the code you want to scan does not work, or you need to keep on struggling with the weigh scale”

The participants mentioned that they believed that scanning fruits or vegetables was most efficient by doing it at the regular checkout. That when they already have entered the store with a self-scanner and decide to purchase fruits, which was discussed to be annoying and troublesome, they would have preferred using the regular checkout. As the quote above mentions, it was common that the participants shared the same view that weighing fruits and vegetables was troublesome. The participants further responded that if they were inside the store with a self-scanner and they would proceed to purchase vegetables or fruits this would become troublesome. It was expected that the experience should be smooth and efficient but if they chose to purchase specific items that are difficult to scan it would change their opinion on the efficiency. That when they are standing there inside the shop with a self-scanner and must scan difficult items it would be time-consuming and not as quick and smooth as they expected.
Thus, the keywords collected from this question are, quick, smooth, efficient, reconciliation and outperform regular shopping.

**Question 4.2: How would you describe the experience compared to regular shopping?**

There was a difference between self-scanning and regular shopping that was discovered among the focus groups. Hence, the majority of the participants agreed that the main difference on the experience was that the self-scanner was smoother and quicker. It was also mentioned that you would use the self-scanner when you have knowledge of the stores layout. Another reason for a difference was that the user could avoid interactions with others. Others further mentioned that it is more efficient and smart to use the self-scanner since you only place the items in the bag once. Compared to regular shopping, the customers would first need to place the items in a bag and then when they enter the counter they would have to unload all the items onto the checkout counter. After they have put the groceries and items on the counter they would have to purchase a bag to then place them back again. As seen in the quote below, it presents the participants answer from the third focus group.

“If you use self-scanning, it's easy because you have already packed the groceries as they should be”

Furthermore, another quote similar to the one above from focus group one is,

“Nice to pack at the same time and get it done when you pay”

There were multiple discussions in the focus groups regarding the similar views on self-scanning and regular shopping. That they agreed upon self-scanners are quicker but also more efficient. The participants present their opinion that self-scanners provide the user with all functions so that they don't need further assistance from the personnel.

**4.1.3 Post-purchase - Questions 3 and 4.1**

**Question 3: How are you influenced by your previous experience in the department store when returning to the same store again?**

When collecting the participants answers there were some different opinions among them. However, it was common to understand that they were influenced by previous experiences. Some
participants mentioned that they would return to a specific grocery store because they know how their knowledge of the layout is. That knowing where everything is would make the procedure a lot more efficient. The keywords selected became, knowledge of store layout, bad vs positive experience, knowing the personnel and past experiences.

Participants also argued for the knowledge they had when returning there again. The participant from group three mentioned:

“The good thing about returning to the store is the fact that I can find everything much easier”

There were multiple participants not only in focus group three that agreed that knowing the layout would make it easier to return. Specifically, that it becomes more convenient to be aware of where the items are located. Furthermore, the participants mentioned that past experiences in a store and the service or product received there, had a significant influence on their intention to return there again. This was mentioned clear by a participant in focus group two:

“It could even be that you would not visit a store again because previous experiences were bad. Likewise, if it was a positive experience, you would want to go there again”

It was also mentioned by some participants in different focus groups that the role of the personnel was important. That if they were properly treated by the personnel, they would more likely return to that specific store again. However, if several bad experiences in terms of service with the personnel happened on several occasions that would then influence their choice to return. This was stated by a participant from group four:

“It is on repeated occasions that the influence of an experience affects me. If the experience is bad several times in a row leads me to not return there again”

Question 4.1: Do you feel that these expectations are met when using the self-scanner?

It was explored that most of the participants in the focus groups answered similarly. Between the focus groups it was common that the expectations were met or almost met. The only factor that differed between the groups was that if there would be a reconciliation it would not be as they expected. The first below comment is taken from the first focus group,

“Yes, I think it usually goes as expected, as long as you do not get a reconciliation”
Although, some of the participants mentioned that they never received a reconciliation but the participants who had experienced a reconciliation did interpret it as something negative. The reconciliation was something that took time and also made the self-scanner less efficient. The reconciliation in its turn would lower the expectation when shopping according to the participants.

The keywords selected from this question were connected to reconciliation and expectations. There was only one participant who mentioned that they expect that the use of the scanner would be of a hassle and therefore avoids to use it. Although, the respondent did however mention that this gave him/her low expectations upon next their next visit. Further mentioning that the possibility that his/her next visit to the store would possibly surpass his expectations.

4.2 Self-scanning

The figure 2 below illustrates the process and structure conducted on the empirical chapter. It presents the concept (Self-scanning) and the sub-concepts and questions connected accordingly. E.g. questions connected to perceived task complexity are questions 1,2,3 and 5. These questions are further presented in 4.2.1 Perceived task complexity.

![Figure 3 - Outline of the Empirical chapter; Self-scanning. Self-generated](image-url)
4.2.1 Perceived task complexity - Questions 1, 2, 3 and 5

**Question 1:** *What are your main reasons for using a self-scanner?*

The first question was to discover what are the main reasons for using a self-scanner. All the participants have used a self-scanner previously. All the participants furthermore shared the opinion that self-scanners are efficient. Furthermore, it is smoother to use the self-scanner compared to the regular shopping. A majority of the participants agreed that using self-scanners also enables you to pack a shopping bag while you shop and at the end of your shopping you just make your payment. This was then compared to regular shopping where you collect your items in a shopping cart, which you then have to empty when making your payment so that the cashier can scan your items for you. After this has been done you pack your items again. This comparison came up and was discussed by all of the focus groups. The quote below is taken from group one:

“[…] you can pay and thereafter you have already packed”

This quote describes how many of the participants from the different focus groups felt. The option to self-scan was not perceived as difficult when considering the main reasons of usage, but rather the focus was that the purchase became more efficient.

**Question 2:** *What is your opinion about the self-scanners in terms of usage?*

The participants were asked to share their opinion about self-scanners and in terms of usage. Their answers were a bit scattered but all the groups mentioned that there were improvements that could be made. Participants from all the groups said that the scanner itself was troublesome to carry around and also finding it difficult where to put it while packing items into the bags. Below follows quotes from participants from groups one and three:

“I think it’s a bit hard that I don’t know where to put the self-scanner. I usually put it in the jacket pocket but then when I pick something, I have to put it somewhere else,”

“I think they are a little clumsy too. That there is no natural place to put it if you do not have a carriage. If you have a basket then you have to put it in a special place to weigh vegetables.”
The participants discussed that it is troublesome to put the scanner at various places when packing the groceries. In their opinion it was hard to carry around the scanner. The participants in group one also mentioned that the scanner is troublesome to carry around since they don’t have three arms. That the usage of the self-scanner could sometimes imply an issue of mobility.

However, there were also positive comments regarding the usage of the self-scanner. The participants mentioned that the possibility of seeing discounts and keeping track of the total costs is good. Although, the functions could be improved, for instance, to inform the user how to delete items. The keywords taken from the focus groups were, reconciliation, difficult to carry, discounts, clumsy, user-friendly.

**Question 3: Would you use the self-scanner in all situations or do you avoid using it in certain situations?**

There were various responses from the participants when asking if they would use the self-scanner in all situations. It was agreed by several participants that they would avoid using the self-scanner when buying large amounts of vegetables since that would result in many separate weigh-ins which would be time consuming. However, they would use the self-scanner in almost any other situation since it provided good information, was quicker and more efficient than regular shopping. However, in focus group one there was one of the participants who opposed that the self-scanner would not be used when buying vegetables by saying:

“But I probably would have done it [used the self-scanner] anyway, I do not feel that it is that difficult. In the end I think you make up for the lost time anyway, when you do not have to stand in line and wait to pay”

After stating this there were others in the group inclined to agree. Although, the opinion that the scanning became more difficult when purchasing many vegetables and other weigh-in items could for the most part be seen in all of the focus groups.

**Question 5: Describe how current grocery inventory and total cost influences you when using a self-scanner?**

The last question entailed what opinions the participants had regarding the information that the self-scanner provides. The answers were very similar between the focus groups. All four groups
mentioned that the possibility of seeing current inventory and price was very good. That being able to see the price made it easier for the user to think twice if they actually need that item or not. They also argued that it was good that you could see the total price at any given time. As seen below, these quotes are taken from group three and four:

“Quite spontaneously, as you see the total amount, you react that you may not want to buy that little extra item.”

“I think it's great that you can see the price. Seeing the price of each product”

The price was further discussed among the participants that it was a good feature since it clearly presented which items you have received discounts on. It was also mentioned that it presents more information than compared to regular shopping. That the price and how much you have bought is clearly provided in the display of the scanner.

4.2.2 Perceived waiting time - Questions 1 and 4

Question 1: What are your main reasons for using a self-scanner?

The first question was to discover what are the main reasons for using a self-scanner. All the participants have used a self-scanner previously. The groups one, three and four also commented that self-scanners are time efficient. Once again, the possibility of avoiding waiting lines came up. Majority of the participants agreed that using self-scanners enables them to pack all the groceries while going through the store. Hence, when they were finished with collecting all items, the only thing left to do was to make a payment and leave with the shopping bags already packed. All of the four focus groups discussed this as the part of your shopping where you can save time.

“It is usually no waiting lines, and then you can pay and thereafter you have already packed”

The above quote was taken from focus group one. Mentioning one aspect of using self-scanners is also to avoid waiting lines and the possibility of having the groceries packed.

Question 3: Would you use the self-scanner in all situations or do you avoid using it in certain situations?

There were various responses from the participants when asking if they would use the self-scanner in all situations. It was agreed that participants agreed upon that they would avoid using
the self-scanner when buying large amounts of vegetables. However, they would use the self-scanner in almost any other situation since it provided good information, quicker and more efficient than regular shopping. Although, group three mentioned that they would use the regular checkout desk if there was no waiting lines. As seen in the focus group three:

“If you know there is no waiting line in the usual checkout counter, I'd rather take that one”

The other participants in group three agreed that if there was something in particular that they wished to purchase they would rather prefer using the regular checkout desk. However, if there were no waiting lines or if there was nothing in particular they were purchasing they would choose the self-scanner. Since this according to the participants was more efficient and quicker.

Furthermore, it was also quoted from one participant in group four:

“I would probably avoid it in some situations, depending on how many people are standing in line. Sometimes I can't bother using it either. Then there are some situations where it is not very crowded or any lines which makes me use the regular checkout”

It was observed that one of that participant's responses was that he/she would avoid using the self-scanner if there were no waiting lines. However, this answer from group 4 was completely different compared to an answer given in group two:

“In food stores, I always use it. Because I do not see any situation where I would say to myself “no today I don't feel like using the self-scanning, I'm going to stand and wait in the normal waiting lines”

This participant's stated clearly that they wished to use the self-scanner in all situations. They believed that by using the self-scanner it would reduce their waiting time compared to using a normal checkout.

**Question 4: What are your thoughts on waiting lines when using a self-scanner?**

The participants from the four focus groups shared similar thoughts on waiting lines when using the self-scanner. All four groups mentioned that there are little to no waiting lines at all when using the self-scanner. And that the reason for using the self-scanner is to avoid waiting lines. The participants also mentioned that they felt joy when seeing that there are waiting lines for
people using the regular checkout. For example one participant supported with this quote from focus group two:

“I'm pretty happy when I see that there is a waiting line for those who do not have the self-scanner.”

Furthermore, there was one more participant who mentioned a similar quote:

“You get a little happy when you come to the self-checkout cashier and see that there is no waiting line and that there are waiting lines for the "regular" checkout”

It was further mentioned by the participants from all the focus groups that more people should use self-scanners to avoid waiting lines. That the self-scanner provides the possibility to quickly and efficiently skip the waiting lines and check-out.

4.2.3 Companion influence - Questions 1 and 3

Question 1: What are your main reasons for using a self-scanner?

The first question was to discover what are the main reasons for using a self-scanner. All the participants have used a self-scanner previously. In regards to companion influence, many of the participants agreed that what had lead them to use the self-scanner in the first place was due to being shown by friends. Hence, when recollecting reasons for using the self-scanner most of the participants said they had been influenced by people they know. Some of the participants also stated that the reason they used the self-scanner was that it made it easier when shopping together with someone since it enables you to pay at the same time instead of queueing after one another which is shown by a quote from focus group three:

“I like the payment to go fast and that I and the one I'm shopping with can pay at the same time and do not have to wait so long for each other”

Question 3: Would you use the self-scanner in all situations or do you avoid using it in certain situations?

The situations in which the participants would use the self-scanner was varied. Most mainly focused on the fact that it was an efficient option compared to regular shopping. However, the influence of others in certain situations was also mentioned during part of the discussions. What
surfaced was that to use the scanner together with someone was a good way to further increase its efficiency. If a participant went shopping with a friend and one held the scanner while the other held the items, then that would also allow for an easier time when shopping. It was described best by a participant from focus group four.

“In addition to being fast, I think it's good when me and my boyfriend go shopping together. Like, he runs around for all items and I keep track of the shopping list and scan everything.”

There were also other participants who said that they preferred to use it when they were shopping together with their friends. Here the type of items to purchase was not mentioned but instead the focus was on what your friends were doing and that in end you would be able to leave at the same time. Hence, if a friend decided to use the self-scanner then the participant would also do the same.
5. Analysis

In this chapter the collected data from the focus groups will be analyzed together with the theoretical tools. The analysis will be conducted in the same structure as the operationalization which begins firstly with the overall theory and its sub concepts. Thus, the analysis will therefore commence with customer experience and its sub concepts and then finally, delve into self-scanners and its sub concepts.

5.1 Customer experience

5.1.1 Pre-purchase phase

The pre-purchase phase concerns the customer’s choice of items and the type of store to make a purchase in prior to the actual purchase. Hence, this is the phase where the customer begins to make decisions that will have an influence on the experience process of the purchase (Lemon and Verhoef, 2016). Several of the participants’ responses involved the amount of other customers in the store. Depending how many other customers there were in the store this could be seen to influence the participants experience. When discussing this there were also participants who considered the time of purchase during the day, in order to avoid peak hours, when there are many customers in the store. This reflects findings in regards to the environment of the store, which Lemon and Verhoef (2016) argues is one of the aspects that influence the pre-purchase phase.

Furthermore, when being asked questions concerning their experiences in the pre-purchase phase, the participants considered the type of items that they were going to purchase. This was in order to decide upon what sort of payment method and store would be the most suitable, which is argued as the main aspects of the pre-purchase phase (Lemon and Verhoef, 2016). This became clear when specifically being asked about their expected experience with a self-scanner. When knowing beforehand that they would purchase specific weigh-in items, such as fruit and vegetables they preferred to use the regular checkout, where the cashier could assist them. This was due to an opinion that weighing fruits and vegetables by yourself was not considered an efficient option compared to the regular checkout. This is in line with findings by Puccinelli et al. (2009) and Lemon and Verhoef (2016) who argue that customers consider their past experiences
in a holistic manner and therefore past experiences becomes a measure of expectancy for future experiences.

5.1.2 Purchase phase

When recalling on their past experiences the participants acknowledged that the types of items to purchase were the most influential aspect for the experience. This was due to the fact that certain items required more from the participant when self-scanning compared to the regular checkout. The issue that most of the participants stated was that it became more troublesome as the amount of effort put in to scan an item increased. Specifically, for the type of items which required weigh-in but also if the barcodes of the items did not function as intended and the participant became unable to scan it. Hence, the participants would avoid certain items when using the self-scanner in order to have an efficient experience in the store. According to Puccinelli et al. (2009) and Lemon and Verhoef (2016) customers are influenced by their previous experiences and this determines how the customers will act during the purchase phase, in terms of avoidance and acceptance. This explains the participants’ responses, where a majority would avoid the self-scanner when purchasing multiple weigh-in items, since it would contribute to making the experience less efficient. This loss of efficiency, would however be accepted by the participants if the weigh-in items did not account for a large part of the items purchased.

The experience during the purchase phase was expected to be efficient and smooth when conducting a purchase with the self-scanner. This was also emphasized by the participants as the main difference in experience between regular shopping and shopping conducted with a self-scanner. It was further elaborated that the difference was shown during the actual payment with the self-scanner, where they could just pay for their items and then leave the store. This was then compared to the experience with regular shopping where they would wait at the regular checkout, put up all the items on the checkout desk and then repackage the items into bags again before leaving the store (Bolton et al., 2014).

The experience of the purchase phase, when using the self-scanner, was also mentioned as being altered when using the self-scanner in the sense that fewer interactions had to take place in order for a purchase to be completed. Hence, the participants mentioned, they did not need assistance from the personnel (Lemon and Verhoef, 2016).
5.1.3 Post-purchase phase
When the participants were asked to recollect how their previous experiences influenced them when visiting the store again, it was indicated that they primarily take into consideration the service experience that they received during their last visit. The service received was connected to how they have perceived the experience overall and also to how they have been treated by the personnel. Several participants mentioned that to visit a store continuously and learning its layout would also contribute to the experience, since the visits would then become more efficient. Repeated positive experiences would influence the participants positively and make them return to the store whilst repeated negative experiences would influence the participants negatively thus they would not return (Wang et al., 2012). When considering these experiences while using a self-scanner, the participants felt that their expectations were met almost every visit. One aspect that would lower their expectations was during grocery shopping when they had to have a reconciliation which would make the self-scanner experience less efficient and therefore reduce its initial purpose of use. Hence, apart from having these occasional reconciliations the expectations were met. Thus, the experience with the self-scanner was considered to be successful and sustainable over time (Pine and Gilmore, 2011). Furthermore, several of the participants expressed that learning about a store’s layout from continuous positive experiences encouraged them to return to the store again (Lemon and Verhoef, 2016). Since they are aware of where the items they want are located, from their previous successful experiences, they can now complete a purchase more efficiently. The memorable experiences, can therefore be seen to have resulted in more sustainable experiences (Pine and Gilmore, 2011).

5.2 Self-scanning

5.2.1 Perceived task complexity
When considering the perceived task complexity the participants all mentioned that they had faced different difficulties when using the self-scanner. The situations where the most participants felt that they had been forced to ask for help to use the scanner was when trying to weigh items or when trying to delete items which had been scanned by mistake. To weigh in items by yourself was mentioned as the main drawback of using a self-scanner. This is in accordance with findings by Dabholkar et al. (2003) and Anselmsson (2001) who argue that factors which influence efficiency are the main concerns for individuals using a self-scanner. The
problem participants had faced in terms of deleting items was apparent when first introduced to the scanner. Thus, when the participants who had this problem learned how to properly delete an item after a few attempts, it was no longer a problem since they had become more familiar with the technology (Dabholkar et al., 2003; Marzocchi and Zammit, 2006). Another concern, for the participants was when carrying around a self-scanner. It was considered to be too ungainly, which sometimes resulted in that they did not use the self-scanner. This can contribute to making the usage of the self-scanner be perceived as complex and therefore influenced some of the participants to perceive the overall usage of the self-scanner to be difficult (Wang et al., 2012).

5.2.2 Perceived waiting time

When contemplating regarding waiting time when using the self-scanner the participants shared common views on its efficiency. They argued that the combination of avoiding waiting lines and packing the groceries simultaneously while shopping influenced them to choose the self-scanner. These two aspects were influential for the participants in terms of saving time and avoiding to have to wait for others whilst shopping. Hence, the participants felt that the perceived waiting time was less when using the self-scanner compared to the regular checkout (Wang et al., 2012). Therefore, the time efficiency is of importance to the participants which is in accordance with findings by Anselmsson (2001) and Dabholkar et al. (2003) who argue that individuals who use the self-scanner are those that are concerned with the time spent shopping and that appreciate time-efficiency.

Moreover, the participants answers were scattered since some of them stated that they would always use the self-scanner whilst some mentioned that it is dependent on the situation. Although, the majority of the participants agreed that the main reason for using a self-scanner is to avoid long waiting lines since that would be the preferable choice. When exploring the question what the participants thoughts were regarding waiting lines while using the self-scanner, it was discovered that they compared it to regular checkouts and thereafter decided on the option which they perceived would save them the most time. Wang et al. (2012) argues that customers evaluate situations based on these waiting lines. Hence, if there would be no waiting lines in the regular checkout this would entail that customers could evaluate the situation differently.
5.2.3 Companion influence

The companion influence, hence, the influence gained from friends, family or associates was not mentioned to be the primary reason to use a self-scanner by any of the participants. Instead, the companion influence was seen as the reason why a participant began to use a self-scanner in the first place. This is in accordance with findings by Wang et al. (2012) who found that individuals often wants to be accepted and tend to be influenced to use an SST if their friends are using it. Furthermore, many participants mentioned the issue that the self-scanner was ungainly when using it by yourself but when you were accompanied by friends, family or associates this would influence them to choose the self-scanner over the regular checkout. When a friend used the scanner the participant felt a need to do the same to gain a similar experience but most significantly to be able to finish their shopping at the same time. This is also similar to Wang et al. (2012) and their findings which indicated that acceptance by peers has an influence on the individual. With the scanner, the friends could make a quick payment and leave with their already packed bags more consistently than what was experienced when using the regular checkout, where you had to wait for one another. Thus, this situational factor does influence a customer’s choice to use the self-scanner when others in their surroundings do so. Further discussed by Wang et al. (2012) customers are influenced by people in its surroundings. Thus, the interaction with others could contribute to the decision of using or not using the self-scanner based on whom they are accompanied by.
6. Conclusion

This chapter is based on the conclusions that can be made from the analysis. Furthermore, this chapter will answer the purpose of this thesis.

When considering the customer journey, it was found that the participants take their past experiences into consideration when deciding upon how, when and where to conduct a purchase. It was also determined, through their past experiences what they were to expect for an upcoming purchase. This expectancy was based on experiences from each of the customer journey phases and therefore influenced their choice to use or not to use the self-scanner.

The influence of situational factors on self-scanner usage was found to influence the customer differently depending on the type of factor. The participants could be seen to consider several positive and negative outcomes for each of the situational factors, such as the type of items to purchase, the amount to purchase and whether or not the shopping were to be conducted alone or together with a friend. When using the self-scanner, the participants expected the purchase to be efficient and this was taken into consideration as well for each situation. Hence, when entering a store, the participants would take into account the perceived task complexity, perceived waiting time and companion influence for the specific situation. Thereafter, an assessment of the situational factors would result in the most suitable choice where each situational factor would have more or less influence depending on the participant's current needs with an aim to have an efficient experience.

The perceived experience for the customer using a self-scanner is that it should be efficient when compared to the regular checkout. Hence, the participants sought the purchase method that would correspond with their expectations to find the most efficient choice for that specific situation. These choices are then present throughout the customer journey and reflects upon future purchase decisions and the participants’ perception of the received experience.
7. Research implications

This chapter will describe the implications of this thesis, beginning with theoretical implications which concerns what this thesis has contributed with to the research field. Thereafter, the managerial implications are presented which describes the use of the findings in this thesis. Finally, the authors suggestions for future research are presented.

7.1 Theoretical implications

The research field of SST and its use by customers is a well-researched topic (Li and Zhou, 2011; Kokkinou and Crange, 2015; Kim, 2016) with some focusing on specific industries such as airports and banks (Meuter et al., 2000; Bitner et al., 2000), but only a few having a deeper focus on the use of self-scanning (Anselmsson, 2001; Marzocchi and Zammit, 2006; Dabholkar et al., 2003). Hence, as can be seen in the existing literature there are several studies that have been conducted on a broader level, where the focus has not been on one particular SST (Meuter et al., 2000; Bitner et al., 2000; Li and Zhou, 2011; Kokkinou and Crange, 2015; Kim, 2016) Therefore this thesis has had a more deep scope, specifically targeting the customers using a self-scanner to gain further insight on what situational factors influence the use of this type of SST and how the customer perceives this experience.

The customer experience was faceted through the customer journey as it is explained by Lemon and Verhoef (2016) and then the use of the self-scanner was acknowledged through the situational factors used by Wang et al. (2012). Through these two theoretical components, in the context of self-scanner usage, this thesis contributes to the SST research field by deepening the understanding of the influence of self-scanning on the customer’s perceived experience.

7.2 Managerial implications

From the findings in this thesis there are some suggestions to be made. The customer perceives the experience with a self-scanner differently to when using a self-scanner and this therefore needs to be taken into consideration by companies who have this type of service offer. When considering the situational factors acknowledged in this thesis the participants were overall in agreement as to what determined their choice to use or not to use the self-scanner. The type of items to purchase was mentioned throughout all focus groups and therefore managers should look into how to best support the customers in their difficulties with weighing fruits and vegetables. A
suggestion would be to add more scales and specify their purpose so that the customer has a better experience with the self-scanner even when buying many weigh-in items. Furthermore, the perceived waiting time was also of importance when deciding to use the self-scanner or not. To aid the customer in this choice the store manager could supply this information on a display at the entrance of the store where the self-scanners are situated. On this display the customer could then gain information, such as approximate waiting time to regular checkout compared to the self-scanner checkout and as such encourage usage of the self-scanner for the customers.

7.3 Future research suggestions

Due to convenience sampling, this thesis’ sample is based on Swedish people from Växjö with past experience with a self-scanner. It would therefore, be interesting to apply a similar study for a different sample or to use a quantitative approach.

More specifically, it could be interesting to conduct research on specific product lines when using a self-scanner in a retail context. Where certain products, such as weigh-in items require more of an effort to purchase compared to non-weigh-in items. Therefore, both high and low involvement products could also be of interest for researchers to compare and study further. Also, research could be conducted on the issue regarding reconciliation and its influence on the customer journey and how it could affect the purchase decision. This could be done by studying how the employees’ reception of the customer, during a reconciliation, influences the customer experience and also future decisions to use the self-scanner. Finally, it would be interesting to study differences in usage of self-scanners for different age groups. This could involve differences in attitude towards certain situational factors or the overall attitude towards self-scanners in the retail context.
References


## Appendix

### Translation of operationalization

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<td>1. Pre-purchase/ Purchase/ Post-purchase phase</td>
<td><strong>1. Beskriv ditt senaste besök i ett varuhus...</strong></td>
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<tr>
<td>Self-scanning</td>
<td>Situational factor&lt;br&gt;Situationsfaktor&lt;br&gt;1. Perceived task complexity,&lt;br&gt;perceived waiting time and&lt;br&gt;companion influence&lt;br&gt;1. Uppfattad väntetid, Uppfattad&lt;br&gt;uppgiftsvårighet, Inflytande från&lt;br&gt;omgivning.</td>
<td>1. What are your main reasons for using a self-scanner?&lt;br&gt;1. Vad är det huvudsakligen som gör att du&lt;br&gt;använder själv-scanning?</td>
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<td>2. Perceived task complexity&lt;br&gt;2. Uppfattad uppgiftsvårighet</td>
<td>2. What is your opinion about the self-scanners in terms of usage?&lt;br&gt;2. Vad har du för åsikter gällande användandet av&lt;br&gt;en själv-scanner?</td>
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<td>3. Situational factors - perceived waiting time, task complexity and companion&lt;br&gt;influence&lt;br&gt;3. Uppfattad väntetid, Uppfattad&lt;br&gt;uppgiftsvårighet, Inflytande från&lt;br&gt;omgivning.</td>
<td>3. Would you use the self-scanner in all situations or do you avoid using it in certain situations?&lt;br&gt;3. Skulle du använda självscanning i alla situationer&lt;br&gt;eller undviker du att använda den i vissa situationer?</td>
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<td>5. Perceived task complexity&lt;br&gt;5. Uppfattad uppgiftsvårighet</td>
<td>5. Describe how current items inventory and total&lt;br&gt;cost influences you when using a self-scanner?&lt;br&gt;5. Beskriv hur informationen på själv-scannern&lt;br&gt;såsom vilka varor som scannats samt pris påverkar&lt;br&gt;dig när du använder själv-scannern..</td>
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