The Future of Traditional Grocery Stores

A qualitative study investigating trends affecting the stores’ area requirements

MICHAELA JERNBECK

JOSEFIN SOJDE
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by

Michaela Jernbeck
Josefine Sojde

Master of Science Thesis INDEK 201X:124
KTH Industrial Engineering and Management
Industrial Management
SE-100 44 STOCKHOLM
Framtiden för traditionella livsmedelsbutiker

En kvalitativ studie som undersöker trender som påverkar butikernas ytbehov

av

Michaela Jernbeck
Josefine Sojde

Examensarbete INDEK 2017:124
KTH Industriell teknik och management
Industriell ekonomi och organisation
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Abstract

Grocery stores are required to sign leases many years before the space will be utilized, or renew the already existing leases and thereby tie-up the space for a lot of years. In order for grocers to know exactly what they want in terms of store requirements in the future, they need to know how people will purchase their groceries in that specific time. The complexity is reinforced by new trends and technological developments within the industry. For instance, e-commerce within the food industry is growing markedly and is predicted to continue to grow. The purpose of this report is to investigate how the grocery industry will develop in order to investigate the eventual change in traditional grocery stores’ area requirements. Further, the parameters affecting the requirements are analysed in regards to impact, time horizon and geographical areas in Sweden. Applying the theory behind diffusion of innovation, retail change theory and customer behaviour the purpose is met. In parallel, the trends affecting the research area, such as convenience and technology innovations was investigated. Data was gathered from interviews with industry experts as well as literature and reports.

The conclusion of the study is that due to e-commerce and new store concepts, the overall area requirement can increase in certain areas and decrease in others. The largest cities in Sweden are likely to find a solution in order to be able to offer home deliveries. This solution might be a central warehouse, which would decrease the sales area in the physical store. The stores already owning a certain area will most probably redesign the store and utilize the trend of coexistence. Together with the trend of convenience, the new stores will be built in the natural flow of people, which means that the big cities will have more stores with smaller areas in general. For geographical areas with lower population density, the e-commerce is more likely to be of the click & collect alternative. Consequently, the storage section of the store will need to increase in size. In the rural areas, the adoption of e-commerce will not be as fast since the profitability for the companies will not be as high in these areas. The interior changes could mean that the stores will be redesigned, but will not affect the area requirements namely, leaving the area requirements in these areas more or less the same.

Key-words: Area requirements, forecasting, e-commerce and grocery store development
Sammanfattning

Livsmedelsbutiker behöver skriva under hyresavtal många år innan utrymmet kommer att utnyttjas, alternativt uppdatera redan existerande avtal och binda upp sig i flertalet år. För att veta vilka ytor de vill ha i framtiden behöver de veta hur kunder kommer att vilja handla sina varor vid denna specifika tid. Detta innebär vissa svårigheter som även förstärks i och med nya trender och teknisk utveckling inom branschen. Exempelvis växer e-handel inom livsmedelsindustrin markant och förväntas göra så fortsättningsvis. Syftet med denna rapport är att undersöka hur livsmedelsindustrin kommer att utvecklas, för att vidare undersöka hur ytbehovet eventuellt förändras för de traditionella livsmedelsbutikerna.

Vidare analyseras parametrar som påverkar ytbehoven med avseende på inverkan, tidshorisont och geografiska områden i Sverige. Teorin bakom spridning av innovation, handelsteori samt konsumentbeteende används för att uppfylla syftet. Parallellt undersöks de trender som påverkar forskningsområdet, såsom bekvämlighet och teknologisk utveckling. Data samlades in genom intervjuer med branschexpertar samt litteratur och rapporter.


Nyckelord: Ytbehov, framtidsprognos, e-handel, utveckling av livsmedelsbutiker
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Acknowledgements
First we would like to thank our supervisor Terrence Brown at the School of Industrial Engineering and Management at The Royal Institute of Technology for his advice during this study. We would also like to thank our contacts at ICA, Magnus Rosén and Magnus Elowson, who have provided us with valuable insights. Lastly we want to thank the respondents who have taken time out of their schedule to be part of this study and added valuable information.

Thank you!

Josefine Sojde & Michaela Jernbeck

Stockholm, June 2017
1. Introduction

The aim of this chapter is to provide a background to the trends and the impact of digitalization affecting the grocery industry as well as an explanation to the problem formulation. It also presents the purpose, the research questions and the study’s contribution and delimitations.

1.1 Background

Historically, periods of intensive change have not been unfamiliar around the world. Unlike previous periods of significant disruption, for example the agricultural and industrial revolution, the digital revolution that we now are witnessing has no boundaries and no borders. Digital change is constant, global and fast. It is changing every segment of previously established business models, customer behaviour and expectations as much as the tools used to deliver services and experiences. Technology is no longer only an enabler that supports more efficient processes that secure competitive advantage; it is gradually becoming the source of competitive advantage itself. Subsequently, companies in every industry have to think of themselves as technology businesses in order to meet the increasingly competitive environment (pwc.co.uk, 2016).

By the year 2020 an entire generation will have grown up in a world where technology and digital breakthroughs are omnipresent, using technology is second nature to members of this group. The effects of an increasingly digitized world are now reaching into every aspect of our lives since people, especially the new generation, expect to always be connected. Technology advances enable cheaper solutions available in every industry and economic benefits are being realized by companies implementing new technology everywhere (strategyand.pwc.com, 2017).

The borders of the digital and physical world have been blurring more and more since consumers learned to shop and meet in virtual spaces. The online world has mirrored experiences from the physical world, however now we are instead witnessing the physical world getting digital characteristics as it becomes rich with digital information (Mckinsey.com, 2013).

E-commerce within the food industry is growing markedly. During the year 2014 one in four consumers had shopped food online. The younger generations are overrepresented among those consumers where approximately 50% of individuals between 18 and 35 years shopped groceries
online. Furthermore, the people living in big cities rather than small-town residents and families with children rather than individuals with other household structures are overrepresented as well (Digital Mathandel, 2015). The reason that these consumers prefer to shop groceries online is due to convenience. The most mentioned arguments are that they are saving time, not having to carry grocery bags, not having to reside in the physical store, get a greater range of items and it results in fewer impulse purchases (Digital Mathandel, 2015). The online food industry is predicted to continue increasing. According to E-barometern (2016) the food industry is the only sub-sector within e-commerce with a growth rate of over 30%.

For decades the storekeepers have focused on keeping the physical store accessible and with enough space for the incoming customers and the groceries. Due to the digitalization the focus for the storekeeper may change. Will the area requirements change and will the division between storage and sales area for customers differ from today?

### 1.2 Problematization

Real Estate firms in general, and for this study grocery stores in particular, are required to sign leases many years before the space will be utilized (SI, 2017). In order for them to know exactly what they want and need for instance 15 years from now, they need to know how people will purchase their groceries in that specific time. Knowing the future size of your retail store and the parameters affecting it could therefore be valuable for retailers.

E-commerce may play a big role in how already existing grocery stores will change in the future. Buying a plane ticket for the holiday, or new schoolbooks for the semester etc. is becoming more and more popular online (Digital Mathandel, 2017). Consumers learn the advantages of using online services and are therefore more free and flexible when making their choices. However, there are some concerns regarding the online food industry. For instance, since some items are fragile and need cooling during the transportation, it requires unique equipment. Consequently, the prices are triggered in an already price sensitive industry (Digital Mathandel, 2015). However, by applying the concept of economy of scale the prices may decrease if the deliveries increase in numbers (economist.com, 2008). How big will then the online grocery industry become and what will be the effects on the physical grocery stores?

There are many changes that may occur and simplify for both customers and storekeepers in the physical stores. Trends and new technologies will affect the way we buy our groceries in the
future, while simultaneously affecting the actual physical stores. The question is if the stores’ area requirements will increase or decrease. E-commerce may decrease the area requirements if the purpose of the physical stores becomes serving supplemental shopping, or it may increase the requirements if the stocks and storage need to grow. The self-checkouts could also decrease the area requirements at the same time as the trend may show that wider aisles in the stores increase consumer spending.

1.3 Purpose

The purpose of this report is to investigate how the grocery industry will develop in order to investigate the eventual change in traditional grocery stores’ area requirements. Further, the parameters affecting the requirements will be analysed in regards to impact, time horizon and geographical areas in Sweden.

1.4 Research Question

How will the area requirements change for the traditional grocery stores?

- Which trends and external factors will affect how we consume groceries?
- Which bigger changes, affecting the area in stores, will be done in the current grocery stores?

1.5 Contribution

Trying to predict the future seems to be in the nature of man, and the grocery industry is no exception. The digitalization and trends have a big impact on the retail industry, changing the fundamental perception of people’s shopping experiences. This, together with the fact that the grocery industry is lagging behind other industries in the development, makes the future of the grocery industry interesting.

Previous work has focused on the way we will do our grocery shopping in the future, as well as on certain developments in the physical stores. However, the results are sprawling and the research leaves a gap regarding the area requirements for the already existing grocery stores in Sweden as well as the location for them with respect to the identified future scenarios. Furthermore, the contribution of this study includes gathered data and the discussion regarding future planning.
1.6 Delimitations

The future of the grocery industry as well as the future of e-commerce could be affected by numerous parameters. In order for this study to be feasible our scope has to be delimited. The main concerns addressed will be delimited to the Swedish market and trends currently affecting that market, as well as the theory of diffusion of innovation and retail change. Our conclusions will therefore be delimited to the previous mentioned factors. Another possible outcome is that international actors might enter the Swedish market, which will not be taken into account further on in this study.

Laws and regulations as well as societal aspects might have an affect on the development of the grocery industry. However, this study is delimited from investigating those parameters since forecasting them would require investigation into several new areas as well as forecasting those areas.

The statistics accessible regarding e-commerce for groceries is delimited to sales towards customers, as in business to consumer. Consequently, the study is delimited to the traditional sales towards consumers and do not focus on the sales between businesses, i.e. business to business. Further, the study will concern the change in area requirements regarding the stores of the traditional grocery chains existing today. However, the possible change in area requirements for solely online operating grocery actors will not be considered.
2. Method

This section aims to provide information and understanding about the research methodology chosen as well as the aspects of reliability and validity. The approach regarding data gathering as well as the ethics of collecting and publishing gathered information is presented.

2.1 Research Design

The qualitative research design assumes that the reality is holistic, multidimensional and ever changing (Merriam, 2009), which we find well suited for a study regarding behaviour and unpredicted future scenarios. The area for the research question was given on behalf of the commissioner from one of the biggest food chains in Sweden, ICA.

According to Jacobsen (2002), the qualitative research design is flexible since the authors can amend the research question as well as the purpose of the study as more information is gathered. This was considered suitable for the study because the authors gained more understanding as the study went by. Within the qualitative research design chosen, primary data from qualitative semi-structured interviews were gathered, as seen below under the section Data collection.

2.2 Research Process

The study can be divided into two parts, the pre-study and the main study. During the pre-study previously written theories and studies were gathered and analysed. The information from the pre-study was brought to the main study and more in-depth information was gathered and analysed. New thoughts were brought to mind after the interviews and new information had to be found and researched. An overview of the study can be seen as below:

Figure 1: Visualization of the research design
The pre-study was limited to a six-week period where the structure of the process was made. The mapping of the problem formulation and previous research was read and stored as shown in figure 3 below. During the pre-study meetings with the commissioner and seminars with the supervisor were held in order to structure the study in a desirable way. When the majority of the previous research linked to the study had been read and the first meetings and seminars were finished the first interviews could be conducted and the study moved to the main study phase. During the interviews, which can be read about below under Data collection, more trends and thoughts around the future development of the grocery industry were observed and more in-debt reports regarding the specific scenarios, i.e. waste-free stores and drive-thru options, could be investigated. The purpose of the study and the research questions were iterated during the rest of the study, affected by the new findings and the focus of the study. As the purpose and the research questions were updated, the topics and information in the literature study was as well.

2.3 Data Gathering

The method for data gathering has been qualitative, mostly through qualitative interviews. Certain information gathered has been of quantitative nature, but could be seen as background research. The reason why a section regarding quantitative data has been included further in the method section is mainly because that information later will be used in order to forecast the potential increase of turnover from e-commerce. Methods used by the authors to the reports, were the information has been taken from, can be seen further down in this section, under quantitative secondary data. Figure 2 below visualizes the data gathered via the qualitative method as well as the quantitative secondary data.

Figure 2: Visualization of data gathering approach
Literature Study
During the pre-study of the research general information was gathered for what then was thought to be relevant for the study. The digitalization of the grocery industry was in focus in the beginning as well as consumer behaviour. After the first interviews conducted, in the main study, new topics and trends had to be analysed and information given had to be checked. Hence, the literature study was an iterative process were new findings had to be checked and new information gave the authors new guidelines for further studies.

Databases used in order to gather the relevant information and literature were Primo KTHB and Google Scholar. The key words searched for included e-commerce, area requirements, diffusion of innovation, retail change, consumer behaviour, forecasting and the grocery industry. The key words searched for were chosen based on the knowledge gathered upon that specific time. Further in the study various trends had to be researched, such as car use and environmental aspects, after new information had been given during interviews and read literature. The environmental aspect was later removed from the study since even though it is important in many concerns it was considered not to have a big impact on the area requirements for future grocery stores.

Qualitative Interviews
The literature study together with the iterated problem formulation contributed to the design of the interviews. The interviews took between 30-90 min and were held during week 6-20. The questions asked were focused on the trends affecting the market of groceries as well as customer behaviour and problems faced today and in the future. All interviews were face-to-face apart from one, which was an interview held over the phone due to geographical distances.

The interviewees were chosen based on their knowledge within certain areas of the grocery market as well as everyday experiences in specific fields. These fields within the food market was for instance strategy and investments for real estate, online market nationally as well as online food industry internationally and storekeeping of different physical grocery stores.
Before every interview the prepared questions were written in a document, available for both the interviewers. All interviews were recorded and some notes were taken in the prepared document during the interviews. After each conducted interview the audio file was moved to the storage service Google Drive and one of the interviewers transcribed the interview in a shared file in Google Drive. The other interviewer checked the transcription in order to make sure that all the relevant information was written down and that the perception of the responses was formulated in a correct way. This data was saved and stored in a structured way during the whole time of study. The structure can be seen in figure 3 below:

![Figure 3: An overview of the structure in Drive](image-url)
Using interviews, as a research method, is suitable if the researchers wish to develop a deeper understanding of a phenomenon and discover new dimensions of what is being studied (Blomkvist and Hallin, 2015). With this in mind, the semi-structured approach was used. Some questions were general and therefore asked to all the interviewees, which can be seen in appendix, but further questions were asked depending on the answers given in order to get more in-depth thoughts. The prepared questions for the interviews were themed to make sure that the areas previously investigated were asked about. These areas were in the store, e-commerce, consumer behaviour and trends. By choosing this type of method, the semi-structured interviews, the interviewees could bring up topics and trends that the interviewers had not investigated before the specific interview at the same time as the topics previously read and asked about were mentioned (Denscombe, 2003). The first interviews held were conducted with individuals chosen and contacted by the researchers. They were storekeepers as well as strategists within IT and real estate, since information and thought from these specialists’ areas were considered important for the future study. These individuals guided the interviewers further to various specialists within the industry. The interviews were, as recently mentioned under Qualitative Interviews, all recorded and during the phone interview the speaker phone was used in order to make sure that both the interviewers could participate.

**Quantitative Secondary Data**

In the beginning of the study, the plan was to conduct a questionnaire in order to gather information about consumer’s perception of advantages and disadvantages of e-commerce and in store shopping. This type of information was during the pre-study found in the report Digital Mathandel from several years and hence the data was used as secondary data. The report Digital Mathandel is given every year and the aim is to raise awareness of online food sales, describe consumer behaviour, attitudes and opinions, as well as the size and development of the market. The report has been written by Handelns Utredningsinstitut, HUI Research, on behalf of Svensk Digital Handel and is based on a consumer survey and collected data from industry companies. The data taken into account for the study has been gathered from numerous reports of this kind and the consumer survey, which is the biggest of its kind, included more than 4000 respondents for the version 2017. The method used in these reports has been surveys online, structured questions with predetermined alternative answers as well as open ended question were the respondents have been giving the answers themselves (Digital Mathandel, 2017). The survey methodology is, according to Blomkvist and Hallin (2015), generally considered suitable if the aim is to do a quantitative study and the authors are interested in gaining an overview of the
examples that might affect what is studied. In this study this was considered suitable since the quantitative data could give an overview of consumers’ perspective of identified trends as well as international data and trends that might affect the Swedish market.

The historical data, shown in figure 2, mainly concerned the food industry but also trends that might have close connection to the consumer behaviour. This was for instance regarding how the car use has changed during the past years and also how the urbanization has changed the market’s demography. This data was gathered from Statistiska Centralbyrån, SCB, an authority in Sweden providing official statistics (http://www.scb.se/).

The second part of the quantitative empirics involved comparing data. The data was mainly found in the report Digital Mathandel, mentioned previously, and concerned information regarding the use of e-commerce, use of smart phones and population densities. Here the aim was to gather information from other countries that are more developed within the online grocery shopping and digital use within the stores. Data from similar industries, such as books and clothes, in Sweden was also gathered to be included in the discussions further ahead in the study.

In the result and discussion, chapter 4 and 5, certain quantitative data will be presented and forecasted. The method used has been to let the historical data, of for instance the turnover, increase with different growth rates. When the turnover was forecasted the growth rates used were 40%, 25% and 15%. These specific numbers were chosen since the growth rate for the past few years has been around 40%, more specific information about this can be found in chapter 4, and one could argue that this can continue even though the growth depend on low numbers at the moment. Therefore, the 40% growth rate was considered a high number for future growth and the numbers 25% and 15% were chosen in order to get a good distribution of the three rates chosen. Furthermore, the turnover for grocery industry in total has been forecasted as well. This has been done in order to be able to see the fraction of the total grocery industry’s turnover that can be taken by e-commerce. In this case the growth rate of 1,5% has been used, as a long term estimation in line with the inflation rate.

2.4 Analysing Collected Data

The thematic analysis method is common when it comes to qualitative gathered data. It refers to the method when patterns for gathered data are identified and the data is analysed (Braun and Clarke, 2006). The semi-structured interview questions were, as previously mentioned, created with some themed topics in mind. Hence, the thematic analysis method was considered well suited for the study. The themes, which the qualitative data was categorized under, were in store,
e-commerce, consumer behaviour and trends. During the analysing part of the study, the responses from interviews were gathered and sorted under the above mentioned topics. The discussion of the study is based on the gathered qualitative data from interviews as well as quantitative secondary data together with reflections on the received results.

2.5 Evaluation of the Chosen Method

Risks with qualitative method and interviews

During a qualitative research the data collection and the analysis of it can often be done simultaneously (Collis and Hussey, 2013). This could be considered a risk since the following interviews afterwards can be affected by the analysis and preliminary conclusion drawn from previous interviews. This was taken into account such that the questions asked further to new interviewees were firstly open ended, letting the interviewee answer the questions with as little directives as possible from the interviewers. As the composition of the interviews were semi-structured, the prepared questions stayed the same through the interviews and the discussion part of them depended more on what the interviewee thought was of interest for the study.

Another risk with the qualitative method is that one can access too much data (Collis and Hussey, 2013). If too much data is gathered the difficulty of structuring and analysing it can increase. Even though the interviewees were not decided before the process of data gathering the topics had been studied before hand. This meant that the areas of interest were decided, even though some topics could change along the way. However, not all of the gathered data is mentioned in the results of the study due to a reduction of information which was considered not to have a clear link to the area of study or lacking background information to the area mentioned.

Since most of the interviewees were given to the authors by previously interviewed one risk is that they have similar thoughts regarding the future of the industry. Many of the interviewees also worked for the same big grocery company and hence most probably do have the same wishes and information given to them. This was taken into account by the authors during the interviews. Follow up questions were asked in order to receive a deeper explanation on why the respondent think as they do.

The previously mentioned report Digital Mathandel, comes out every year and gathers information of interest for many in the grocery industry. Chances are that many of the interviewees have read the report before the interviews were conducted. Even though the latest one, from year 2017, was published after the interviews. The fact that they have read it could
lead to them repeating the information they have taken part of. This was considered as the
questions asked during the interviews regarding the information given in the reports was more
in-debt and the interviewee was asked to explain further why they thought in a certain way.

**Risks with secondary data**
The methods used when gathering the secondary data from reports and statistics has not always
been presented. This could lower the credibility of the data. On the other hand the sources, were
the information is taken from, have good reputations and the authors to the articles and statistics
are presented. This means that there is a transparency that could help the visitors of the pages to
contact them and learn about the methods used.

Further, it could be considered a risk that the surveys, conducted by for instance Digital
Mathandel, was not made by the authors to this study. The intention was in the beginning to
conduct a survey, but when this report was found with the wide extent of gathered data it was
considered a better alternative since they reach far more respondents than the authors to this
study could in the given time frame.

In regards to the ethics perspective, since the authors do not have precise information about the
methods used they do not know about how the ethics are applied. Since, the sources are well
known and have good reputations the authors are left hoping that the researchers behind the
secondary data gathered have considered the ethics perspective.

### 2.6 Ethics

Blomkvist and Hallin (2015) propose four requirement segments that represent the ethical basis
of a study. The segments are as follows:

- Informational requirement
- Consent requirement
- Confidentiality requirement
- The good use requirement

**Information requirement**

This requirement concerns the information we, as interviewer and observer, convey to our
interviewees. In our study we have been very thorough when informing our interviewees about
what our study is meant to investigate, at what university we are conducting the study as well as
for what company we will present our findings. Some interviewees raised concerns regarding their competence and knowledge regarding our field of study. In those situations, we explained that the information they were able to give us were very much appreciated and would be treated anonymously.

**Consent requirements**
The consent requirement refers to the claim that those individuals being studied have to agree on the fact that they are being studied during a certain time span. During the interviews the interviewee has been asked prior to the interview if he or she agrees to the interview being recorded. Further, no individuals have been observed and the observation being used in this study.

**Confidentiality requirements**
The interviewees are not mentioned by name in the report, which lets them be more anonymous and could therefore be more opened to speculate in certain questions asked. After the gathered data has been written down and included in the paper, the interviewees have been offered to read through what has been perceived during the interview as well as interpreted by the authors. The collected data through surveys conducted by HUI could from obvious reasons not been treated with the same guaranteed ethical approach since the data was not retrieved by us. However, since HUI is a well-known institute we trust that they conduct their data gathering within ethically accepted frameworks.

**The good use requirement**
The good use requirement will be met by only using the collected material with the same intentions and purposes as stated when first collecting it. This will also be confirmed to be true when the interviewees read the report to make sure they agree with how their answers are portrayed. The recording will not be used further after being transcribed.

2.7 Reliability

In simple terms, reliability can be expressed as an affirmation that the authors study in the right way (Blomkvist and Hallin, 2015). To assure reliability the demonstration of the operations of a study, for instance the data collection procedures, should be able to be repeated with the same result (Yin, 2003). This is typically done in quantitative studies, where data can be measured in another way than for qualitative studies. In a qualitative study the responses given can vary even if the same interviewer asked the exact same questions to the same experts. Since this study
mainly relies on gathered data in form of qualitative empirics through the methods semi-structured interviews, it could be difficult to achieve the exact same result if an investigator were to repeat the procedure. In general, one can argue that this would lower the reliability of the report.

On the other hand, this applies for all the qualitative studies and as researcher Stenbacka (2001) argues regarding this topic the qualitative studies in general does not strive to measure anything, but instead searching for a characteristic that is typical of a phenomenon or a characteristic that distinguishes the phenomenon.

The topic has been taken into account in a way such as the respondents have been given the opportunity to read through the authors' interpretations of the interviews and numerous questions have been similar to the different interviewees, given more distinct parallels between the responses. If the answers given deviate much, they have either been ignored or new questions upon the subject has been investigated.

2.8 Validity

Validity entails studying the right thing (Blomkvist and Hallin, 2015). By asking questions regarding the research questions and being able to recheck the responses and gathered data with research of others the validity of the report receives more credibility (Golafshani, 2003). Further, the validity is achieved when there are clear parallels for the problematization, purpose and research questions as well as that the theory presented in the theory section is used in the analysis of the study (Blomkvist and Hallin, 2015).

The validity of the study was ensured by firstly getting inspiration from earlier presented studies and hence to learn from mistakes and successful strategies. Further, the purpose and problematization, together with the researched questions, were developed in an iterated course of action. This was conducted in order to ensure that the sections deal with the same research areas. The data gathered from non-scientific literatures and reports was discussed by the authors and the expert of the diverse fields in order to avoid discussing information that could have been biased.
3. Literature and Theory

In this chapter the currently known information about the phenomenon investigated and trends of today will be presented. The segment deals with the theory behind retail change, diffusion of innovation and customer behaviour as well as trends such as convenience, digitalization and urbanization.

3.1 The Retailing Environment

3.1.1 Retail Change Theories

A number of theories explain the present structure of the retailing industry and predict future development (Zentes, J. et al., 2007; Baker, M. et al., 2010). One such theory is the Wheel of retailing (McNair, 1931) which is a well established framework for explaining developments within the retail industry and describes how retail institutions go through cycles (Zentes, J. et al., 2007). Innovators start as low-margin and low-price competitors and then gradually increases its services and margins until it reaches a higher level in the price scale. By then new innovators enter the market competing with a low-price strategy and so the cycle repeats itself (Wadinambiaratchi and Girvan, 1972). However, Cundiff (1965) argues that such innovators and innovations in retailing only can take place in the most developed economies while other economies merely adapt and adopt these innovations since they have more to gain from already tried and tested developments. Further Wadinambiaratchi & Girvan (1972) states that environmental preconditions has to exist in order for innovations or adaptions from innovating countries to be successful. This means that the wheel of retailing concept applies to retail developments in economically developed and growing countries. Cundiff (1965) extends this view by concluding that to which degree evolution and adoption of new methods of retailing operations will exist depends on the total environment. Apart from economic environment this includes e.g. cultural acceptance and resistance of change, demographic and geographical influences, political and legal environment etc.

Another cyclical theory is the retail life cycle, first mentioned by Davidson et al. (1976), which is a concept describing the sequence of different stages a retailer’s format goes through over time. A retail format consists of a specific structure of the retail marketing mix; store size, store location, merchandise, price and service offered (Zentes, J. et al. 2007). McGoldrick (2002) recognized that the wheel of retailing was inadequate for its particular focus upon changes in costs and margins as the basis for understanding the evolution of a retailing format. He perceives
the sequential nature of the wheel of retailing framework to be unable to meet the speed, diversity and change of the developments of modern retailers (Baker, M. et al., 2010). The retail life cycle consists of a four-stage development: Introduction, Growth, Maturity and Decline. A number of characteristics can be applied to each stage. Introduction represents the stage where the retailer is motivated by the desire to bring an innovation to the market, operating with few competitors. In the Growth stage rapid sales increases generate higher profitability as well as more competitors since they want to get market share in the new area/sector. The Maturity stage is where the sector has the largest number of competitors, which means that price becomes a competitive factor and profitability within the sector reach a plateau. The final stage is the Decline stage where new indirect competitors often enter the market and where retailers struggle with declining sales and lower profitability. The retail life cycle has been applied to both specific businesses and to general retail formats (Baker, M. et al., 2010; McGoldrick, 2002). The Retail life cycle has in later research become more adapted to portrait the stages a new format will go through over time, resulting in five stages rather than four. In the Development stage a new format is introduced to the market, at least on of the marketing mix elements is altered in the new format. In the Introduction phase cost and risks are high since long-run success is not yet assured at the same time sales and profits are low. The Growth phase represent a phase where existing companies expand their markets and competitors with the same format enter the market. The following phase Maturity is characterized by market saturation, where a high number of firms operate with the same retailer format while at the same time new formats enter the market. In this phase profit margins may have to be reduced in order to stimulate consumer purchases and the main goal is to sustain profit for as long as possible. Finally, in the final phase Decline, sales volume and profits decline. Retailers can reposition the format in order to try to avoid decline however many firms instead introduce a completely new format to keep their customers and attract new ones (Zentes, J. et al., 2007).

Researchers have expressed critique against the various theories of retail change since the theories share a common view that change within retailing is cyclical. The main critique questions if retailing is as deterministic and predictable as the cyclical approach proposes. Retailing evolvement reflects an environment that is unstable, unpredictable and constantly changing. However, although the critique is important to consider the theories and their mapping of patterns have proved valuable to other researches in order to get insight into trends and opportunities within the retailing sector (Baker, M. et al., 2010). Although history might not repeat itself it will suggest both questions and useful answers making a long term view of the retailing industry advantageous (McGoldrick, 2002). Baker et. al. (2010) states that a significant
value of the retail life cycle theory is its application regarding the evolvement of retailer formats, presenting views from researches on the profitability of new formats and concepts where it is concluded that profitability is likely to stagnate within a specific time-period after launch. It is suggested that retailers have to carefully consider the risks of long-term investments in expensive, inflexible and limiting property assets.

3.1.2 Retailing Strategy

To design successful strategies, which will ensure long run viability, retailers have to combine a view of the marketing environment surrounding them today with possible competitive and demographic changes in the future. Such changes can occur as a result of competitors seeking to improve their own strategic position, which in turn might lead to reactive changes by competing firms in order to protect their performance. Furthermore, a company’s future profitability will be affected by changes, which will occur independently of competitors’ actions such as changes in economic conditions, lifestyles, preferences and demography. A successful strategy therefore has to consider all of these changes (Ghosh and Craig, 1983).

Factors relating to firms’ long-term success in retailing includes store variables such as location, size, store image and service level. These factors have to be tailored to fit the environment surrounding retailers today without disregarding the changing environment of the future. A good location has been perhaps the most important determinant of success in retailing to this day. It can provide a firm with strategic advantages that might be difficult to overcome for competing firms (Ghosh and Craig, 1983; Zentes, J. et al., 2007). Zentes, J. et al. (2007) describe the core of a retailing strategy as the retail format, i.e. store size, store location, merchandise, price and service offered.

In past research store image of retailers with traditional physical stores has been under intense investigation. Lindqvist (1974) concluded that the image of a store is complex, it consists of a combination of functional factors in the store and physiological factors perceived to be present in the store by consumers. Martineau (1958) has a similar approach concluding that each store has a “personality”, which consists of physiological and functional characteristics. Ghosh & Craig (1983) argues that some marketing mix elements may be easily changed in response to a changing environment, e.g. store image. However, store location for the most part represent long-term investments, which in a short-term perspective only can be changed at a considerable cost. A strategic plan that considers the future changes in the environment of the store is therefore critical for retailers regarding location (Ghosh and Craig, 1983).
Numerous models for determining optimal store location exist since locational decisions are not easily reversible. Deciding on a model might be difficult; some models evaluate a location based on a single store, however retailers often establish a network of stores in an area. The location then has to be evaluated with the risk of cannibalization on the retailers’ other stores in mind. The model also has to consider the competition in the area, not only today but future changes in the competitive environment of that area. The dynamic nature of the retailers’ environment results in that fundamental factors, which affect a store’s volume such as distribution and composition of population are changing over time. A location that is profitable today might become unprofitable if the nearby area changes. The same is true regarding areas, which could be considered unprofitable if only the current state of that area is considered. However, when evaluating the future demand in that area the attractiveness of that area might change completely (Ghosh and Craig, 1983).

3.1.3 Retailers Area Requirements

Location and area requirements are parameters considered when a retailer establishes a new store. The current transformation in the retailing industry requires the retailers to establish even greater operational efficiencies. They have to optimize their stores and one parameter affected is the area of the stores (Fernie et al., 2010). Pires et al. (2017) discuss the issue considering retail backroom storage and how the design of it affects several critical functions in a modern traditional grocery store.

Fernie et al. (2010) argue that operating an online retailing service from an existing physical grocery store’s storage area has both advantages and disadvantages. The main advantage is argued to be that the retailer does not have to invest in new storage facilities for which future demand is uncertain. Other advantages are the more effective utilization of existing resources, both property and staff and the simplified geographical expansion of an online retailing service operating through an already existing grocery store. However, disadvantages exist in form of the possible lack of stock predictability. An item might exist in the store however when packing the online ordered product, it might already have been bought and the online customer then has to depend upon the shopkeeper to substitute it. Another disadvantage is the future pressure on the storage area in the likely event that online grocery orders increase in numbers making the central warehousing for online orders a more logistical effective alternative. However, Fernie et al. (2010) continue to discuss that such a warehouse might not be cost efficient until certain
volumes of online orders are reached which ultimately will depend on the density of demand and local competition in the specific geographical area considered.

3.2 Consumer Behaviour

The theory and literature of consumer behaviour is extensive and has been researched on multiple occasions, published in publications such as for example the European Journal of Marketing, Culture, Markets, and Consumption as well as in International Journal of Research in Marketing, Journal of Consumer Culture, Research in Consumer Behaviour and in books and other research papers. In our study we try to connect our research topic to existing research on consumer behaviour, however we by no means intend to be exhaustive or all inclusive since we are constrained by the timeframe of our study. In our study we aim to understand the future of grocery shopping and how it will transform the physical grocery stores. In order to reach further knowledge in this subject we have to explore existing literature on consumer behaviour and investigate what drives changes in such behaviour. To generate as close connection to our study as possible the theory and literature regarding this subject has been divided into three sub sections; consumer behaviour and technology adoption, consumer behaviour and e-commerce and finally consumer behaviour and the experience dimension.

3.2.1 Consumer Behaviour and Technology Adoption

When studying consumer behaviour and technology adoption it is important to be aware of the differences relating to behaviour in various age segments, although some behaviour patterns are alike others can be influenced by their technology habits and the amount of technology they use. Blackburn (2011) demonstrate this in her research specifically considering Millennials and their adoption of new technology and innovation. The researcher mentions that there is a wide gap in how generations operate in their everyday life. Connaway et al. (2008) describes Millennials as having grown up immersed in technologies which are taken for granted “like the air”. Some specific characteristics mentioned described that they have no tolerance for delays, prefer to learn actively and by discovery and have a high level of confidence in information search processes.

Besides from age other demographical factors such as income, household size and composition (if there are children in the household or not) are also important to consider in regards to the adoption and use of technology. In what geographical area the household exist in are another factor that affects the technology adoption, not all technologies reach households at the same time and even when it is available the adoption is influenced by the geographical location
(Dholakia, 2012). Boutellier and Heinzen (2014) concludes that technology has to be accepted before adopted and discusses what makes an individual accept technology. Customers, end-users, retailers and manufacturers all have vested interest. One decisive factor for technology acceptance is the impact on end-users and employees in the value chain.

Consumers consider both utilitarian and hedonic product attributes when adopting and using new technology. Interactions with technology provide functional benefits but may also enhance enjoyment and often provide ways to signal social status (Arruda-Filho et. Al. 2010). Experiential products are products purchased predominantly for enjoyment, e.g. books, music and movies. Digital technology has changed how consumers experience these products. Utilitarian and experiential perspectives are often described in consumer behaviour models (Chen and Granitz, 2012). According to Holbrook and Hirschman (1982) consumers of experiential products are influenced by hedonic components of the products while consumers of convenience products are influenced by the utilitarian aspects. Although groceries can be considered a convenience product, the change in customer behaviour today results in that the demand for experiential value in every industry forces businesses to reinvent their identity (Aida and Sasaki, 2014).

Furthermore, Chen and Granitz argue that when we are unable to reconcile the utilitarian and/or the experiential functions with a tech-enabled change in form, e.g. physical books changed into digital books, convergence might be the result. Meaning that we continue to consume physical books for example to fulfil some utilitarian and experiential values while at the same time consume digital books to fulfil other utilitarian and experiential values. Additionally, they state that consumers adopting new tech-enabled formats favour accessibility, convenience, lower costs and ease of use.

3.2.2 Consumer Behaviour and E-commerce

Today consumers can choose from a wide range of online retailers leading to an increasingly competitive landscape among the retailers which makes it more important for the retailers to differentiate themselves in order to gain and keep market share (Kellner J. et al. 2013). A customer’s intention to purchase online is influenced by his or hers lack of leisure time and by the level of connected lifestyle (Koufaris, 2002). Koufaris (2002) argues that an online consumer has to be viewed as both a shopper and a computer user since both the enjoyment and perceived usefulness of the site strongly predicts the consumers’ intention to return. The question is weather online consumers are to be viewed differently than offline consumers. Online customers
make purchases without using all five senses; instead they need to rely on a hopefully well-presented product representation.

Studies have shown that representation of the products online as well as the overall shopping experience will affect the consumer’s attitude towards shopping online as well as the intention to buy. Net-enabled organizations dependent on e-commerce cannot rely on a desirable product display, exciting music or a modern clientele to convince their customers to purchase products. Instead they may depend on well designed web pages and web features, e.g. one-click checkouts. Perceived risks of online shopping and the perceived ease of use of the web site have been stated to affect the attitude towards online shopping. (Koufaris, 2002).

3.2.3 Consumer Behaviour and the Experience Dimension

An experience as part of an economical offering is not a new phenomenon, consumers’ preferences change and experience in combination with shopping is predicted to be a developing trend within retailing. Furthermore, it is stated that individuals own preferences for different experience oriented services could make them choose one alternative over another. Strategies for competitive advantage often have one reoccurring factor, which is creating added value for the customer (Lang, 2007). Dholakia (2012) argue that “fun, play and want” are more useful consumer motivations than “useful, functional and need”. Consumers are able to characterize goods according to their combination of hedonic and utilitarian dimensions but the preferences of consumers are based on the nature of trade-offs between these dimensions.

Lang argues that one way to create experience for the customers could be that the offering is reinforced by different products and services being marketed and sold as a whole. Another option could be to provide the customer with the option to combine utility with pleasure in the buying situation. Zolfagharian and Paswan (2015) states that an increase in co-production can increase and reinforce customers’ positive feelings such as satisfaction while at the same time reduce negative feelings such as uncertainty and doubt.

3.3 Diffusion of Innovation

Everett Rogers first published his theory on diffusion of innovation in 1962, and 2003 his fifth version was published. One of the reasons why the theory has gotten so much interest is because of the complexities of getting a new idea or innovation accepted and adopted. Many innovations require a long period, sometimes years, from the time they become available to the time when they are widely adopted. (Rogers, 1983) It has since introduced become one of the principal
models used to understand why a large number of consumers do not seem to adopt a new product or service as fast as the market experts expect them to (Fain and Roberts, 1997). The diffusion of innovation is particularly adapted to the interaction of organizational culture, social factors, communication patterns and information technology innovations. The theory explains and predicts the effect specific factors have on the innovation adoption and implementation decision (Russel and Hoag, 2004).

Diffusion is the process of which an innovation is communicated through certain channels over time among the members of a social system. It is a special type of communication in which the newness of the idea communicated involves some uncertainty. Uncertainty implies a lack of predictability, of structure and of information. Information however, reduces uncertainty and a technological innovation embodies information and thereby reduces uncertainty about cause and effect relationships in problem solving. Diffusion is a kind of social change, a process by which change occurs in the structure and function of a social system. Social change can occur when a new idea is invented, diffused, adopted or rejected, which leads to certain consequences. The four main elements that are identifiable in every diffusion research study Rogers argues are innovation, communication channels, time and the social system (Rogers, 1983). To predict how these factors will affect the adoption and implementation the factors are divided into parts. The innovation element involves the perceived nature of the innovation itself (advantages, complexity and compatibility etc.) which is further discussed in this chapter. Communication channels can be formal or informal, resource-intensive or inexpensive. Further time involves the rate of adoption over time and the social system consist of targeted adopters, managers as well as the organizational structure and culture (Russel and Hoag, 2004).

An innovation is an idea, practice or object that is perceived as new by an individual, even if the period of time since its first use or discovery would not necessarily qualify it as new. The perceived newness of the idea for the individual determines his or her reaction to it. The newness aspect of an innovation may be expressed in terms of knowledge, persuasion or a decision to adopt (Rogers, 1983). Zolfagharian and Paswan (2015) argues that innovation characteristics is of prime importance and is said to explain 49-87% of the variations in adoption behaviour. A technical innovation is usually subject to scientific evaluation through R&D activities leading to an assumption that the innovation at least has some degree of benefit or advantage for its potential adopters. However, they cannot often be certain that an innovation represents a superior alternative to the previous practice that it might replace. The innovation decision process is essentially an information seeking and processing activity in which the potential adopter is
motivated to reduce uncertainty about the advantages and disadvantages of the innovation (Rogers, 1983). From a retailer aspect Wang (2007) concludes that if a technological innovation complements existing technology new entrants in the retailing environment will be forced out as more and more existing firms succeed in adopting the innovation.

A widespread adoption of an innovation might take various amount of time depending on the perceived characteristics of an innovation:

1. Relative advantage is the degree to which an innovation is viewed as better than the idea it replaces. It might be measured in economic terms, convenience, social prestige factors and satisfaction.
2. Compatibility is the degree to which the potential adopters feel that an innovation is consistent with his or hers existing values, past experiences and needs.
3. Complexity is the degree to which an innovation is perceived to be challenging to understand and use.
4. Trialability is the degree to which an innovation can be tested on a limited basis. Innovations, which allow a potential adopter to experiment as a first stage, are more quickly adopted.
5. Observability is the degree to which the result of an innovation is visible to others, the more visible it is the more likely individuals are to adopt the new innovation.

These are not the only characteristics of an innovation that affect adoption rate. However, past research indicates that they are the most important (Rogers, 1983; Greenhalgh et al., 2004). Nonetheless the importance of these characteristics has been debated by other researches, Zolfagharian and Paswan (2015) states that relative advantage has been found “as irrelevant, as positively related and as negatively related” to customer adoption behaviour by previous research. Further they evaluate the characteristics concluding that relative advantage, compatibility and complexity are of importance in their study, however trialabilty and observability is not as significant characteristics in service innovation hence eliminating these characteristics from their study. Tornatzky and Klein (1982) underpin that notion by concluding that although identifying several attributes which have a significant affect on the adoption of an innovation three attributes had the most consistent significant relationship to innovation adoption (i.e relative advantage, compatibility and complexity). The result of various diffusion studies show that the majority of individuals do not evaluate an innovation on the basis of scientific studies of its consequences, instead most people depend upon a subjective evaluation that is
delivered to them from previous adopters. The information is conveyed through communication channels (Rogers, 1983).

Time is an important factor in the diffusion process. It is involved in the innovation decision process by which an individual starts out hearing about the invention to finally deciding on adoption or rejection. The time dimension is also present in the innovativeness of an individual, meaning how early or late the individual adopts the innovation compared with other members of a system. The level of innovativeness of individuals has been categorized into five categories; Innovators, early adopters, early majority, late majority and laggards. The different categories have different length of innovation-decision period, the first individuals to adopt a new idea (the innovators) do so because they both become aware of the innovation earlier as well as because they require less time to move from knowledge to decision. Finally, time is involved in the rate of adoption in a system, usually measured as the number of members that adopt the innovation in a given time period in a system (Rogers, 1983). The model implies that a new product or service will not be profitable until the diffusion reaches at least part of the early majority. Many technology-driven innovations quickly gets accepted by innovators and some early adopters but never reaches an adoption by the large population (Fain and Roberts, 1997). Bass (1969) builds on the theory first presented by Rogers by defining the five categories of individuals mentioned earlier as innovators and imitators. Imitators are unlike innovators influenced by the timing of adoption of other members of their social system. Innovators however are not influenced by the increase of adoption by other members, instead the opposite might be true.

When the number of individuals adopting a new idea is plotted on a cumulative frequency basis over time, the resulting distribution is an s-shaped curve. A time period could be a month or a year and at first only a few individuals (innovators) adopt the innovation in each time period. But as more individuals adopt the innovation, the curve climbs higher until it finally levels off as fewer and fewer individuals exist who have not yet adopted the innovation. Most innovations have an s-shaped rate of adoption however it can look more or less steep depending on the innovation or depending on the social system. A social system consists of members who cooperate to the extent of seeking to solve a common problem in order to reach a mutual goal. The members of a social system may be individuals, informal groups, organizations and/or subsystems. (Rogers, 1983)
Past research has generally shown that the adoption of an innovation follows a normal bell-shaped curve when plotted over time on a frequency basis. When showing a cumulative number of adopters, the result is an s-shaped curve. The s-curve accelerates to a maximum until half of the individuals in the system have adopted. The s-curve of diffusion can be argued to take-off once personal networks become activated in spreading subjective opinions and reviews of an innovation from peer to peer in a social system. The area of the diffusion curve between ten percent of adoption up to 20 or 25 percent is the heart of the diffusion process and after that it is most likely impossible to stop further diffusion of a new idea (Rogers, 1983). Boutellier and Heinzen (2014) argues that diffusion of an innovation takes 10-40 years to achieve the big majority in the market and critiques the often visualized s-curve. They argue that the reality is that after the first introduction of an innovation many small companies go out of business which lead to a dip in sales.

Fields within scientific research will always have to endure criticism since every field have to make certain simplifying assumption about the surroundings where the subject for investigation exists in. If such assumptions were not made the reality would be too complex to describe in a feasible manner. Some of the criticism regarding the diffusion theory of innovation involves issues regarding the theory being too optimistic regarding innovations, stating that not all innovations should be adopted by all members of a social system. The criticism also involves the

Figure 4: Illustration of the s-curve and diffusion of innovation

Source: Adapted from Diffusion of Innovations, Rogers, 1962
tendency of the theory to hold the individual responsible for his or her problems instead of the social system in which the individual is part, as well as counting on the individual to recall when he or she first adopted a new idea (Rogers, 1983).

3.4 Trends

3.4.1 Urbanization

Urbanization refers to the fact that larger parts of the population move from the countryside to the cities or suburbs. This trend has been on going for a longer period of time. Since the beginning of the 20th century the part of the population in the age group 20-64 years has increased in the cities (sverige2025.boverket.se, 2012 ). Most of the people living in the big cities in Sweden belong to this age group, and most of the children and youth (age 0-19 years) live in the suburbs. According to Boverket (2012) the division between those age groups and which type of region they live in is represented in the picture below:

![Figure 5: Representation of age segments in geographical areas](source: Adapted from Sverige2025.boverket.se)

Statistiska Centralbyrån (2015) points out that the main reasons for the urbanization in Sweden today are more births than deaths in the big cities (>100 000 inhabitants) and the immigration to the conurbations. At the same time there is no drastic reduction of residents on the countryside because of the growing population (Svanström, 2015). People living in the countryside are subject to a higher risk of poverty although in Sweden the differences between cities and the countryside are not as significant as other countries within EU (Helgesson, 2015).
3.4.2 Digitalization

Digitalization is defined as the use of digital technologies to provide new revenue and value-producing opportunities; it is the process of moving to a digital business (Gartner, 2016). It is inevitable, irreversible, remarkably fast and omnipresent. It affects businesses, the economy, individuals and society as a whole. An extensive digitalization across almost every business and every industry can now be witnessed. The drivers of this digitalization include the digital technological breakthroughs of the last decades as well as the change in people’s behaviour, attitudes and expectations; reasonably low barriers to entry; and the availability of venture capital. These four drivers powerfully reinforce one another. The most significant driver of digitization is the digital technology breakthroughs, for example social media, mobile computing, analytics/big data, cloud computing, Internet of things etc. However, the enabler of the fast and wide adoption of the digital technologies is the changes in people’s behaviour, attitudes and expectations (Oswald and Kleinemeier, 2016).

Within the grocery industry many changes and digital developments have been tried. In Seattle the first grocery store without a checkout line has opened. By using computer vision, sensor fusion and learning algorithms the customer enters the store by confirming the membership with an app and the products are automatically registered and paid for before the customer leaves the store (Weise, 2016).

In Sweden, more physical grocery stores are introducing the self-checkout and in some stores the customers can scan their items with the mobile phone and consequently reduce the time spent in the store (ica.se, 2017). One store in the southern part of Sweden has opened with similar premises as the store in Seattle. The entire store is unmanned and is functioning nearly autonomously (Prindle, 2017).

For the consumers of today, there is no difference between the digital and physical worlds when it comes to shopping. Close to 80% of all the purchases made in physical stores has started in some way on the Internet, for instance by gathering information, comparing items or just to get inspiration (sitoo.se, 2017). The past years the phenomena of webrooming and showrooming has occurred. Webrooming refers to the act when a consumer searches for information on Internet and then purchases the item in a physical store, whereas showrooming is the opposite when the consumer instead tests or looks at the product in a physical store and then purchase it online.
Between the years 2015 and 2016 the number of consumers using webrooming increased, which led to more well informed customers in the physical stores which required high service and knowledge in the stores. The showroming, on the other hand, has decreased. This might be because of increased faith in the online stores, linked to the growth of consumers’ experience and e-commerce maturity. Further, there has been shown that consumers using multichannels spend more money than consumers using one channel (E-barometern, 2016). According to E-Barometern (2016), consumers who have researched before their purchase spend 60% more than consumers being more spontaneous.

3.4.3 Convenience

In hand with the digitalization trend another identified trend is convenience (docere.se, 2017). In Sweden the e-commerce for food is increasing. In 2016 swedes bought food online for 5.5 billion SEK, which represents 1.9% of the total market for food. This portion is still relatively small. However, it has increased every year (Digital Mathandel 2017).

The online grocery sale is traditionally divided into two main groups, the prepared grocery bags and the traditional self-picked bag. The prepared bag is said to have attracted the consumers into the online stores, but in 2015 the self-picked bag took over the majority of the food sold online. The trend continued during 2016 and in the end of the year self-picked bags bought online had 58% of the grocery e-commerce compared to the prepared bags with 42% (Digital Mathandel 2017).

Internationally Sweden positions itself more or less in the middle of the scale for portion of food bought online. With 1.9% Sweden is ahead of big economies such as Germany and The US, but not quite competing with France, Great Britain and the clear leader South Korea (Digital Mathandel 2017).
Among the European countries France and Great Britain are in the lead regarding online grocery shopping, even though their structures differ. In Great Britain the customers became more price sensitive after the last financial crisis and the e-commerce increased. The large volumes have forced the logistics to improve, which made it even more convenient for the customers. For instance, it is possible to receive some grocery items within one hour in London (Digital Mathandel, 2017). France, on the other hand, has increased their online market share by the click and collect model. This means that they purchase their groceries online and collect it by themselves, often via a drive through (Digital Mathandel, 2017).

According to Digital Mathandel (2017), there is a correlation between population density and the proportion of online grocery shoppers in the city. In 2016, 75% of the online shoppers from a big city (>200 000 inhabitants) received their latest online grocery purchase to their home, whilst consumers from smaller cities collected their online purchase in the store. This could be because the option of home deliveries decreases outside the big cities. One conclusion drawn can therefore be that the online grocery shopping increases when the catchment areas for home deliveries expand (Digital Mathandel, 2017).

3.4.4 Car Use

The car ownership is increasing overall in Sweden. In 2015 the car ownership was calculated to 479 per 1000 inhabitants in Sweden, and 368 per 1000 inhabitants in Stockholm (miljobarometern.stockholm.se, 2016).
On the other hand, the number of car owners who are not frequently using the car is increasing in Stockholm and the use of car pools is more frequent. 54% of the car owners in Stockholm did not frequently use their car in 2013 and the same number was 46% in 2004 (miljobarometern.stockholm.se, 2014; miljobarometern.stockholm.se, 2013).

The trend shows that people living in the more central part of Stockholm are letting their car stand still to a wider extent. For instance, in 2013 70% of the car owners of the inner city area Norrmalm mostly did not use their car. This can be compared to the suburban area Skärholmen where 37% of the car owners let their car stand still most of the time (miljobarometern.stockholm.se, 2014).
4. Results

The following chapter presents the results derived from interviews, historical data and information found in the literature and theory etc. The chapter is divided into sections regarding the identified factors affecting the future grocery stores and, in the longer run more specifically, the area requirements.

4.1 Influencing Factors

4.1.1 E-commerce

From the 60’s until some years ago the food industry looked more or less the same. E-commerce for food is relatively new and there are many things happening in the industry at the moment. The million dollar questions for the future in this industry are; how big will the online food industry be and what will influence and decide its destiny? (CD, 2017).

Using the data given in reports such as Digital Mathandel (2017) regarding the turnover of the online grocery market in Sweden a quantitative forecasting can be conducted. Between the years 2009 and 2016 the growth rate of online grocery has varied between approximately 23% and 62%, but with an average of a little bit over 37% (37,3%) and a median of 33%. The diagram below shows the numerical forecasting of the growth rates continuing until year 2022.

![Figure 9: Illustration of different levels of forecasting](image)

In order to be able to present some fraction of the online grocery industry in relation to the total food market one has to forecast the expected turnover of the total grocery market as well. We
have used a long-term estimated inflation rate of 1.5% in order to present a forecasted turnover for the total grocery industry. The table below shows the turnover of the total grocery industry together with the online grocery industry and its fraction of the total industry and the forecasted numbers based on the various growth rates of the online grocery industry.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Grocery Industry (In SEK Billion)</th>
<th>Online Grocery Industry (In SEK Billion)</th>
<th>Fraction of Online Grocery Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>250</td>
<td>1.6</td>
<td>0.6%</td>
</tr>
<tr>
<td>2013</td>
<td>265</td>
<td>2.1</td>
<td>0.8%</td>
</tr>
<tr>
<td>2014</td>
<td>275</td>
<td>3</td>
<td>1.1%</td>
</tr>
<tr>
<td>2015</td>
<td>285.2</td>
<td>4.2</td>
<td>1.5%</td>
</tr>
<tr>
<td>2016</td>
<td>285.9</td>
<td>5.5</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Table 2: Display of calculations over forecasting

4.1.1.1 DRIVERS

During the study some drivers pushing the development and transformation of e-commerce have been identified. The results show some drivers of today and others that might influence the phenomenon later on. The results below are generated from surveys made by HUI and Svensk Digital Handel as well as interviews with shopkeepers and experts from the industry.

Accessibility

One of the main advantages consumers see with online grocery is the wider range of products (Digital Mathandel, 2015). Naturally there are more grocery stores in areas with higher population density (Dagligvarukartan, 2016), which might cause longer distances to the stores as well as a smaller assortment in areas where the density is low. In addition to this, the technical development and accessibility of e-commerce and the expanded assortment of products may drive the growth of customers using e-commerce.

As the technology evolves and the ease of use increases, online shopping is simplified. In the same time as the companies learn to understand the customers’ wishes and which channels are
being used for purchase, the convenience grows (SM, 2017; SL, 2017). The mobile phone as a purchase channel has grown during the past years. This is said to be due to the fact that the mobile phone is a device people usually have close to themselves. However, this differs amongst the larger cities and the smaller ones together with the rural areas. The mobile usage is the biggest in the larger cities, whilst the use of computer via a website is the biggest in smaller cities and the rural areas. Below chart shows the proportion of different devices used for online purchases during the past years (Digital Mathandel, 2017):

![Figure 10: Technological devices used for online purchases during a three-year period](source: Adapted from Digital Mathandel 2017)

The bigger cities (>200 000 inhabitants) are the ones driving the growth of e-commerce. Outside those cities the possibility to get home delivery decreases drastically. In those areas the most common delivery alternatives offered is click and collect together with delivery to a post office. In the bigger cities 75% of the online shoppers received their latest online grocery purchase by home delivery, whilst the majority of the consumers from smaller cities or the countryside got it by collecting it from the physical store. The growth of online grocery purchases is most significant in the bigger cities, but obvious in the smaller ones and the countryside as well (Digital Mathandel, 2017).

**Convenience**

Among the top reasons why consumers want to purchase their food online one finds to be: time saving (42%), home delivery and consequently that you do not need to carry grocery bags (35%), no need to go to or stay in the physical store (29%) and the flexibility in being able to order whenever you want to during the day or in the week (27%) (Digital Mathandel, 2015). These reasons can be included within the trend of convenience.
Several reports mentioned the fact that the willingness to pay is low today. Interviewee (IE, 2017) informed us that there is a great difference in the number of online purchases when the cost of home delivery varies. According to the report *Scenarios for the future growth of e-commerce*, the consumers’ willingness to pay for service will grow, which is mentioned by the shopkeepers interviewed as well (Scenarion för e-handeln framtida tillväxt, 2013). The shopkeepers argue that the consumers eventually will realize the advantages and accept the extra charge (SM, 2017).

During one interview we are introduced to the principle of playlists. It is presented as follows: from the beginning there was radio, one channel offered certain songs with little room for influences from listeners. Then people were introduced to the CD, with the possibility to play the song one wanted to hear at a specific time. Further along Spotify was introduced, with the possibility to hear basically any song in the world whenever and wherever you want. With too many choices problems occurred and Spotify presented the playlists. Back to basics, where Spotify tells you what to listen to. The same can be seen in other industries such as for example the travel industry. At first there were travel bureaus offering certain packages of trips, where the hotel and transfer was included and decided by someone other than the buyer. After this the travel industry moved online and the choices grew and the limitations were small. This resulted in too many choices that were too time consuming to choose from, which leads us to the fact that many would like to get back some of the benefits from the travel bureaus. The interviewee claims that the same phenomenon will occur in the food industry- the playlist principal. This may be the prepared grocery bags for instance (SI, 2017).

Coexistence is a word stumbled upon several times during this study. The idea behind it is that for instance stores complementing each other will share a space in order to attract customers to one another. Both shopkeepers and industry concept experts talk about package delivery points in the stores. Other examples are external sushi restaurants, optician or a small room for a family doctor inside the grocery stores (GR, 2017; CD, 2017). Further, this concept could be extended to the online market. An idea could be that while you receive your groceries to your door, why not include the packages from the post office and the drugs from the pharmacy (GR, 2017; IT, 2017).

For the physical grocery stores visited during this study, the number of click and collect- online purchases has beaten the number of home deliveries. (SM, 2017). The surveys made by Svensk Digital Handel have shown that customers are interested in subscribing to certain items such as
milk, potatoes and toilet paper. In the survey conducted during 2017 41% of the respondents said they had some items they would like to subscribe to. For households with single parents and children, the same number was 49% (Digital Mathandel, 2017).

**Competition and Triggers**

Another mentioned driver and influencing factor for the e-commerce is competition. The barriers to entry are often lower for e-commerce than for starting a physical store. Already existing players in the food industry have good locations and to try your luck online might not require the same amount of investments. This is a motivation for new players to invest online (Scenarion för e-handeln framtida tillväxt, 2013).

Interviewee (IE, 2017) draws attention to the thought that home deliveries seem to be a key driver for the consumers. She argues that the flexibility and suppleness for carriers depend on the demand of home delivery. More companies will get into the industry of transportation and come up with new solutions that will improve the value chain for the carriers. Simultaneously, the demand of home delivery will increase if there are companies offering smooth solutions. This gives us a system where the demand of home delivery and the supply of home delivery, together with competition among carriers, triggers one another and might therefore increase the number of home deliveries in the future (IE, 2017).

4.1.1.2 BARRIERS

While there are drivers pushing the transformation and development forward this study has also shown that barriers exist, which can be seen as obstacles to overcome or which will lead to alternate paths in the future of the grocery industry. Today three out of four people living in Sweden have not yet purchased groceries online (Digital Mathandel, 2017) the following barriers are to be seen as contributing reasons for that statistic.

**Assurance, Guarantee and Inspection**

One of the biggest obstacles to overcome has been claimed to be the lack of ability for the customer to inspect groceries like fresh vegetables or fruit when ordering it online. Other goods like books and music do not have that problem. This is said to be the reason why the growth in online sales for those products have been much higher than for example groceries (Scenarion för e-handeln framtida tillväxt, 2013).
Amongst respondents in a survey conducted by HUI Research in the first quarter of 2016 the majority of those who had not purchased groceries online responded that they had not done so because of the wish to be able to see and inspect the groceries in the store. The second biggest factor was that they were used to shop in the store and that they continued to do so out of habit. However, these barriers have become less significant when compared to the result of previous years’ surveys and seem to be connected to the age of the respondents. The need to inspect the groceries seem to be low in the younger age-segments however dominating in the segment of respondents over 65 years of age (Digital Mathandel, 2016). This is correlated with the result from the same survey conducted the year before when statistics shows that the second most purchased grocery products online are fresh vegetables and fruit (Digital Mathandel, 2015).

One of our interviewees claimed that we might actually have reached the state when fresh fruits and vegetables are the types of product that you want to buy online (GR, 2017). This was argued to be true since customers presumably feel that they can trust that the grocery that you purchase online has to be of top quality because the stores do not want to get negative feedback. In the latest survey conducted by HUI Research in the beginning of 2017 the dominating barrier is still the lack of ability to see and inspect the grocery before purchasing. However, the respondents agreeing with that statement have gone from two out of three in 2012 to one out of three in the latest survey (Digital Mathandel, 2017).

**Technical Development and Consumer Maturity**

Technical innovations are part of the reason why the E-commerce industry has grown over the last years. The adoption of smartphones for instance can be seen as an enabler for the growth of e-commerce and hence the online grocery industry over the last years. Smartphones meet the need of customers who are on the move and where time is a scarce resource, which is a trend discussed earlier in this chapter as well as under the convenience trend in chapter 3 (Digital Mathandel, 2016).

Technical innovations are necessary to be able to meet the changes in customer needs and behaviour and are also a strong driver of financial growth in the retail business. The technical development is an essential component for the retailing industry and its future (Rämne et. Al. 2010). However, one of the reasons why online grocery shopping has not developed further today in Sweden (IE, 2017) stated was because of the lack of development efforts conducted by existing grocers today. Today the technical development is prioritized however it is still lagging
behind international retailers and might be a barrier for grocers who are not able to adapt with new technology as fast as necessary.

Today one of the largest barriers both for grocery retailers and customers are the logistics of packing and delivering the products. The online shopping experience today meet the need of customers whose grocery shopping experience in the physical store are associated with a dull repetitive task. However, until the delivery and online solution get increasingly effective and seamless the majority of customers will most likely continue to shop in the stores (Hartman Group, 2015; SM, 2017). In the survey conducted by HUI and Digital Svensk Handel 2017 the respondents answered that the main reason for shopping online was that it was convenient and timesaving. This was true for all age groups, however more important in the younger segment. In large cities almost half of the respondents answered that home delivery was an important factor. Amongst the respondents who had never ordered groceries online they stated that the top four factors that could influence them to start ordering food online were: special deals/offers, cheaper delivery fees, deliveries to my town and better delivery alternatives. Besides more developed delivering services technical innovations like Smart refrigerators and Glue locks could help with this barrier if it were to be adopted by housing associations or private persons, they exist today but has not yet been subject to a widespread adoption (EE, 2017).

A necessity for the growth of online grocery shopping is the maturity level of the customers. Changing a habit is complex, consumers who today have grown up using technology experience an easier adoption of online grocery shopping since they are used to purchasing other products online (Digital Mathandel, 2016).

The Swedish population can be said to adopt new technology rather quickly, however when it comes to online shopping we are lagging behind many of our European neighbours. One of the reasons for this is that the Swedish population were affected by the debates regarding security problems associated with using the Internet and purchasing goods through the Internet in the beginning of 2000. Today consumers are much less sceptical however a negative debate in the media or a scandal associated with online grocery shopping might delay the growth of online grocery shopping further (Scenarion för e-handelns framtida tillväxt, 2013).
Profitability and Efficiency

Other products within retailing have increased their online market share greatly compared to grocery products. One of the enablers for that growth has been the ability to compete with a lower price when you don’t have to have an expensive store (Rämne et. Al, 2010).

However, groceries do not have the same margins as for example clothes, electronics or similar products. Low price strategies are therefore more difficult to compete with within the online grocery industry and might not be a favourable path to take in order to increase the growth in online grocery shopping compared to in-store shopping (SM, 2017).

The sales, which occur online through ICA today result in the fact that the employees in the stores have to pack the products and place the order in storage for pick-up or delivery. This results in an increased workload for the employees in the stores. Today this is manageable, however if the online market share increases the stores will not be able to manage the manual order preparations conducted today. In a store everything is calculated to be as effective as possible since the biggest expense of a store in Sweden is its manual labour (SL, 2017). Therefore, the lack of effectiveness associated with the process of ordering, collecting and delivering online orders are devastating for a store today if the numbers of orders would increase (SM, 2017). The logistics of the delivery are as stated also one part of the process, which needs to be more effective and better conducted in order for E-commerce to grow to its full potential. Today the deliveries struggle to be profitable since transportation of groceries are more expensive than other type of goods. This is due to the fact that the transportation has to be able to carry both fresh and frozen products resulting in the need of a specific transportation vehicle (Rämne et. Al, 2010). Online sales of groceries are therefor at the moment a competitive necessity rather than a profitable business for retailers (SM, 2017).

4.1.2 In Stores

E-commerce is only one part of the digital transformation, which is happening today. A complete digital picture includes everything from finding a store and checking prices to sharing content and purchasing products. This occurs both in stores and out of stores. Consumers are increasingly adopting new technology that simplifies and improves every part of the processes (Nielsen, 2015).

All interviewees agree on the fact that e-commerce within the food industry will grow. The question is how soon and how big it eventually will become. As mentioned in section 4.1.1.1
under the headline Convenience coexistence is something many believe is the future. This could have effects on the grocery stores and the area requirements. Today, stores are already expanding or reorganizing the stores in order to give room to delivery points or post offices for instance (IE, 2017). In addition to this, the click and collect purchases have increased, which affect the utilization of the space in store. If the demand of home deliveries increases it will not be sustainable to keep the grocery bags in the stores and the need for a warehouse for online purchases is necessary (SM, 2017).

In order to stand out within the increased competitive landscape present due to e-commerce one possible strategy can be to increase the service level and the happenings inside the physical stores. This goes hand in hand with the idea behind coexistence, but also includes digital and personal service. The idea behind personal service is for instance manual disks and the digital service might refer to easily accessible information about the origin of the meat or recipes customized for you (SM, 2017).

The customers of today do more of the job previously done by employees, and they enjoy it. The customers perceive the experience as painless and smooth when they do not need to interact with the employees (CD, 2017). On the other hand, another interviewee mentions that the manual disks add value to their store and that they are highly appreciated (SL, 2017). One of the bigger visible changes made in many physical stores the past years has been the checkouts. The shopkeepers interviewed confirm that they have decreased the number of tasks for the employees in stores and offer the customers a more efficient checkout (SL, 2017).

The way the store is structured, in regards to the assortment and specific offers, depends on the nearby market and demand. New concepts are tried out constantly, in order to get to know the customers more. SL (2017) claims that his stores’ customers are health conscious and that they need to adapt to them. ICA Sveavägen is one of the existing concept stores at the moment. Before the changes it belonged to one of the smaller formats own by ICA, ICA Nära, and looked like an ordinary grocery store. Now the size of the store is half of what it was and the new focus is in store-prepared dishes. The customers can sit down and eat a meal, which make the store compete with restaurants and cafeterias in addition to other grocery stores (SS, 2017; icagruppen.se, 2016). The new concept stores can be viewed in close regards with the theory of Retail Life Cycle mentioned in chapter 3.
The concept will be evaluated after one year. One of the interviewees in charge of the concept stores mention that the size of the store might have been reduced a bit too much but the definitive evaluation is yet to come (CD, 2017). The concept of prepared food stem from the trend showing that people want to cook less than before since they want to spend their leisure time on other activities. The restaurant life as well as the habit of ordering prepared restaurant food delivered to your home has grown in Sweden (CD, 2017). One of the challenges for the grocery stores of today also connected to the trend mentioned is that the customers’ desires vary during the week. Typically, the customer see food as a utilitarian product that takes too much time Monday until Thursday, whilst Friday to Sunday food is something you can spend more money on as well as something that can take time and is important. The grocery store needs to be able to adapt to this variation in customers’ desires (SI, 2017; IT, 2017).

To help shopkeepers evaluate their stores there are certain ratios one can consider. One of those is turnover per square meter. In a few of the interviews conducted the interviewees mention that it is more difficult to find store locations in the bigger cities and the prices for rent are raised more and more. This could make the ratio of turnover per square meter even more relevant in the future (CD, 2017).

The environmental aspect could be important for the stores to consider in the future according to IT (2017). IT (2017) continues saying that the stores need to be close to the municipal traffic communications, and everyday flow of people in order to be attractive further on.
5. Discussion

In the following chapter the results and previous literature is discussed in order to reach a conclusion in the following chapter. Further, the discussion concerning gathered data and problematization around the statements given to us is presented.

5.1 The Future of E-commerce

In order to be able to say anything regarding the area requirements for the physical grocery stores in the future one has to take into account which parameters that will have an affect on the physical area of a store. The e-commerce of grocery is one of the main parameters we think one has to consider. That the online shopping will grow is not a bold guess, the question is rather how big it will get, how fast and the impact it might cause.

5.1.1 Trends

People tend to cook less in their own kitchens and the time it takes to prepare a meal is often prioritized elsewhere. On the other hand, as mentioned in the previous chapter, weekend grocery shopping and cooking tend to take more time and is more prioritized. If there was an option to make a meal faster it would probably be welcomed by certain segments if not all. As online grocery shopping often is mentioned together with the advantage of less time spent, the phenomenon goes hand in hand with the predicted desires of customers.

The obstacles shown regarding consumers’ willingness to purchase food online are mainly regarding the logistics of the delivery and the desire for inspection of the groceries. These are obstacles in correlation with consumer maturity and technical development as mentioned in chapter 3 and 4. It is tempting to say that this will be in place in some years from now. As more and more consumers test the e-commerce the desire to inspect the items should decrease and the ease of use increase, leaving us with a higher demand of online shopping in general. With this being said, it does not mean that the demand for physical grocery stores is decreased to zero. As stated in the literature on customer behaviour convergence might be the result since some utilitarian and experiential values are more visible in the traditional grocery shopping while others are obvious within the e-commerce of grocery shopping. Convergence would mean that we continue to pursue both online and offline shopping since there is a value in both. If the majority of the population would do both the e-commerce would grow substantially.
In the results presented previously, the majority express that they have difficulties believing in an online food market over 40%. The biggest online food market of today is, as earlier presented, South Korea with almost 17% (16.6%) online. The reasons for this high proportion of the market is said to be because of the population density together with the fact that a great proportion of the inhabitants own a smartphone and have a high internet penetration. This number of almost 17% is due to the fact that almost 100% of the inhabitants in the ages between 10 and 40 years old buy food online. With this being said, they do not mention the proportion of their grocery shopping they do online. Much seem to point to the fact that the online segment for food will grow up to at least this number.

The trend of coexistence in the physical stores should not just stay in the physical world; why not offer the same customer experience online. This might be an additional argument for the growth of e-commerce. As stated in the literature on consumer behaviour the online grocery customer has to be considered both a shopper and a computer user meaning that both shopping experience is important as well as the ease of use of the technology. Offering added value services through online grocery shopping would increase the experiential value of the service most likely attracting more customers.

5.1.2 Forecasting

In section 4.1.1 a diagram with the turnover forecasted with the potential growth rates of 40% (Extreme), 25% (Strong) and 15% (weak) was shown. Together with the theory behind retail change presented in the chapter Theory and Literature, one could possibly say something about the most likely growth. Since the online grocery market is said to be in the introductory phase it will soon be facing a phase of growth. Last year it had a growth of 30%, which would mean that the growth would increase further on.

The food industry in total is growing as well. This is for instance due to the growing population and parameters affecting the society, such as economical influences. When forecasting the grocery industry’s growth, one should take these parameters into account among others. This is very difficult and no one can be sure of the future development for obvious reasons. Consequently, when forecasting the proportion of the total industry that the online grocery will have it does not only depend on the growth rates considered, but the growth of the underlying industry in total as well. The results of the quantitative forecasting should therefore be taken with consideration of such errors.
The high levels of online grocery purchases in the online leading country, South Korea, is said to be due to the high population density and the high utilization level of smartphones for instance. The smartphone usage in Sweden is already on high levels, but regarding the population density we cannot compete. As mentioned in the section Technical Development and Consumer Maturity under Results as well as in Consumer behaviour and e-commerce under Theory and Literature, another parameter that goes hand in hand with the usage of smartphones is ease of use. The technical development and the experienced ease of use is likely to improve as the demand grows. When then trying to foresee the future many years from now this is not considered a barrier further on.

Forecasting the industry ten years ahead gives us the fractions below, depending on the different growth rates used:

![Figure 1](image_url)

**Figure 11**: Illustration of different proportion of online grocery industry depending on growth

Most of the interviewees in this study do not believe in a definitive online grocery industry over 40% of the total grocery market. Shopkeepers state that if the online grocery from their specific store exceeds 7-10% they would have difficulties as it is today and they would need to look for alternative ways of operating. This change could for instance be a warehouse for picking online purchases. Looking at both the strong and the extreme growths presented above, the general online grocery portion exceeds 10%. In the weak growth scenario, the general online grocery market is a little bit over 7%, which probably means that the online purchases from some specific stores will be over 10%. Further, this means that some solution for the stores, such as the warehouse, needs to be in place within ten years looking at the forecast presented previously.

The extreme growth scenario is less probable since the habits of consumers massively need to change as well as solutions for numerous barriers have to be found. The solution for home
delivery, such as glue locks, would most probably affect the growth of the online grocery industry. These kinds of solutions are already tried out, which could mean that within ten years the technique is in place.

5.2 The Future of the Physical Grocery Stores

As presented in the result above we are experiencing an intensive period of change in the grocery industry. E-commerce is influencing the grocery industry more than any other industry when considering growth rate and since the main grocery chains now have started to compete for market share we will most likely see more and more consumers trying out the online shopping alternative. Furthermore, we have presented trends that will most likely affect the physical store and give the physical store another meaning in a relatively near future.

5.2.1 Trends

As stated in chapter 3 and 4 technology innovations are making the customers more informed than ever before at the same time as it is giving the grocers the opportunity to learn more about their customers needs and desires. The amount of data that can be extracted about customers will only increase as almost every device gets connected and everyone interacts through or with the help of technology. Digital innovations become more adopted in stores, technology like sensors, which can record characteristics relevant for a customer’s shopping behaviour when the customer walk into the store have been tested. As well as mobile applications, which let you scan and pay for the item as you walk down the aisles, the only technical device you need is your smartphone. This we believe will lead to a much higher individualization in the future grocery shopping both online and offline.

One of the grocers interviewed stated that his customers were very conscious about health and environmental aspects and therefore very much appreciated the service experienced with a manual disk. However, both grocers interviewed stated that customers today do all the work in the grocery stores themselves, which in return has reduced the number of employees needed in the store. The customers walk through the stores looking at recipes’ in their cell phones and are positively impacted when they do not have to interact with an employee. Leading to a scenario where the digital service in a store to some degree replaces personal service. This of course can be argued to depend upon the age of the consumer, which is why some stores might still benefit from a high level of service from employees in the store if the majority of their customer base is in the older age segments.
Customers want convenience in every aspect of their lives, a trend that most likely will evolve since new technology will increase the accessibility and ease of use of existing innovations. The storekeepers interviewed portrayed a picture of very informed and conscious customers who knows what they want. This combined with the fact that storekeepers can get this data about its customer means that he or she can adapt the selection of products available in the store leading to a more effective assortment in the stores. The e-commerce then gives the customer a more expanded selection of products, a wider selection than has been possible prior to e-commerce. However, this of course only is true if the e commerce is offered through central warehouses instead of local stores since local stores only can hold a certain amount of products if it is meant to be as effective as possible.

The environmental aspect has been mentioned throughout the study, both in chapter 3 and in chapter 4 where we got some indication of an environmental and sustainability focus which seem to be increasing in both the customers’ mind-set and the companies. We mentioned sustainability trends, which have become popular internationally, i.e. package free stores. However, we don’t believe that this will be a trend which impact the majority of stores although some niche-stores in areas with the right customer base might see it as an opportunity for differentiation. The environmental and sustainability trend are more likely to affect entire brands than specific stores. Several of our interviewees stated that it is important for a company to be aware of and concerned with environmental issues today. The store and the area associated with the store should be as environmentally effective as possible, it should be easy to get to the store with public transport and an overall sustainability level should be associated with the company in order for customers to choose or stay loyal to one company.

Another trend discussed was regarding the coexistence of multiple types of services within a store, i.e. optician, restaurant, pharmacies or post office etc. This in turn gives the customer an added value when visiting a grocery store. This goes in line with the idea discussed in the literature about consumer behaviour trends and how nowadays there is more focus on the experiential value of an innovation rather than the utilitarian, this is of course mentioned in regards to the online grocery shopping however now it's becoming equally important within the actual physical store to include an experience dimension which is also discussed in chapter three.

5.2.2 Influences of E-commerce

Depending on the proportion of the total grocery market e-commerce will take it will affect the physical grocery stores. The actors only operating through online sales have not until this point
affected the physical stores substantially. However, if the e-commerce industry for groceries continues to grow while at the same time more and more grocery chains with physical store adopt and develop their online offering some actors will be affected.

We can evaluate the formats of the existing grocery chains with the perspective of Retail Life Cycle theory concluding that grocery chains in Sweden have under a relatively long period been in the Maturity phase while some even have suffered from entering the Decline phase. New formats, in form of online-only grocery firms then entered the market pushing the the traditional grocery firms to evolve themselves. Now many grocers are struggling to meet the needs of customers alternating marketing mix elements such as location, size service level etc. Leading to a transition into the development phase as well as the introduction phase. The risks are still high since the success of the format has not yet been assured and could still suffer from other competing formats or possible better solutions. As the e-commerce grows and the new formats are on the verge of entering the growth phase they might trigger each-other leading to a higher growth then expected.

The change in the competitive landscape most likely will mean that some actors who operate on the market today have to close down in favour for more resilient companies, solely e-commerce companies as well as established grocery chains. As mentioned in the literature regarding the retail environment the competitors operating on the market has to consider the competitive landscape today without forgetting about the possibility of reactive changes of competitors in the future. One such change could be the entry of international players on the Swedish grocery market although this is out of the scope of this study. If less resilient actors have to close down this could mean that the market for online groceries reach the same market structure that groceries offline have today in Sweden, a handful of large chains and a few smaller niche stores.

How the effect of e-commerce will influence the physical stores of today is as stated dependent on how much the e-commerce industry of groceries will grow. It could be considered a fact that the higher growth the bigger impact it will have on the physical stores. However, that might not be true depending on how you define a big impact. If the extreme growth scenario would be true than we would have a much more profitable delivery solution both because the logistics for delivering groceries would have to have been developed further for e-commerce to have the ability to grow into the extreme scenario and because the delivery would have a larger customer base making it effective through economies of scale. The extreme scenario would also mean that a central warehouse would have to be in place since a physical store would not have the area or
the capacity to collect all the online orders in the stores. Unlike the more moderate scenarios in which collecting and storing the online orders in the store might still be possible but will require a lot of capacity in form of storage and hours by employees. The extreme scenario would of course affect the product assortment in a physical store more than the moderate scenarios, since a single store could present a more limited but personalized assortment if the wide assortment has its place in a central warehouse. If the case is that the grocers own the area of the store before the central warehouse is in place, this could mean that they have room for coexisting businesses. On the other hand, if the area is about to be bought when the central warehouse is up and running the area requirements for that should not be as big.

5.3 The Time Aspect

The most difficult factor to consider, and the one the interviewees seems to avoid the most is the one regarding time. When will certain solutions be in place and barriers solved? In order to take this parameter into account one could benefit from looking at e-commerce through the diffusion of innovation theory and the s-curve. One argument could be that e-commerce is not an innovation since it has existed for many years, however as stated in the literature, as long as a member in a social system perceives the phenomenon as an innovation it can be classified as one since that perception will determine the individual's reaction to it. Since only 1 out of 4 people in Sweden have bought groceries online to this day we believe it is still being perceived as an innovation. The diffusion of the e-commerce of groceries is a kind of social change, which will lead to certain consequences in the structure and function of a social system, which in turn will have impact on both consumers and storekeepers.

The slope of the s-curve depends on the perceived characteristics of the innovation. Where the steep growth is most significant on the curve were the barriers affecting the innovation today could be placed. Combining the barriers and characteristics of the e-commerce with the s-curve one might find it more manageable to draw some conclusion as to where we are on the curve today and consequently how big e-commerce for groceries might get. Furthermore, we will analyse the potential effect of the barriers identified and how they could affect the curve if and when they are resolved. One illustration can be seen below:
The perceived advantages and barriers to e-commerce is, as earlier presented, as follows:

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less time spend on grocery shopping</td>
<td>Habit</td>
</tr>
<tr>
<td>Less time spend in physical store</td>
<td>Generation</td>
</tr>
<tr>
<td>Wider range of products</td>
<td>Technological development</td>
</tr>
<tr>
<td>Less Waste</td>
<td>Security</td>
</tr>
<tr>
<td>Home delivery</td>
<td>Glue locks or smart refrigerators</td>
</tr>
<tr>
<td></td>
<td>Cost for customer or grocers</td>
</tr>
<tr>
<td></td>
<td>Central warehouse</td>
</tr>
<tr>
<td></td>
<td>Subscription</td>
</tr>
<tr>
<td>Coexistence online</td>
<td>Leave certain waste</td>
</tr>
<tr>
<td></td>
<td>Collaboration</td>
</tr>
</tbody>
</table>

Table 3: Advantages and barriers for e-commerce

Looking at the barriers and drivers concluded in previous chapter, as well as the categories of perceived characteristics of a technical innovation as stated in the literature, we try to make some connections. However, besides the perceived characteristics of the innovation the social system in which the potential adopters exist might also have an affect on how steep the s-curve is since different social systems might perceive the characteristics differently. We will portray this by looking at the division of different social systems in the three geographical areas discussed.
throughout this report; large cities, cities and rural areas. The social systems can be found through the urbanization effect on different age segments mentioned in chapter 3. This concludes that rural areas have a higher proportion of seniors over 65 years of age and fewer families than for example the cities and larger cities that have a higher portion of families as well as young adults. We will generalize this into three different social systems:

- Young adults living without children
- Families
- Seniors

We are aware that some concerns could be identified with this generalization, for instance families with more than one child could have completely different needs and desires than families with only one child. Furthermore, young adults include everything from students to hardworking businessmen and women, who might not have the same lifestyles. However, we argue that the characteristics within these three social systems are sufficiently similar for further conclusions regarding the diffusion of e-commerce of groceries. When looking further ahead in the future the boundaries of these social systems will have blurred since an individual most likely will go through all of these social systems during a lifetime. A young adults’ positive reaction to the innovation today might mean that he or she in the future will influence the members of the social systems that is families. The same could be said regarding the family segment, and as stated in the literature the majority of individuals rely on the subjective evaluation from previous adopters they can identify with.

Looking at the barriers and drivers and trying to incorporate them as characteristics gives us the following results:

**Relative Advantage, Compatibility, Complexity, Trialability and Observability**

In rural areas the density of the population is lower which means that it is not as much hazard to get to the stores. The benefit from the advantage of time saving would therefore not be as big in these areas. In rural areas cars are also more frequently used, as stated in the literature chapter, since more people compared to people living in the cities, have to travel longer distances during a day. Since people there are travelling in cars more frequently, going to the store could be argued to not be associated with as much effort compared to people who do not travel by car. This combined with the fact that people living in rural areas generally have a lower income than people living in large cities might implicate that the majority are less willing to go from offline
grocery shopping to online grocery shopping if it is perceived to be more expensive. However, in Sweden the economical difference is not as noticeable, which instead could mean that as long as other perceived benefits were higher than the offline alternative for grocery shopping the e-commerce for groceries would get adopted. Furthermore, our results state that e-commerce in general is popular in rural areas since their assortment of products has experienced a significant expansion since e-commerce first was offered. However, this would only be true if the e-commerce offered would be supplied through a warehouse that was not the actual physical store.

One barrier previously mentioned was regarding ineffective home deliveries and the fact that the majority of people who have the possibility of choosing home deliveries live in the larger cities. This combined with the fact that the majority of people not grocery shopping online answered that it had to do with some parameter regarding the delivery, concludes that a large portion of the market is not yet addressed. Consequently, the relative advantage might be considered much higher if the deliveries were more effective, reached more people and did not cost as much. This is a barrier that most likely will take longer time to overcome in areas with a lower population density. In those areas the majority of the people from a senior age segment live, which also could be argued to contribute to a slower adoption rate since seniors are not as technology advanced as the generation growing up today.

Another barrier, which has been most frequently discussed regarding online grocery shopping, is the lack of opportunity for inspection. Grocers have addressed this during a period of time leading to the barrier not being as fundamental as earlier. However, the majority who still feel that this is a barrier are in the senior social system.

Many grocers are giving the customers the opportunity to try grocery shopping online without any delivery cost and some are even offering a discount when purchasing food online for the first time. This could make customers less hesitant to try out e-commerce for groceries. As stated in the result, most customers who have tried shopping online are likely to return. This speaks in favour for a growing market for e-commerce in all social systems and possibly in all geographical areas. However, the benefit of grocery shopping online is not as observable as other innovations since groceries are consumption products, which will not be displayed in public after the purchase. The only real possible observable benefit would be the time saved from not having to go to a grocery store and that might not be as obvious to be seen. This could mean that the adoption rate would be slower than the rate for for example e-books where the benefit of having
numerous of books packed into your smartphone was quite observable to individuals carrying around heavy books.

**Conclusions regarding social systems and geographical area:**
These advantages may be argued to affect the families and the young adults living in larger cities the most, and the barriers might at this moment be harder to overcome for seniors as well as other social segments living in rural areas since that would mean that the online grocers would have to offer profitable delivering solutions there. This result is of course generalized since the perceived advantage of an individual within the senior social system who has problems reaching a grocery store might experience a lot more relative advantage than a stay at home mom or dad who have a lot of leisure time. However, generalizing over the segment would make the S-curve flatter in the rural areas than in others.

The age segment, which we conclude will have the steepest s-curve are families living in large cities and cities. Thereafter young adults living in large cities and cities will follow because of their technology maturity. The curve will not be as steep though, since not all young adults feel that they are willing to pay extra for groceries. And finally we believe that the rest of the social systems will have quite similar steepness of curves unless something drastic happens. This is due to the fact that we believe that the barrier of home delivery will take too long of a time to reach the rural areas, meaning that even though the advantages of getting a wider assortment of products (if offered through a central warehouse) could be considered compatible with their needs, they will not consider that enough to find online grocery shopping exceeding offline grocery shopping in relative advantage. Further we believe that in the larger cities there are not much barriers stopping us from entering the steepness of the s-curve for e-commerce. We might even be in the part of the curve where the highest growth is visible. This we believe due to the fact that a lot of individuals from both the family segment and young adult segment are now discussing their experiences with online grocery shopping, which will lead to a higher adoption rate among other individuals of their social system.

**5.4 The Future Area Requirements**
If the online purchases would grow to a majority of the grocery sales the traditional sales area would need to decrease. If a warehouse specific for online sales would be a solution, the room for inventory inside the stores could decrease. Together with a more effective logistics and better grocery deliveries to the stores the space for inventory would not be as important. If home
deliveries on the other hand do not grow as much as predicted and the click and collect solution grows more, the requirements would look different.

The different scenarios might depend on which part of the country we focus on. In the bigger cities the probability of more home delivery solutions is higher because of the population density for instance. The possibilities for grocery actors on this market and the delivery agents, if they are not the same company, can more easily benefit from economies of scale and the demand is most probably higher here because of the population density. Consequently, this would then affect the area requirements more inside the stores. Looking at less populated areas the home delivery solutions might not be as effective for the companies or more expensive for the customers. Further, this could mean that the click and collect offer increases in these areas. The consumer saves time, but can still drive or walk to the store. This would then demand a better space for the inventory as the products order online and the items aiming for the visiting customers should not be mixed together.

Along with the population density and the mobile use, the car use is an interesting parameter to consider. It affects the area requirements because it might affect the type of e-commerce that will be most popular in an area together with general consumer behaviours. Interviewees say that they see a trend of decreased car use in the bigger cities. The information found and presented in the chapter Literature and Theory show that the car ownership increases in general but the car use decreases, most significantly in Stockholm. One could argue that the car use would increase or at least stay on the same levels in the future because of more environmental friendly cars, such as electrical cars, or even self driving cars. This could be true, but as the population grows in bigger cities the environmental aspect might not be the only reason for not using or owning a car. If the cities get more crowded, the lack of space and the number of traffic congestions could increase. This could be in favour of solutions such as car pools in the bigger cities, as the advantages of having your own transport rather than going with public transport can be big.

Furthermore, there are trends affecting the inside of the grocery store as stated in the previous text, these trends will also have an impact on the area requirement. The technical development affecting grocery stores will not directly affect the area required, at least not until the technical development affects the inventory effectiveness and thereby affecting the number of items required in the shelves presented towards the customers. Technical developments might also lead to less and less cashiers needed in the stores since a smartphone might be the only device you need to purchase goods as stated in chapter 4. This would free more space in the stores, which
could lead to for example more experiential activities, coexisting businesses or smaller stores. Most aspect presented in chapter 3 and 4 points to the fact that the larger stores will not be as large in the future, customers want convenience in form of less time wastage however they still want a wide assortment of products. They want information about products but the majority of consumers are used to retrieving information without any help from another person, e.g. through a smartphone. Storekeepers will be able to get much more data about their specific customer base and what needs and desires they have, leading to a better-adapted assortment.

However, the area requirements for grocery stores might be somewhat different depending on if the store is located close to a large city, a city or a rural area. As well as how big the market share of e-commerce for groceries gets. The area of the grocery store is of course dependent on the distance of the catchment area and how many competitors exist in the same area. As stated earlier when building a new store today companies look for locations, which are much closer to the natural flow of people than ever before. They do not want to force people to travel outside of their everyday flow if they can avoid it. This is why more stores are being placed in an area close to or within a city. The size of a store in a rural area might therefore not experience the same rate of change as the size of the stores in a city area. In a city area the stores will most likely get smaller however with a higher number of stores. The existing stores might not necessarily have to change their size instead they can transform it by offering coexisting service accustomed for the customers they have. In the rural areas the size of the stores might stay the same for a longer time period since effective and profitable home delivery will take longer time if the population density is lower as stated earlier. Unless of course the delivery service for groceries evolves to include other items and services which would improve its profitability. Otherwise the market of groceries through e-commerce in the rural areas will most likely mean an increase in click and collect purchases leading to a scenario where the area in the store is needed to be able to store the bags for pickup either through a drive-thru alternative or a pick-up point in the store.

5.5 Limitations

The study can be considered limited by the fact that a majority of the respondents belong to the same grocery company, and therefore could have been affected by the thoughts circulating in the specific company as well as the culture and partiality. On the other hand, this has been taken into account when analysing the data given and been rechecked with reports and other sources.
As the number of respondents to interviews increases, the patterns are more easily discovered and the analysis could thereby be enriched. The number of interviewees consequently limits the research.

In order to gain data from storekeepers, working with a specific market, interviews have been conducted with storekeepers working in different sizes and types of stores. However, the geographical area considered is still limited to cities. Further, the secondary data considered from reports such as Digital Mathandel, has not been possible to confirm. The study is therefore limited by the fact that certain secondary data has been relied on. However, the data has only been included if the source has been considered qualified.
6. Conclusion and Future Research

In the following chapter the results and discussion is combined with the previous research in order to present our conclusions on the research questions. Characteristics identified are relevant for different geographical areas in Sweden. Consequently, the chapter is sectioned into conclusions regarding general changes and future changes in big cities, cities and rural areas. Lastly, thoughts about further research are stated.

6.1 General Changes

In general, the predictions are that the area requirements for the grocery stores will decrease in Sweden. This is for instance because a larger proportion of the grocery sales will move online. In extent to this, grocers will need to attract customers in other ways and transform their value proposition. Collaborating with other businesses, for instance restaurants or family doctors, in order to benefit from coexistence and giving the customers added value could be a solution.

The number of changes and the level of adoption to those changes depend on numerous parameters. These parameters can be linked to consumer behaviour, demand from customers as well as resources from specific market actors. The way a certain store is designed depends on the nearby market and will always do. This means that when something does not work, something else will be tried out. Betting shops has for instance had its natural space adjacent to grocery stores, but as the betting moves more and more online the space will be better suited for something else. Technological changes inside the stores will make the store more efficient, e.g. smoother checkouts.

Depending on the number of changes, the scale of the changes and to which extent e-commerce will be adopted, the area requirements will differ. The population density and the consumer behaviours, as shown in the picture below, influence certain markets.
Today's sales area will most likely take less space since the assortments will be reduced and the stores will be more efficient. However, if an area is used today for a certain store, new alternatives will be tried out in the extra surface. If new surfaces are to be used, we see that the general trend shows decreased area requirements. This points to the fact that today's sales area is decreasing and that the area for the store in general might be held more or less the same. Changes will be made in different times depending on where in the country you are. Further conclusions for more specific geographic areas are presented below.

6.2 Larger Cities

In larger cities urbanization is affecting the buying behaviour of the population and will continue to do so in the studied time period. This combined with the trend of using more carpool and less traveling with cars in the inner city suggests that the grocery stores will benefit from a location closer to the paths used on a daily basis by the individuals in that catchment area. This will most likely result in that we will have more stores with smaller areas in general in the larger cities.

The demand of home deliveries together with the higher population density suggest that the online purchases with home deliveries will most likely be more significant in the larger cities. Simultaneously, the simplifying solution for home deliveries, such that there will not be the same requirements for customers to stay in one place during a time window to get the groceries, has to be in place in order for the e-commerce to grow to its full potential.

As the e-commerce increases the need for better solutions from the perspective of the storekeepers has to be in place as well. This could for instance be a central warehouse, which is currently only relevant for the larger cities in Sweden, as it needs to be profitable for the
companies. Such solutions would decrease the sales area in the physical store. The stores already owning a certain area will most probably redesign the store and utilize the trend of coexistence.

Central warehouses, glue locks, smart refrigerators etc. are planned, tested or considered at the moment for big grocery actors on the market. If these are in place and consumers join the trends, it points to the fact that the growth of e-commerce will increase over the following years with quite a steep s-curve in the larger cities within the customer segments of families and young adults.

6.3 Cities

The urbanization is not only affecting the largest cities in Sweden, but also the smaller ones. The density will not be as significant as in the larger cities though. Depending on the adoption of e-commerce this will decide the version of online shopping most popular in these areas. If the efficiency and profitability gets big enough for home deliveries this could be an alternative for the cities in general. Nevertheless, the most probable scenario that we see is that the click and collect- version of online purchasing, e.g. drive thrus, will grow most significantly in these areas. Consequently, the storage section of the store will need to increase in size. Depending on the level of adoption to this solution the design of the store needs to adapt to the area requirements for the inventory.

Cities and suburban municipalities are to a wider extent populated with families, which today seem to increase the demand of e-commerce in these areas due to the time saving and convenience advantages, which seem most compatible with the family segment. However, in order for e-commerce to reach its full potential in these areas the home-delivery has to be offered to the customers more likely to adopt online grocery shopping if an effective home delivery solution were in place.

6.4 Rural Areas

The greatest proportion of the Swedish inhabitants over 65 years live in rural areas. The urbanization in the country affects the rural areas, as they get more depopulated. This trend could make it difficult for the companies offering home deliveries to succeed in these areas. The consumer maturity regarding the e-commerce on the other hand is rather widespread however not as applicable to the seniors who are less technologically advanced than the individuals from the younger age segments. The car use in these areas does not show any signs of decreasing. This could then mean that the click and collect- version, as for the cities, gets better opportunities
however the rate of adoption is most likely slower in these areas due to lower perceived relative advantage. The change in area requirements would then be the same as for the cities however not as near in the future.

The changes and the adoption of the e-commerce is as stated more likely to take longer time in these areas compared to the cities and larger cities. Consequently, the rural areas will not show the highest rate of change and the new solutions will have been tested in the bigger cities beforehand. For instance, warehouses will not be considered in these areas until the delivery solution can get more profitable. However, if considered the adoption rate would most likely increase since consumers in these areas prioritize a wider range of assortment as known from other e-commerce industries.

6.5 Future Research

Within the study, specific barriers to e-commerce within the grocery industry have been found. Some of the barriers have certain solutions connected to them internationally or considered solutions within Swedish companies. A suggestion for further research is therefore to look further into these solutions and their feasibility in the Swedish market.

Moreover, the study concerns the change in area requirements for physical grocery stores and thus do not focus on solely online grocery actors. This type of companies could therefore be of interest regarding further research as the future of their businesses could affect the physical grocery stores as well as the requirements for their specific industry.

As the research deals with future scenarios the forecasted numbers and ideas could be updated further on and thus might give varying results depending on the level of adoption for instance. Future research could for that reason handle the same type of investigations, only with updated data.

6.6 Sustainability

Sustainability is one parameter mentioned regarding the future branding of stores, including grocery stores. The technological developments inside the stores will not only optimize the area and the flows of goods for instance, but also influence customers’ decision when choosing where to purchase their food. The efficiency behind cooling equipment and use of electricity might be displayed in stores and affect the customers’ perception of the chain.
During one interview, the question regarding which parameters that affect the consumer behaviour was raised. For instance, the temperature in the store was mentioned. Solutions for an automated system optimizing this parameter are currently discussed and researched. This improvement does not only affect the consumer spending in a positive way for stores, but also the environmental aspect, which in the longer run should improve the sustainability.

If central warehouses could be built in certain areas of the Swedish market one can argue for the improved sustainability for groceries. Instead of displaying the products in stores the vegetables and fruits could be kept secured in a more optimal way. Further, if more customers tend to utilize the home delivery the car use could decrease and therefore affect the environment in a desired direction.

6.6 Answering the Research Question

SQ1: Which trends and external factors will affect how we consume groceries?

- In short the e-commerce in general will have a great impact of the way people consume groceries in the future and more specifically the type of e-commerce; click and collect or home deliveries.
- The convenience trend is another trend changing what people buy in stores, for instance more prepared meals, as well as how far people are willing to travel outside their natural flow during a day. This might also increase the number of stores in the areas with high population density. This trend is therefore considered highly influenced by the urbanisation trend.
- The trend of coexistence might impact the way groceries are bought in the future, together with other types of items. This trend has a clear correlation with the adoption of the technological development, which can affect the industry further on.

SQ2: Which bigger changes, affecting the area in stores, will be done in the current grocery stores?

- A reduction of the store area can be seen since for instance betting shops are removed from the pre-store area.
- The trend of coexistence is affecting the area in stores, since other types of values are added to the traditional stores, such as restaurants and post offices.
- Depending on the type of e-commerce adopted in a certain area, the area for storage can be affected. The need to expand or in some cases change the division between stores and storage grows.

**RQ: How will the area requirements change for the traditional grocery stores?**

The trends affecting the changes in the grocery industry has been divided into three geographical areas in Sweden.

- **Larger Cities:**
  - Smaller stores
  - More stores

- **Cities:**
  - Greater proportion of storage
  - Smaller sales area

- **Rural Areas:**
  - No significant change in the area requirements
7. References


8. Appendix

Interview questions:

In store:
• How is the division between store and storage?
  o Do you think this will change?
• Do you have any processes in store that takes a lot of time for the staff?
• Do you think the staffing will change?
  o If yes, when?
• Do you have any bigger changes planned for the store?
• What do you see regarding digitalization of the store?
  o Do you have anything planned?
• How do you thing the grocery stores will look 5, 10 and 15 years from now?

E-commerce:
• What is your view of e-commerce in general?
• How do you handle e-commerce in the store?
  o Do you offer deliveries?
• What benefits do you see with e-commerce?
• What disadvantages do you see today and beyond?
• What costs have been incurred through e-commerce?
• Have you encountered any specific issues during the implementation of e-commerce?
• How large is the total turnover of e-commerce for you and compared to the traditional sales?
• How has the traditional sales been affected after e-commerce was implemented?
• What margins do you have on products sold in store vs. online?
• What do you think is the purpose of e-commerce?
• What do you see as competition?
  o Greatest competition for traditional stores?
  o Greatest competition for e-commerce?
  o Threats internationally?

General:
• Have you identified any trends affecting the grocery industry?
• Which parameters will affect the area in store?