Multi-channel Grocery Retail

Retail brand equity and its influence on online channel consumer adoption in the Czech market

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Aalborg University
IM Department of Business and Management

Prepared by: Lubomira Zavodnikova
Supervisor: Andreea Ioana Bujac
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Abstract

The sales in online grocery retail have been gradually increasing. The interest towards the online grocery has been no longer demonstrated only by consumers in developed markets, but smaller markets such Czech Republic are eagerly following the trend too. While pure online retailers have been among the first to offer groceries online, leading brick and mortar retailers have started entering online channels too. There are more pure online retailers on Czech market compared to brick and click, and it is expected that other brick and mortar retailers will extend to online too. With the increasing competition, the retailer brand is gaining an importance.

Brick and mortar retailers' extension to online channels have been related in literature to that of product brand extensions. Online stores are understood as a brand extension of an offline store. Previous studies have acknowledged that brand equity significantly influence brand extension strategies. The main objective of this study was therefore to examine how retailer brand equity built in the offline channel influences the retailer online channel adoption. The study focuses on traditional grocery retailers who have been transforming or will eventually in the future turn into multichannel retailers through the establishment of their own online stores.

This study is based on Retail brand equity conceptualization which foundation lies in well recognized Aaker (1991) Brand equity conceptualization, composed of retailer awareness, association, quality and loyalty. Due to the complex nature of retailer associations, as noted in the research, this study attempted to extend this dimension to suit the research context. Retail brand equity was expected to transfer in retailer online trust, extension attitude and purchase intention. In line with brand extension theory, non-brand related factors were included into the examination, too. Namely, two most frequently cited factors of consumer innovation adoption, perceived complexity and perceived benefits were included in the study. The study has also aimed to recognize the differences between online grocery shoppers and non-shoppers. Pure online retailers available on the market and consumer related perceptions were also evaluated.

Data were collected through an online survey. A convenience sampling and snowball technique were employed as a method for data collection and 120 questionnaires were subjected to data analysis. The data were analysed using multiple statistical analyses including regression analyses, correlation analyses, T-tests, ANOVA etc. The study evidenced the significant importance of brand related factors in consumer evaluation of the online extensions. Retailer equity dimensions proved their direct and indirect influence on consumer acceptance. Retailer loyalty proved to be a direct and strong predictor of online purchase intentions, together with value associations. Retailer quality strongly predicted online trust towards the retailer, which together with extension attitude too predicted purchase intentions. Perceived complexity was a strong determinant of extension attitude. Consumers with online grocery experience evaluated multichannel extension more positively and demonstrated also higher online purchase intentions compared to non-shoppers. However, they have also demonstrated higher purchase intentions towards pure online retailers. The perceived benefits of online grocery shopping were less acknowledged by non-shoppers, while perceived complexities were significantly higher compared to shoppers. Close social influence also varied among two segments. With the increasing level of awareness, measured by recognition, the purchase intentions towards pure play retailers have been increasing. Implication for brick-and mortar retailers have been drawn to help them guide their online extension strategy accordingly.

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List of acronyms

ANOVA	Analysis of variance
AT	Attitude
ASS	Associations
BE	Brand equity
BEN	Benefits
COM	Complexity
FMCG	Fast moving consumer goods
H	Hypothesis
IM	Image associations
INT	Intention
KMO	Kaiser-Mayer-Olkin measure
M	Mean
N	Number of cases
NS	Not significant
OGE	Online grocery experience
LOY	Loyalty
RBE	Retail brand equity
RQ	Research questions
SD	Standard deviations
SIG	Significance
VAL	Value associations
QUAL	Quality

1 Introduction

The Introduction section presents the research background, explains the evolution of the multichannel movement phenomenon in retail and grocery retail industry. This section further highlights the relative research gap in the literature, formulates problem & research questions, and briefly explains the content of the study. Definitions that are often used throughout the study are also explained.

1.1 Research Background

In the past, retail experience was solely *brick and mortar* and the closest retailer store would be the most usual spot for shopping. The shopping experience was *uni-channel*, where customers had no other opportunity to get in contact with a retailer except visiting the store or sending a letter with concerns or appraisals. This was followed by *catalogue retailing*, while more than a decade ago, internet allowed *online retailing* to become eminent. At its beginning, the launch and progress of online shopping was rather inert due to speed and security concerns. However, over the course of the past several years, online retail has become a mainstream retail channel. The introduction of broadband, 3G, Wi-Fi accompanied by the rapid expansion of the mobile Internet-connected devices and social media have altered the entire way the consumers shop. Nowadays, consumers have *multiple channels* at hand for any retail transaction (Deshpande et al., 2011).

According to a report by the Nielsen Global Connected Commerce (January 2017), consumers´ acceptance of the online channels has been constantly increasing, which in turn led to some markets experiencing online sales recording a remarkable double-digit share. For instance, online retail sales in China that is the world's greatest e-commerce market, represented almost 13% of the total retail spending in 2015, whereas Great Britain represented an average of 12.5% to October 2016. In the U.S., e-commerce captured above 8% of total retail sales (Nielsen Global Connected Commerce, 2017). According to American Marketing Association research, which analysed the online and offline in-store shopping behaviour of 7 million shoppers in 14 different countries around the world, phenomenal shifts in shopping will remain to effect retailers and brands, urging *change* in both *brick and mortar and online channels* (Highley, 2015).

One of the largest segments in global retail is grocery. In fact, it is three times the size of the global apparel industry and it is valued at €3 trillion (Desceras, 2015). *Grocery retail* has gone through several changes in the past years, nevertheless the most significant impact caused the *adoption of the online channel.* People around the world are increasingly turning to the Internet for their groceries (Desceras, 2015). Multichannel movement is thus becoming one of the biggest game-changers in the industry (Highley, 2015). To June 2016, sales of groceries through online channels reached $48 billion (Kantar Worldpanel) and according to American Marketing Association research the global online grocery market is expected to reach €80 billion by 2018 (Desceras, 2015).

As in other industries, grocery e-commerce growth is not equal around the world. The world's largest market is digitally well developed South Korea, with e-commerce value share 16.6%, whilst the biggest growth in 2016 reached China, to a value share of 4.2%. The leading European market and the third-largest adopter of online grocery shopping is UK with 6.9% global market

value. France has reached 5.3% while bigger markets such as Spain (1.7%), and Germany (1.2%) follow behind. In USA, only 1.4% of groceries are bought online.

The fact that e-commerce is projected to play an increasingly important role in grocery retail was recognized by traditional retail chains that continue making huge investments into developing their online channels, as well as by new online grocery projects emerging around the globe. Established retail chains pushed innovation and operational excellence, while *pure players* have been piloting and developing their business models with many holding a strong business propositions (Desceras, 2015). They are often led by young, smart, clever entrepreneurs and are challenging *traditional brick and mortar* retailers, not excluding some supermarket giants (Sanderson, 2010).

Traditional brick and mortar retail formats pursuing new online channels are believed to have a competitive advantage such as brand strength, stable customer base, trust, experience or financial resources (Verhagen & van Dolen, 2009). These were probably the reasons that led many traditional brick and mortar grocers to enter e-commerce, as particularly visible in UK market, where Britain's leading supermarket chain Tesco has watched one rival after another, threatening their e-grocery businesses (The Business Week, 2000). However, a longer history and stronger brand image of a well-known *brick and click retailers* in a battle with pure online retailers does not always guarantee the success (Gulati & Garino, 2000). Big players such Amazon are challenging the industry, not excluding local successful pure players at some markets.

Given the current multichannel movement phenomenon, it is essential to understand how consumers decide whether they will adopt the online channels for grocery shopping and what may be the reasons to shop at certain retailer. This understanding is mostly pertinent to the increasingly *competitive online grocery retail market*, where an abundant number of brick and mortars, as well as pure play retailers compete among themselves, within a relatively stable market (Rohm et al., 2004). Additionally, multichannel retail managers are being concerned about what factors explain online purchasing towards their online channels (Frasquet et al., 2015).

To provide the understanding and possible guidelines, researchers have been struggling with wide spread questions recognizing significant factors that influences consumers' adoption of online channels (Lim and Ting, 2012). While past studies have studied consumers' online shopping intentions, they have typically focused on examining the single online channel of retailing only, concentrating on system level and consumer acceptance of technology for the purposes of online shopping (Doong et al., 2011). Well-known Technology acceptance model (Davis, 1989) was often used to explain online shopping adoption. Limited research has, however, inspected consumers' online shopping behaviours at brick and click retailers, who conduct their business in multiple channels (Lai, 2006). Researchers to a great degree have observed specific online influential factors, such as website features (which is clearly essential), however, they have ignored the effects of consumers' offline exposure (Jin et al., 2010). Consumers oftentimes visit the online channel with varying degrees of prior experience with offline channel (Jin et al.,2010).

As such, to this day, research on multichannel retailing remains sparse and fragmented (Badrinarayanan et al. 2012). Consumers have only recently begun to fully experience the multichannel shopping environments (Dholakia et al., 2010) and consequently, multichannel shopping has just begun to capture the attention of consumer researchers (e.g., Konus et al., 2008). So far, only few researchers have examined certain offline attributes influencing consumers' purchase intentions at online channels of brick and click retailers. For instance, Hahn & Kim (2008) studied the influence of offline trust towards a retailer as well as perceived Internet confidence. Similarly, Kuan & Bock (2007) examined the influence of offline trust together with social influence. Besides trust or risk factors, other authors have looked at the influence of offline store perception aspects (Verhagen & van Dolen, 2009; Warrington et al., 2007) or customer-relationship with a brand (Frasquet et al., 2015). Most of the studies were related to apparel industry (e.g. Hahn & Kim, 2008; Kim & Park, 2005; Jones et al., 2010; Kwon & Lennon, 2009), music retail stores (e.g. Verhagen, 2007; Verhagen & van Dolen, 2009), consumer electronics (e.g. Frasquet el. al, 2001; Madlberger, 2006). However, to the best of authors knowledge, limited research was done concerning groceries (e.g. Kuan & Bock, 2007; Rafiq & Fulford, 2005). As product features can be very diverse depending on the industry, researchers referring to earlier findings must be carefull (Doong et al.., 2011), which suggests that more research is needed to examine multichannel grocery retailing.

All in all, different studies suggested the influence of certain offline aspects on online shopping intentions. However, as Lai (2006) suggest, more research is also needed to understand the extent to which retailer equity built in the physical channel can be leveraged in the online channel. Furthermore, Rafiq & Fulford (2005) proposed that an avenue for further research is a study examining both *retail brand online channel extensions* (e.g. Tesco) and purely online retailers (*non-retailer brand extensions*) in terms of performance. Thus, this study considers these two propositions. That is, will integrate retailer brand equity view to examine retail brand online channel extensions. Furthermore, the study will examine consumer behavioural intentions towards both brick and click retailers (retail brand online channel extensions) and pure Internet retailers (non-retailer brand extensions).

Lastly, many multichannel studies originated in US or UK. Since results of US studies may differ from European results (Warrington et al., 2007) and country of residence may influence online behavioural intentions to a different extent (Frasquet et al., 2015), this study will bring insights related to one particular market. Numerous studies focused on online shopping globally, but many conclude with calls for a closer investigation of online purchase intentions in specific countries (Lim and Ting, 2012).

1.2 Problem Statement and Research Questions

Although a relatively small country, Czech Republic presents an interesting online grocery market. According to Kantar Worldwide (2016), Czech Republic is among other top markets, as measured by the estimated e-commerce share of the FMCG market with 2,1%, surpassing the share values of countries such Spain, Netherland or USA. Online sales of grocery started by traditional brick and mortar retailer Tesco in 2012 and quickly gained popularity among consumers. To this day, consumer rising interest and adoption sparked attention in several pure players who are already competing for the share on the market. As dynamic growth in internet

retailing is one of the notable trends, some leading grocery brick and mortar retailers also announce the future intentions to establish their online channels (Hrdlickova, 2015).

Due to the current trend of multichannel retailing and trend of online grocery shopping that is facing more and more competition arising from both brick and click retailer and pure player retailers, traditional retailers will need to ensure a good understanding of how their equity build in offline channels may be leveraged when operating or extending into online channels. Also, what drives consumers acceptance and what aspects can influence their online shopping intentions.

Thus, this study seeks to investigate ***what are the factors influencing the consumer´s online grocery purchase intention towards multichannel retailers?***

To address the problem statement; the following research questions are formulated:

1. a) To what extend the consumers´ perceptions and attitudes towards the retailer built in the offline channel (as measured by Consumer-based Retail brand equity) influence consumers´ intention to adopt a retailer´s online channel for grocery purchases?

   b) Which other non-brand related factors may influence the consumer intention to adopt a retailer´s online channel for grocery purchases?

2. a) How does consumer prior online grocery experience differentiate among consumers and their attitudes and perceptions towards online grocery shopping?

   b) What is the level of pure online retailers' awareness and purchase intention on the market?

The RQ1a will focus on examining how do consumers perceive and feel about the retailer based on their prior offline experience. The research question will be answered by use of the concept of consumer based retailer brand equity. The research question will examine the relationships between consumer based retailer brand equity dimensions, specifically retailer associations, quality perceptions and attitudinal loyalty and the consumer perceptions towards the retailer online channel, as measured by online trust and attitude towards the extension. Furthermore, the study will examine whether any of the retailer equity dimension can directly explain consumer intention to adopt a retailer online channel.

The RQ1b will investigate what other non-brand related factors may be relevant to consider, when predicting consumer multichannel attitude and purchase intentions. Following the brand extension theory, consumer related factors are considered. Specifically, the two most important factors determining innovation adoption, *perceived complexity* and *perceived benefits*. First, their direct effect on attitude extension and purchase intention will be reviewed. Afterwards, both brand equity factors will be concluded with non-brand related factors to explain their effect, as per conceptual model.

The RQ2a will differentiate between two segments of consumers, those with prior online grocery experience and those without. Several analyses will be performed to test how these two segments differ in terms of demographic, pure player awareness, purchase intentions towards multichannel extensions and intensions towards pure online retailers. Furthermore, differences between perceived complexities, perceived benefits and social influence will be drawn.

The RQ2b will evaluate the level of consumers´ pure play assisted awareness. This research question will also find out, whether consumer demographics influence their level of awareness and whether consumers with various levels of pure players awareness demonstrate different likelihood to accept multichannel or pure play retailers' online channels.

1.3 Project Outline

The thesis is organized as follows. The study begins with reflections on philosophy of science and consequently the methodological approach and methods that guides this study. Reflection methods and techniques employed in the study is also provided. These are found in *Chapter 2*. The theoretical background and literature review are represented in *Chapter 3*. This chapter starts with the debate concerning multichannel movement phenomenon in grocery industry, in *Section 3.1*. It will discuss the relevance of brick and mortar retailers establishing and extending to online channels, thus pursuing multichannel strategy, along with the discussion on the stance of pure online grocery retailers in the online environment. *Section 3.2* will then introduce the Retail brand equity concept, which bases are found in Brand equity research. It discourses the idea of Retail brand equity playing a significant role in online extension success. *Section 3.3* then gathers relevant insights from (online) grocery, brand extension and multichannel literature to build a conceptual model for particular research context and selected market. Retail brand equity conceptual model, will be integrated into a model examining consumer perception and attitudes towards the retailer online extension, along with non-brand related factors as guided by theory of brand extension. The theoretical review will result in a conceptual model which will be depicted in *Chapter 4*, along with proposed hypotheses. *Chapter 5* brings a brief introduction on contextual setting, providing insights related to grocery offline and (grocery) online retailing, with consumer trends and online competitive background in Czech Republic. *Chapter 6,* is devoted to data analyses. *Section 6.1* first offers a comprehensive overview and thorough explanation of analyses used and assumption that have been considered for particular analyses. Preliminary analyses are conducted before embarking on analyses related to the research questions, which are found in *Section 6.4* followed by *Section 6.5.* Results are discussed in *Chapter 7.* Lastly *Chapter 8* provides a managerial implication for grocery retailers, takes a critical reflection on research limitations and provides suggestions for future research.

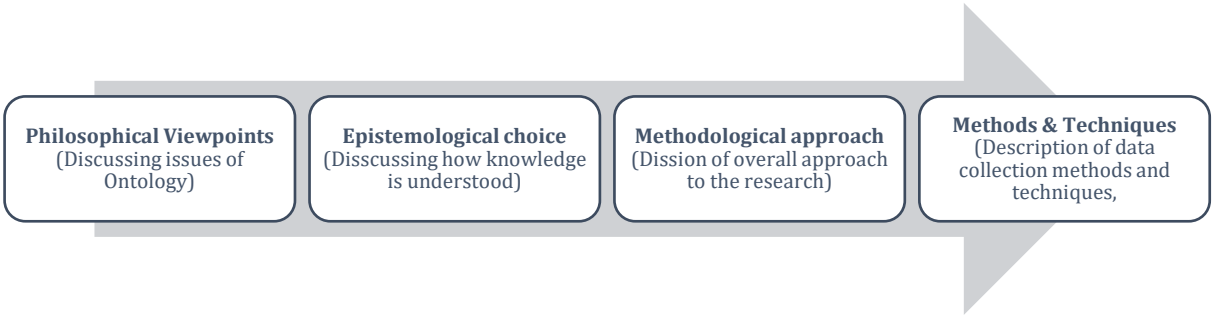
1.4 Definitions

Multichannel retailing	A state when retailer is using more than one channel for offering products and services. Various channels (e.g. online, kiosks, catalogues etc.) are used by the retailers in additional to the store based formats (Madaan, 2009).
Brick and mortar	Term for organisations and businesses that possess traditional physical stores only (rather than virtual or online). Consumers can drive to and enter the stores physically to see, touch, and purchase merchandise (Rouse, 2005).
Brick and click	Term for organisations and business that sells products and services on the Internet as well as from physical locations (Rouse, 2005). Often also referred click-and-mortar (Honda, & Martin, 2002)
Pure player	An online business which was built from scratch, without linking to formerly existing business in the same line (Ball & Beauvallet, 2002). Those are the retailers without physical stores, only online ordering and delivery, and possibly one or more warehouses (Hays et al., 2005).

2 Methodology

It is commonly agreed by social science researchers that various world views that researchers embrace infer diverse foundations for knowledge about the social world. In this light, social science research is usually value-ladened and the selection of methods, data and tools are impacted by these values and assumptions (Kuada, 2010). When the researchers are studying certain phenomenon, they need to consider the common understanding of the phenomenon under examination, questions that are suitable to ask, how the approach to answering the questions to the research questions should be structured and how the conclusions should be interpreted (Kuhn, 1970 in Kuada, 2010). As noted by Kuada (2010), this is what can be called paradigm. which is often defined by most scholars in terms of sets of assumptions – i.e. ontological, epistemological, methodological assumptions and assumptions about human nature. As such, to provide an understanding for the phenomenon under investigation, the process in this study followed four levels, as depicted in the *Figure 1*.

Figure 1 Structure & Levels of discussion of Methodology



Source: Kuada (2010)

Considering the research objective of this study, the research has started with thoughts on the *Ontology*, followed by *Epistemological consideration* that have resulted to *Methodological approach*. Based on methodological approach, appropriate *Methods & Techniques* were adopted. The following sections provide and understanding and discussion related to these four levels of methodology for the present study.

2.1 Ontology Assumptions

Ontological assumptions quest into the formulation of research questions and influence the way research is conducted (Bryman & Bell, 2015). Ontology is a term, that describes the researcher's beliefs about the nature of reality and try to examine the questions such ´What is the truth´, ´What exists´, ´How can the things be sorted out´ (Killam, 2013). The central question is whether the social entities are seen by researcher as objective entities that have a reality external to individuals (objectivism), or whether they are social constructions developed from the perception and actions of individuals (constructivism) (Bryman & Bell, 2015). This difference may be referred to also as *realism/nominalism* perspective (Kuada, 2010).

In this study, the ontological assumptions lie on objectivism/realism. In this way, this study perceives organizations, or retailers as tangible objects, with standardised operations for getting

things done. They have their missions, statements, values, regulations and these features vary from retailer to retailer. These retailers have their realities external to individuals. Individuals then choose particular behaviour towards the retailers. According to the objectivist view, culture and subculture may be viewed as sources of broadly shared values and customs that may affect individuals' decisions. Cultures and subculture may limit individuals, as they internalize certain beliefs system and values (Bryman & Bell, 2015).

Having in mind the goal of this research, which is the investigation of consumers´ intentions to purchase groceries online, the consumer purchases will thus depend on the individuals´ decisions, beliefs and value systems. Thinking of the e-commerce context, where it is generally known by retailers that not all individuals engages in online shopping, however, it would be a retailer decision whether they want to propose ´additional reality´ to the individuals and if, ´How they will deal with the matters´. Thus, retailers create a reality that is external to individual, considering their capabilities, resources and potential cultural influence on consumer decisions (Bryman & Bell, 2015). It must be noted, however, that radical categorization should be taken cautiously. The author of this study believes, that online consumers do have the power to influence the performance and actions of a retailer or provide cues for future directions once the extensions are launched. Yet, they are not strictly perceived as constructors of completely ´new reality´.

2.2 Epistemological Reflections

The subject of epistemology is to answer the question what can be viewed as acceptable knowledge, the ´truth´, in a discipline. The central issue is whether the social world can be studied based on the same principles and procedures (Bryman & Bell, 2015). Thus, epistemology raises the question whether researcher of this study, being external observer, may discover the truth about a certain social world to which she is a stranger (*positivism*), or whether the social world can be only understood by individuals involved in the particular context under investigation (*anti-positivism*) (Kuada, 2010).

The author of this study seeks to find the ´truth´ to the research problem applying the *positivist approach*, thus believing that it is possible to conduct an objective research as an external observer. The study aims to look at regularities and relationships between various elements, trying to foresee what will happen in the social world. The author, applies existing theories leads her to hypotheses that provide *a priori* explanations for the social issues under investigation. These propositions she may then test, and see how they are in line with earlier theories and findings (Kuada, 2010).

Specifically, the author seeks to explain and predict what factors may influence consumer intentions to purchase groceries online from grocery retailers with offline presence expanding into online environments. To look at the issue, the author chose to look at the problem mainly from the branding perspective due to increasingly competitive environment. On the way to seek the objective ´truth´ for the particular problem, the author first made herself aware of earlier knowledge available in the area, by conducting a literature review. Throughout the research, brand extension theory provided a ground for understanding the phenomenon of consumer extensions acceptance. This study is in line with several brand extension studies applying such a positivist approach. After critically evaluating the potential criteria for context, brand equity

factors along with other consumer related factors were further examined to find regularities and relationships between single predictors and consumer online purchase intentions.

From a positivist perspective, the goal of the research was to generate laws in which organizations function. Such generation of the relationships between elements may allow managers to become better at predicting and controlling their environments. The attempt was to provide an understanding of significant factors influencing consumers´ decision, by which the certain actions may be taken by retailers, to secure their successful extensions. (Johnson & Duberley, 2000).

2.3 Methodological Approach

With the positivist epistemological stance, empirical analysis and 'objective' forms of knowledge are of preference by researchers. Researchers applying an objectivist approach are likely to use large data sets to focus on facts and search for causality and fundamental laws. This study therefore applies the *nomothetic* approach and employs the survey technique to find the ´truth´ (Kuada, 2010). This is in line with most of the research employing the brand extension theory that have served as a guideline for this research. The massive amount of such research is concerned with development, extension and validation of models, antecedents and consequences of brand extension evaluation. With noteworthy exceptions, the empirical methods used in brand extension studies depend on experimental approaches, to recognize the main effects, moderators, mediators and control variables in the process of brand extension evaluation (Czellar, 2003). As such, the existing theories formed the development of conceptual model and hypotheses to understand the phenomenon. This approach may be also referred as *hypothetical-deductive* method (Kuada, 2010). These hypotheses are then tested by use of various statistical techniques to confirm or falsify the theories.

2.4 Methods & Techniques

Defining the research problem and objectives of the research, as well as considering the paradigmatic position of this study, the basis for the research were formed. The author then decided on the research design, the fourth level as per *Figure 1.* Different aspects were planned such as type of data sources, data collection approaches, data collection instrument and data collection method and sampling. Once the data were collected, they were processed and analysed. Note that techniques and methods associated with data analyses, are presented in *Chapter 6.*

2.4.1 Secondary Sources and Data Collection

Since learning that online grocery shopping is becoming more and more competitive, the author of this work aimed to focus on the understanding of the consumer multichannel acceptance from brand perspective. Secondary research served as a baseline and provided information that helped to design a unique primary research. Relevant literature for this study was retrieved through the Aalborg University Library website and in-depth analysis of the sources was conducted. Besides the available databases with high quality journal and peer reviewed articles, relevant literature was also accessed through Google Books search to some extent.

Secondary research – Theoretical consideration & Literature review

Before the problem statement was defined, the author reviewed the current literature concerning multichannel retailing with brand perspective focus. The review revealed that the multichannel retail is a rather under researched area. The first identified researched papers that have been dealing with brands´ offline attitudes transference to online were found after 2000, yet, most of the research was conducted over the past decade. Earlier works have looked at certain offline aspects of retailer brand and their transference to online (*Figure 2*), hitherto to the best of author knowledge, none of the earlier studies examined Retail brand equity concept as such Hence, the research gap was relatively effortlessly identified.

To reach the goal of this study, the author had to break down the research in the following areas:

1) Review the relevant literature to gain an understanding of the Retail brand equity concept, that foundations are found in Brand equity
2) Review the relevant literature/theory that can explain consumers´ multichannel acceptance. That is, to find a link between Retail brand equity and online adoption.
3) Consider the specific nature of grocery retail context

First, the literature review has focused on the understanding of the Retail brand equity concept. The author has learnt that Aakers´ (1991) brand equity conceptualizations is most commonly used in the research, and so was often cited within this study too. To get an understanding of RBE, particularly the very recent work of Rashmi et al. (2016) was useful, where authors synthesised the empirical evidence on operationalisation of Retailer brand equity (RBE) and reviewed 160 Brand equity related published studies. The work of Rashmi et al. (2016) served as the main information point to access relevant Retail brand equity articles. *Second*, as many studies relate multichannel retailing to (product/service) brand extension strategies, brand extension literature was reviewed *to link* the Retail brand equity to online environment. That is, to understand the relationships between the brand built in offline channel and consumer acceptance of a new channel. *Third*, reviewing the brand extension literature, the author has learnt that several non-brand related factors may also explain consumer multichannel acceptance. Thus, when examining especially non-brand related factors (besides RBE), the author has conducted a specific research focusing on online grocery retail.

As the above suggests, the phenomenon of multichannel retail is very complex, unlike studying only offline or online environments as separate areas. Due to such complex nature, this study thus synthesizes the knowledge from few areas to provide a very specific understanding of the research problem. Moreover, it concentrates on providing insights that are specific to the industry. The following *Figure 2* presents the main sources of knowledge according to the themes, theoretical concepts and topic that have been utilized to create the understanding of the research problem.

Figure 2 The Thematic Literature Review - Sources of knowledge in the area

Offline environment	Retail brand equity	Arnett et al. (2003), Pappu & Quester (2006a), Pappu & Quester (2006b), Buil et al. (2008), Jinfeng & Zhilong (2009), Allaway et al. (2011), Das et al. (2012), Das (2014), Das et al. (2015), Rashmi et al. (2016)
Link between Offline & Online	Multichannel retail (Retail brand perspective, offline to online transference)	Balabanis (2001), Chen & He (2003), Rafiq & Fulford (2005), Kim & Park (2005), Lai (2006), Madlberger (2006), Verhagen (2007), Warrington et al. (2007), Kuan & Bock (2009), Hahn & Kim (2008), Kim & Jones (2009), Verhagen & van Dolen (2009), Kwon & Lennon (2009), Kwon & Lennon (2009b), Jones et al. (2010), Jin et al. (2010), Doon et al. (2010), Badrinarayanan et al. (2012), Bock et al. (2012), Yang et al. (2013), Frasquet et al. (2015), Melis et al. (2015), Chiou et al. (2017), Chu et al. (2017),
	Brand extension/Retail brand extensions	Aaker (1990), Keller & Aaker (1992), Pitta et al. (1995), Aaker (1996), Hem & Iversen (2003), Czellar (2003), Reast (2005), Volckner & Sattler (2006), Ahn & Park (2006), Volckner et al. (2010), Wang & Li (2012), Dwivedi & Merilees (2013), Wang et al. (2017), Srivastava et al. (2013), Turhan (2014),
Online & Industry specific	Online grocery shopping	Morganovsky & Cude (2000), Childers (2001), Raijas & Tuunainn (2001), Verhoef & Langerak (2001), Raijas (2002), Hansen et al. (2004), Hansen (2005), Rasmus & Nielsen (2005), Hansen (2006), Hansen (2008), Hui & Wan (2009), Cho et al. (2010), Chu et al. (2010), Alamelu et al. (2015), Mortimer et al. (2016)

Secondary research - Contextual setting

Secondary research has also brought industry information, which do not directly provide information to the problem, but offer valuable insights regarding the contextual background on the research issue, allowing to design a better research tool (Kolb, 2008). To get an understanding of the current situation and trends within the Online Grocery sector on the market, secondary research data were obtained from third party sources such marketing or market research firm, statistical publication or PR reports (e.g. Kantar Worldpanel, GfK, KPMG, Euromonitor). Furthermore, the retailer online websites were reviewed.

2.4.2 Primary Data Collection

For primary data collection, quantitative research using survey approach was selected. A cross-sectional survey design was applied in this research, like other brand extension studies (Dwivedi & Merrilees, 2013). This means that data collection was run at a single point of time, with the sample strained from a specified population (Nicholas, 2008). Self-administered online questionnaire served as the data collection instrument. Online data collection was considered for this research appropriate as consumers´ online behaviour was the attention of this study and

the Internet is the most operative way to reach a population of online users. Online questionnaires are often used in research as for their practicality in data collection, ease of data tabulation, and capacity to reach an extensive population of users (Bhattacherjee, 2002). The purpose of targeting only consumers with the Internet access allowed to gain a specific understanding of the propensity of these consumers to shop for groceries online (Hui & Wan, 2009). The advantage of using the online survey was seen in its speedy method of facilitating and gathering the information from a country in which the author of this thesis is not located (Kuada, 2010).

2.4.3 Questionnaire Sampling & Distribution

This study uses a non-probability sampling method, specifically convenience sampling and snowball technique. The advantage of this method was seen in its fast launch and ability to collect data in a timely manner and without expenses. Such sampling also tends to have a high response rate in a relatively short time and is considered as least complicated sampling procedure (Daniel, 2012). Limitation of this method are delineated in *Section 2.5.*

The author has collected the responses via own personal and professional contacts. The participants were then asked to identify other respondents suitable for the research. Among social media platforms, mainly Facebook was used for data collection. The survey too was spread at Facebook public groups related to questionnaire data collection. The members of these groups, usually university students, present their surveys online and respond to the surveys published by other members. The survey was created using the *Surveyxact* platform, which is Scandinavia´s top tool for creating questionnaire-based surveys. The tool allowed to track the responses in real time, providing overview on questionnaire reach, response and completion rate. After the responses were gathered, they were easily exported into an Excel file. The survey was launched in June 2017and data collection lasted for 2 weeks.

2.4.4 Questionnaire Development

The questionnaire (See Appendix) for this study was designed based on the conceptual framework elaborated from existing literature (*Chapter 3*) in line with the selected research question. Throughout the development of the actual questionnaire, the English version of the questionnaire was tested with two university colleagues from graduate programme regarding single items of the survey, wording of the questions, questionnaire flow and length itself. As the items in the questionnaire were taken from the works of other authors conducted in English, the author then carefully translated developed questionnaire into Czech language. The questionnaire was then proof read and tested by another two native speakers, along with offered suggestions for adjustments concerning language wording and length. Except age, all questions in the questionnaire were closed questions. Respondents were required to answer all question in the survey.

2.4.5 Scale Measurements

The items used to measure dimensions within a model were based on the literature review and have been validated in former studies. *Figure 3* provides an overview of the scale statements used along with names of the sources. Consumers were asked to state the level of their agreement with the statements based on a 5-point Liker scale (from strongly agree to strongly disagree).

Figure 3: Questionnaire items measured in Likert scales

Perceived Associations (ASS)	**Source**
ASS1 Selected retailer offers very good store atmosphere. ASS2 Selected retailer offers very convenient facilities. ASS3 Selected retailer offers very good customer service. ASS4 Selected retailer stores offers very good variety of products. ASS5 Selected retailer offers very good after sales service.	Pappu & Quester (2006a)
ASS6: I like the Selected retailer ASS7: I trust the Selected retailer	Buil et al. (2008)
ASS8: Merchandise at Selected retailer stores are of a very good value for money ASS9: I would consider the merchandise at Selected retailer stores to be a good buy.	Arnett et al. (2003) adapted from Dodd et al. (1991)
Quality (QUAL)	
Q1 Selected retailer offers products of very good quality. Q2 Selected retailer offers products of consistent quality. Q3 Selected retailer offers very reliable products.	Pappu & Quester (2006a)
Loyalty (LOY)	
LOY1 I consider myself to be loyal to selected retailer stores. LOY2 When buying groceries selected retailer stores are my first choice. LOY3 Even when items are available from other retailers, I tend to buy from selected retailer	Pappu & Quester (2006a)
Online trust (TR)	
ONT1. [retailer name] acts in my best interest (i.e., look out for my welfare when I purchase groceries from it) ONT2. [retailer name] keeps its commitments to me (i.e., fulfil money-back guarantees and other sales policies, etc.) ONT3. [retailer name] has the ability to meet most of my needs as a customer (i.e., possess good knowledge about its products and services, etc.)	Kuan & Bock (2007) adapted from Bhattacherjee (2002)
Attitude (AT)	
Online grocery shopping at selected retailer is/would be: AT1: Good idea/Bad idea AT2: Wise/Foolish	Pavlou & Fygeson (2006)
Perceived benefits (BEN)	
BEN1: Shopping groceries online I can shop whenever I want BEN2: Buying groceries online can save me the effort of visiting traditional stores BEN3: Buying groceries online I can avoid hassle BEN4: Buying groceries online I do not have to wait in queue for paying**	Forsythe et al. (2006)
Complexity (COM)	
COM1: Online shopping of groceries is/would be complex because I cannot see and feel the products COM2: Online shopping of groceries is/would be in general very complex COM3: It is/would be hard to find the needed products when shopping groceries via the internet COM4: With online shopping of groceries it is/would be difficult to order products	Hansen (2005)
Behavioural intentions towards online [retailer name] (INT)	
INT1 I am willing to purchase groceries at online [retailer name] in the future INT2 If I were going to purchase groceries online, I would consider using [retailer name]	Dodds et al. (1991)
Behavioural intention toward competitor (CINT)	
CINT1 I am willing to use other online retailer for buying groceries in the future CINT2 If I were going to purchase groceries online, I would consider using another retailer	Dodds et al. (1991)

Source: Author, based on authors presented

The items for Retailer brand equity factors were adopted from well-known, often used and validated scales from Pappu and Quester (2006a). Additionally, retailer associations were enhanced by two items based on Buil et al. (2008) representing organizational associations, and two items representing perceived value based on Arnett et al. (2003). Items measuring trust towards the retailer online channel were adopted from Kuan & Bock (2007) and measured competence (belief in the retailer's ability to fulfil its obligations), benevolence (belief that the retailer will not act opportunistically) and integrity (belief that retailer be honest and will honour its commitments) (Chiu et al., 2001). Attitude items were adopted from Pavlou & Fygeson (2006). Perceived benefits items were taken from Forsythe et al. (2006), focusing on the aspect of convenience and comfort; while items measuring perceived complexity were adapted from Hansen (2004). Finally, items for behavioural intentions towards online channel extension of traditional retail and online pure player were taken from Dodds et al. (1991).

As author have used validated measures used in retail and grocery retail research, significant adjustments were unnecessary. Only the wording of one item measuring comfort (BEN4) was specifically changed. That is, originally item ´Buying groceries online I do not have to wait to be served´ was changed into ´Buying groceries online I do not have to wait in queue for paying´ with believe that consumers are no longer served in hypermarkets, supermarkets and discounter stores directly, and this variable in its original form would be rather suitable for instance in clothing stores or specialized stores setting.

2.4.6 Questionnaire Description

The questionnaire commenced with a brief introduction and the purpose of the study. The questionnaire informed respondents about the estimated time needed to complete the survey, as well as about the respondents' anonymity. Condition for the participation of the survey were highlighted and as the questionnaire uses the term grocery, consumers´ were also presented with categories covered in the research along with product examples.

Section A aimed to investigate the perceptions and attitudes consumer hold towards the grocery retailers with offline presence. This section asked respondents to select one of the grocery retailer from the provided list at which they have performed one of their last purchases and with which they are familiar with. After selecting the retailer, respondents were asked to assess the retailer on the dimensions of Retail brand equity. The author in this way followed the procedure of most multichannel and brand extension studies (e.g. Das et al., 2015; Kim & Jones, 2009; Frasquet et al., 2015; Zentes et.al, 2008).

A list of grocery retailers was provided to respondents, as the recommendation of Chen & Hen (2003) was considered. To allow the generalization of the study, it was advisable not to choose only one retailer for the study because, for instance, if a retailer would believe to score high on brand association by one respondent, typically it would be expected to be high by other respondents too (Chen & Hen, 2003; Gil-Saura et al., 2012). Retailers selected for the study were top grocery stores in terms of familiarity and performance (Das et al., 2012; Jinfeng & Zhilong, 2009), thus it was assumed that respondents had experience with the retailers and their responses would be able to provide reliable and valid responses to the questionnaire (Buil et al., 2013).

Unlike some researchers, who did not provide respondents with any list of retailers to choose from (e.g. Jin et al., 2010; Badrinayaranan et al., 2012) and let the respondents to select the retailer freely, this study controls the scope of the survey, providing a certain reference frame (as e.g. Jones et al., 2010; Chen & He, 2003). This way it was possible to limit to certain extend the self-selection biases. Especially in terms of grocery it was considered as an important step, to avoid the consumer selection of any specialised retailers (selling for instance very particular nutritious products, that are not available in traditional supermarkets, hypermarkets or discounter stores). Thus, selected retailers for the study were supposed to be homogeneous in terms of the merchandises specified as a scope of the study (Das et al., 2015).

Furthermore, as stated earlier, respondents were asked to select a retailer in which they have performed one of their last purchases, which is different to some studies. Most of the earlier studies have asked the respondents to select a favourite retailer from the provided list or the memory. However, considering Jones et al. (2010) criticism, who pointed out that such approach may cause the data to be positively skewed, reducing the generalizability, with the chosen approached it was believed to minimize this effect. Lastly, complementary information related to the time required to reach the selected retailer store was introduced.

Section B was related to online shopping at the retailer that respondents have selected. Specifically, three dimensions were measured, trust towards the online channel of the retailer, attitudes towards the online channel and behavioural intentions. If a selected retailer did not have an online grocery channel option yet, a hypothetical scenario of retailer launching its online operation was chosen as stimulus (Dwivedi & Merrilees, 2013). Such a scenario in which consumers are aware of both the parent brand (in this study selected retailer) and the extension-category (online channel) is referred to as a "baseline scenario" and, is considered the "cleanest test" of a brand-extension concept per se (Keller, 2003, p. 598).

Section C measured consumer awareness of the available pure play online grocery retailers together with behavioural intentions to use these retailers for online grocery shopping. Several active pure online players were presented to the consumers, where they have been asked to select those retailers that they have heard of. Note, that such awareness is often termed as assisted awareness (Aaker, 1992) or recognitions (Aaker, 1996) and can be very important to new or niche brands (Aaker, 1996). Furthermore, respondents were also allowed to name a retailer that was not present and that they are aware of. Major players on the market, based on contextual background (*Section 5.3*) insights were presented.

Section D related to non-brand related factors and measured consumers´ general perceptions regarding online grocery shopping, perceived benefits and complexity of online shopping, as well as the normative beliefs (social influence). General online shopping experience and online grocery shopping experience were also examined at this place. *Section E*, finally collected demographic information for the analyses, as well as to verify whether the sample was a representative sample of the average online population, which would influence the generalizability of the results (Chen & He, 2003).

2.5 Reflections on Applied Methods & Techniques

Although *convenience sampling* is one of the most often approaches used in research and very often used in business studies to gain pilot primary data concerning specific problems (Dudovskyi, 2016), there are limitations to consider. Availability samplings cannot be considered well representative of the population (Daniel, 2012). Easily available respondents in the population tend to be overrepresented in the sample, while less reachable individuals tend to be underrepresented. Respondents who participate in Internet surveys are neither representative of all Internet users, nor are they representative of all individuals in the larger population of Internet users and non-Internet users. In general, convenience sampling tends to underestimate the variability in the population (Daniel, 2012). Furthermore, considering that this study employed an online survey, there are three major causes bias in online survey to consider, namely noncoverage bias, nonresponse bias and sample bias (Best et al., 2001; Couper, 2000). These affects the representativeness of the sample collected.

First, *non-coverage bias* is related with the concern that not everyone in the target population is in the sample frame population. In terms of the online survey of this study, this issue is associated with the question of whether all the members of the target population are visitors of the Facebook which served as a main distribution place of the survey. Recent reports of Focus Marketing and Social research agency (2016) indicates, that Facebook remains the dominant and social media platform in Czech Republic, mainly used by people aged 18-44, yet, with 42% of the adult population being registered. Furthermore, it has both the highest number of users and the highest frequency of visits of their users. According to statistics (Huskova, 2016), the number of users signed to Facebook per month is 4,5 million Czechs, which means 56% of total internet population. From those, approximately 3,4 million are daily users (76%). Based on these statistics it may be assumed that the distribution of survey had a relatively high rate of coverage. Besides, to increase the sample coverage, acquaintance on the social site were encouraged to share the link via email, skype or other social media to those who are could not be reached on Facebook.

Secondly, *non-response bias* was examined with the method of early and late respondents' comparisons, employed similarly as Wang & Li (2012). As presented in Wang & Li study, this method is based on the two following reasons (Armstrong & Overton, 1977): first, it is presumed that participants who replied to the survey later or needed more prodding to answer are more like non-respondents; the second cause can be understood through the concept of sequential waves of a questionnaire, which refers to the response caused by a stimulus, such as follow-up messages for input. Therefore, the early and late respondents (each N=60) were compared on demographic variables, including gender, age, employment status, household size and settlement, using independent-samples t-test. The results indicated that there were no statistically significant differences in terms of gender (p=0,829), age (p=0,948), status (p=0,886) and household size (p=0,122) between these two data sets. The only significant difference was in terms of settlement (p=0,041), which author of this study associate with the fact that snowball technique was applied in the research and authors´ first respondents contacts originated from metropolitan area. A closer look at frequency distribution confirmed the author expectations, as almost half of the early respondents were residents of metropolitan city, less towns and villages, while late respondents were rather residents of cities and towns. Based on the independent sample T-test and considering snowball technique employed for survey distribution, it may be assumed that non-response bias for two datasets was not a serious concern.

Third, considering the *sample bias*, data collection method produced a sample with relatively reasonable characteristics (see *Section 6.2*). Considering the aim of the study, as grocery shopping is particularly activity performed by women, the overrepresented proportion of women is not perceived as serious problem, as well as smaller proportion of respondents from villages, as most of the current retailers are especially concentrated in metropolitan area and cities above 100 000 inhabitants. As major limitation may be considered the unrepresentativeness of consumers above 35 and relatively low average age, 31. The proportion of respondents with online shopping experience is very realistic, mirroring the data of the Mediaresearch for Association of E-commerce (APEK) according to which only 3% of active Czech internet users have not conducted any purchase online yet (Euractiv, 2014). Similarly, the proportion of respondents with online grocery shopping is also reasonable, considering the statistics in *Section 5.3* and taking in account the fact that many one third of respondents originated from metropolitan city. As a whole, the respondents were considered representative for the purpose of this study, with emphasis on main limitation. Yet, given the previous discussion, it should be noted that the generalizability of the results best applies to grocery consumers who showed the characteristics of the sample and to those who are disposed to reply to a distributed invitation to take part in a similar survey (Wang et al., 2012).

To continue, another aspect of judging the quality of a study is validity, i.e. whether the set of indicators that are supposed to measure the concepts really measure the concepts (Bryman & Bell's, 2015). *Validity* in this research was ensured by applying established concepts from earlier research in brand management and online consumer behaviour. The concepts, proven scales, have been repetitively replicated and validated even cross nationally. Subjective measures were thus avoided, which brings the advantage if compared with measures used heavily in practice, where only minor care is paid to the quality of the measures used (Davis, 1989). This way the study limits the risk of misinformation in addition to providing future business recommendation on not validated measures (Davis, 1989). Furthermore, the usage of validated items helps to increase reliability and the results may be easily compared with previous work in the related area (Van der Heijden et al., 2003). *Reliability* is the second aspect of judging the quality of the research and refers to the consistency of a measure of a concept. Internal reliability, which measures whether the statements that make up a scale are consistent, was measured with well-known Cronbach Alpha coefficient, ensuring that only reliable measures are used in the data analysis (Bryman & Bell's, 2015).

Although author have designed a unique model for the study, as other researchers, she also sought to provide a sort of degree of generalizability of the results. To reach a certain extent of generalizability, the study seek to obtain enough variability in the data collected. Author have made attempts to design a survey in such way, as was noted in *Section 2.4.6* Recall that respondents were asked to select a retailer where they have conducted a purchase recently and one which they do know well. Respondents have varied in their choice of retailer, ensuring sufficient proportions for significance level analyses. Respondents have selected the retailers as following: retailer A (15 %), B (14 %), C (2 %), D (14 %), E (40%), F (14%). The variability in terms of related distance to the selected stores was also ensured as respondents did not select principally only the closest retailer. Selected retailers were distant from consumers up to ten minutes (44%), up to 20 minutes (20%) and more than 20 minutes (36%).

3 Theoretical Background and Literature Review

The following chapter start with *Section 3.1* that provides a theoretical consideration for the selected area of a study. It will briefly introduce the trend of multichannel retailing with a focus on the grocery retail sector. This section will explain the concept of ´retailer as a brand´ and will shortly outline its potential role in multichannel retail and retail extension strategies. *Section 3.2* will briefly introduce the concept of Brand equity which served as a foundation for subsequent sections. The main literature review will be presented in *Section 3.3*, *Section 3.4* and *3.5* that formed the development of the conceptual model. Retailer brand equity is discussed in depth considering the grocery retail context and the additional non-brand related factors that may influence consumers´ acceptance of online channel extension are explored.

3.1 Multichannel Retailing

Multichannel retailing is a mixed business model designed to reach a wider consumer base through an integration of brick and mortar, Internet websites and catalogue or mail-order operations (Jones & Kim, 2010). The concept of multichannel today may be used for the purposes of sole distribution, advertising medium or as a new contact perspective (Sonneck & Ott, 2010). European research and consulting firm PAC conducted a survey in May 2015 among European retail companies to discover upcoming trends in the next years. The study found that 94% of companies´ employees assumed that online shopping would become more important as a channel. However, captivatingly a vast 73% also believed that the physical outlets will be significant, suggesting that in the multichannel environment the bricks and mortar store continue to be extremely imperative (Allen, 2015).

To adapt to this situation, many traditional companies have started to operate both channels (Arce-Urizza et al., 2016). It is presumed that in the future, online and offline retailing will be used interchangeably, and a multichannel integrated strategy will be a necessity for the retailers (Arce-Urizza et al., 2016). Multichannel provides consumers with widespread choices of diverse outlets, store formats and channels, which serves to different actual consumers´ needs, each brings different benefits, both may be used in parallel or in succession (Sonneck & Ott, 2010).

Shopping at online channels considerably decreases search costs, allows easy access to product and price information and enables product comparison. Consumers do not need to travel to the stores, carry the products and are not restricted on shopping hours. There is a greater accessibility, convenience and time saving. On the other hand, in physical channels consumers can physically examine the products, they can experience interpersonal communication or instant gratification. Consumers must not face shipping and handling costs (Grewal et al., 2004). Some consumers may prefer physical stores as the main shopping channel and use the online channel as a supplementary option, while others may trail the reverse pattern (Chu et al., 2010).

By adopting multichannel retailing, traditional brick and mortar retailers may relish certain benefits (Hyde, 2001 in Weitz, 2010): 1) the online channel springs the opportunity to reach new markets, escalating the market beyond their physical locations 2) skills and assets of the retailer may be used to grow revenues and profits, 3) an online channel overcomes some limitations of the traditional formats, such as shopping from home 24/7, 4) retailers can gain additional valuable insights into the customers' shopping behaviour 5) a multichannel builds

"share of wallet" and customer loyalty. Multichannel endeavours may also be the strategy for differentiation (Neslin & Venkatesh, 2006)

3.1.1 Grocery Industry & Multichannel Retailing

Grocery retail industry has experienced a major flux over the past years. There has been an increase in promotions and retailers´ launch of private labels, as well as the growth of discounters that has put massive pressure on traditional retailers and significantly increased retail competition both within and between retail formats (Ailawadi and Keller, 2004). Furthermore, multichannel retailing is growing its presence in the grocery industry too (Highley, 2015b). Grocery industry is one of the less exciting rather routine, yet important and pervasive industries in the world. The industry is a massive, fragmented and extremely competitive (Delaney-Klinger et al., 2003).

When it comes to the online grocery channel, the courageous pure players initially penetrated it, while traditional brick and mortar retailers have not hurried, as they did not originally perceive the necessity to offer online ordering and delivery service (Hays et al., 2005). During the Internet madness of 1998-2000, an abundant number of pure play grocers emerged, promising consumers the benefits of lower or equal prices on the internet compared to existing bricks and mortar stores, while enjoying the convenience of shopping from home and escaping the crowds at the stores. The most recognized companies were based in U.S such Webvan, Home Grocer or PeaPod who believed that selling groceries online was an innovative way of doing business with big potential. Regrettably, there have been many collapses of these high-profile online grocers back at that time, due to the gap between theory and practical application. In contrast, there are presently numerous examples of grocery retailers that seem to be making effective use of the online channel and who view online channels rather as additional sales channels (Delaney-Klinger et al., 2003).

Traditional brick and mortar retailers were slower to launch their online channels, as groceries are said to be one of the most problematic items to trade for ecommerce. This is because the number of frequent grocery customers is huge, and shopping baskets frequently comprises of many objects. Moreover, unlike selling digital products that are easily accessible worldwide, groceries are rather local. The significant feature is their low value-to-weight ratio and shelf time limits of perishables. Also, online grocery retailing is demanding in terms of delivery systems and delivery equipment. Yet, there is a vast potential for e-grocery, as they present the biggest category in retailing and the purchasing patterns are rather balanced (Raijas, 2002).

3.1.2 Multichannel Retailers vs Pure Online Retailers

The perceived success of some pure online retailers caused brick and mortar retailers to reassess their strategy regarding e-commerce (Hays et al., 2005). With its increasing popularity, grocery retailers are thus no longer facing a competition only on traditional channels but also in online channels (competition between pure online retailers and/or bricks and clicks), while retail margins continue to be low compared to other sectors (Ailawadi and Harlam, 2004).

Pure players present a challenge for brick and click retailers, as they are often setting lower prices that multichannel retailers can barely compete with due to their obligations of costly infrastructures, employees and complex processes (Trenz, 2015). Their advantage mainly lies in lower cost associated with several retail locations, such as rent, parking, and high property

taxes. As the inventory is in fewer locations, pure players can effectively manage their inventory, experience less spoilage of goods and to ensure faster delivery. Furthermore, they are keen on applying innovative targeted marketing and personalized promotions (Hays et al., 2005).

Nevertheless, multichannel retailers, in contrast can benefit from the offline presence, that allows to strengthen the customer relationship (Frasquet et.al, 2015). They can leverage their infrastructures and exploit the incomparable opportunities to differentiate themselves (Trenz, 2015). They can capitalize on their assets such as *established brand names,* large customer base or locations. Furthermore, consumers *trust* the traditional retailers they have known for long, and enjoy shopping at places where they feel confident about the *quality* and correct *prices* (Hays et al., 2005).

3.1.3 The Importance of seeing the ´Retailer as a Brand´

Since a great share of most grocery retailers' revenue and profit originates from selling manufacturer brands, which are also oftentimes on the shelves of competitors (regardless offline/online) building a retailer´s own strong brand is a particularly challenging problem, nonetheless one with vast potential rewards (Ailawadi and Keller, 2004).

A ´retailer as a brand´ can be understood as a group of the retailer's outlets which convey a unique name, symbol, logo or combination thereof (Tanase, 2011). Retailers as brands are different compared to products brands due to their more multi-sensory nature (Ailawadi and Keller, 2004). Retail brands encompass intangible or symbolic identifications of the organization's identity, its reputation and inheritance or imagery (Mitchell et al., 2012). In grocery retailing, we generally refer to a specific store (e.g. Tesco, Carrefour); however, it may be easier to relate it to several non-food sectors (e.g. IKEA, Zara etc.) where the products sold are fully brands of that particular store only (Burt & Davies, 2010). The concept ´retailer as a brand´ is an important intangible asset, allowing retailers to distinguish themselves from the competitors in the consumers' minds (Weindel, 2016).

Along the differentiation, an existing retail brand strengthens brand awareness. simplifies the purchasing process, reduces perceived purchasing risk and exert halo effects. Besides representing functional benefits, strong retail brands can also serve as symbolic devices, allowing consumers to project a certain self-image to themselves and others (Tanase, 2011). Furthermore, strong brands provide an opportunity to be used as an informational cue for the value they perceive or for *brand extensions into new online channels* (Weindel, 2016).

3.1.4 Online Channel Extensions of Retail Brand

Many authors devoting the attention into multichannel retailing (e.g. Rafiq & Fulford, 2005; Warrington et al., 2007; Kwon & Lennon, 2009; Lai, 2006; Badrinarayanan et al., 2012) relate brick and mortar retailers' extension to online channels to that of product brand extensions, believing that both share comparable characteristics and implications (Park, 2009). Brand extension refers to the ''use of established brand names to enter new product categories or classes'' (Keller & Aaker, 1992, p. 35). Thus, online stores can be understood as a brand extension of an offline store, where the retailer brand (e.g. Tesco in UK) is taken to the new online channel (e.g. Tesco Direct and Tesco.com) (Daves & Nenycz-Thiel, 2014).

Brand extension theory assumes that if consumers have positive associations with the parent brand in the memory, then these positive associations are likely to enable the formations of positive attitudes towards the extension (Panda, 2004). The attitudes towards the extension lead to concrete consumer behaviour in the market with regard to intention, choice and repeat purchase (Czellar, 2003). Brand extensions have been the source of strategic growth for many companies (Aaker, 1991) and with the extensive acceptance of the Internet and electronic commerce, they have become increasingly a standard strategy (Yang et al., 2013).

By capitalizing on the company's most valued assets, brand equity that has been formed for the existing brand name, may be applied and serve as a growth strategy for product brand extensions (Keller & Aaker, 1992; Tauber, 1988). The companies with high level of brand equity therefore have the competitive advantage with the opportunity for successful extension (Lassar et al., 1995, Volckner & Sattler, 2006). The majority of brick and click retailers use the same retail brand name in both channels and therefore the channel extensions may profit from the consumers´ favourable associations establish offline (Park, 2009).

Findings from Kwon & Lennon´s (2009) study proved that the concept of multichannel retailing as brand extension is conceivable. According to their study, well-known retailers with established operations in offline channels doubtlessly benefit of the halo effect of their existing favourable offline brand images when launching online. Consumers credit established retailers with higher credibility in comparison to new Internet pure players.

The study of Ragiq and Fulford (2005) supported the brand equity view that customers who are loyal towards a given retailer brand and trust the retailer are more probably to accept brand extensions because of name awareness, perceived quality, and other brand associations (Aaker, 1992). Their results confirmed that two UK grocers, Tesco and Sainsbury's were leaders both in online[1] and offline markets, and confirmed offline loyalty transference to online channel extension. In contrast, fewer consumers were aware about the existence of online channels of the remaining, less popular supermarkets.

Similarly, Jones et al. (2010) proposed that a consumer's level of patronage to a retailer's physical store could possibly be a decent indication of the probability that the consumer would be shopping also at the retailer's online channel. Indeed, off-line patronage appeared as most significant predictor of the intension to shop online. Similarly, Lai (2006) based on brand extension literature, assumed that physical store name recognition will positively impact the consumers' perception of the brick and click store. Her results show that physical store reputation is the dominant factor, at the early stage when building trust and forming risk perceptions.

Besides the above-mentioned studies, other authors have examined several other offline variables related to the offline operations of the retailer (e.g. trust, attitudes, satisfaction etc.) and their influence on online channel. The studies provide a good indication of transference effect from offline to online. Interestingly, to the best of author knowledge, none of the authors examined Retail brand equity conceptualization to explain consumer behaviour in multichannel environment. That is, Retail brand equity has been conceptualized and measured within offline

[1] coupled with the retention indices of 92 per cent (Tesco) and 76 per cent (Sainsbury's)

setting, but its transference to online, as such has been not scrutinized yet. Therefore, the next section will examine the Retail brand equity concept as known from offline setting and later propose its transference path to the online.

3.2 Retail Brand Equity (RBE)

The concept of Retail brand equity followed the practice of manufacturers and has attracted the attention of several marketing researchers (e.g. Takahashi, 2014; Gil-Saura et al., 2013; Musekiwa et al., 2013, Hartman & Spiro, 2005; Ailawadi & Keller, 2004). These researchers mostly relied on earlier Brand equity conceptualization when explaining RBE and therefore, this section will firstly start with providing some insight in the theory of brand equity.

3.2.1 Retail Brand Equity Background

The term Brand equity can be dated back to the late 1980's; and since then many academics (e.g. Aaker, 1991, Aaker and Keller, 1990; Keller, 1993, 2003, Ailawadi et al., 2003; Yoo & Donthu, 2001) devoted their attention to the conceptualization of the term, the development of appropriate measurements, and to Brand equity management (Baalbaki, 2012). The various attempts have led to numerous conflicting view-points on the dimensions and measurement of brand equity, its influencing factors or the perspectives from which it should be studied (Ailawadi et al., 2003).

To this day, Brand equity has been studied commonly from two perspectives, the *financial view* (estimates the value of a brand more exactly for accounting purposes or for merger, acquisition or divestiture purposes) and the *customer view* (Keller, 1993). As Keller & Lehmann (2006, p. 745) describes, when looking at brand equity from the customer's point of view, brand equity is a *"part of the attraction to/or repulsion from/a particular product from a particular company generated by the "non-objective" part of the product offering, for instance not generated by the product attributes*". This advocates that a brand can gradually along with advertising, usage experience, and other activities and stimuli grow chains of attachments and associations that go beyond the objective product (Keller & Lehmann, 2006). These two perspectives are not mutually exclusive but in fact are of complementary nature (Linhoff, 2011). As this study focuses on the understanding of consumer behaviour, it may be obvious that the customer perspective, also called *Consumer-based brand equity* will be applied within this work (Keller, 2002).

There have been generally two well established consumer based theoretical models of Brand equity, that of Aaker (1991) and Keller (1993). The literature review suggests that several authors tried to conceptualize and validate scales for brand equity based on Aaker conceptualization (e.g. Yoo et al., 2000; Yoo and Donthu, 2001; Washburn and Plank, 2002). Some were even validated cross nationally (Yoo & Donthu, 2001; Buil et al., 2008) and later transferred to the retailer equity evaluation (e.g. Pappu & Quester, 2006a; Arnett et al., 2003). To the best of author knowledge, the measurements for Keller´s conceptualizations are rather sparse and not so straight forward.

Similar founding confirms Park (2009), according to who, while numerous studies have offered empirical understanding of the dimensions in Aaker's brand equity model, limited numbers of empirical research which explore the relationships between the dimensions of Keller's model exists. Even less studies have been according to Park conducted in the service industries.

As the aim of the present study is to examine brand equity transference from offline to online environment, this study follows the academic researches that have used primarily Aaker´s conceptualization. Aakers´ conceptualization, as suggested, grants and allows to use well-established and validated scales, which was a critical factor that led to this decision. This is not to say that the author of this study regards Keller conceptualization as less valuable, however, the purpose is to investigate consequences of retail brand equity rather than compared the effectiveness of the two conceptualizations. Furthermore, to the best of author knowledge, this is a first study to investigate Retail brand equity transference as such.

Aaker (1991) has approached the concept of brand equity principally from a managerial and corporate strategy perspective, with a consumer behaviour foundation (Keller, 2002). Consumer view is gaining the importance with increasing competition, increasing operating costs or flattening demand in many markets and help marketers to gain an in-depth understanding of consumer behaviour (Keller, 1993). The Aaker´s conceptualization is depicted on the *Figure 4.*

Figure 4: Aaker´s Brand Equity conceptualization

Source: Aaker (2009)

Brand equity has been defined as *"a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm*

and/or to that firm's customers" (Aaker, 1991, p.15) These assets and liabilities are different from context to context, but Aaker believes they can be generally grouped into 5 dimensions *(Figure 4*): *brand awareness, brand associations, perceived quality, brand loyalty* and *other proprietary assets*[2] such as trademarks, patents etc. To review further the RBE concept, these dimensions will be therefore discussed in the following sections.

3.2.2 Retail Brand Equity & Dimensionality

Similarly, to Aaker´s brand equity definition, Pappu & Quester (2006a, p.319) conceptualise retailer equity as *"the value associated by the consumer with the name of a retailer, as reflected in the dimensions of retailer awareness, retailer associations, retailer perceived quality and retailer loyalty"*. The concept of retail brand equity emerges from a set of consumers' perceptions and feelings that consumers connect with a certain retailer, from a set of ongoing observations, experience and/or consumer memory (Troiville & Cliquet, 2016). It involves *"a "shortcut" in the minds of consumers that recalls from memory the most salient positive elements of satisfaction with past shopping experiences and goods purchased, which in turn influences future patronage and minimizes the potential influence of competitor efforts"* (Allaway et al., 2011, p.191 based on Ailawadi and Keller, 2004). It occurs when retailer's own brand is acknowledged as one to which consumers respond more favourably than to those offered by competing retailers (Ahlert et al., 2010) and comes because of a supermarket chain's total efforts devoted to building a brand over time, including the daily implementation of the marketing message through service, product, price, and promotion which are experienced in the stores by consumers (Allaway et al., 2011).

One of the first studies providing a consumer based measure for RBE and empirical evidence was that of Pappu & Quester (2006a) who confirmed, as suggested above, that the structure of retailer equity mirrors that of Aaker´s brand equity (1991). Arnett et al. (2003) have also used Aaker´s dimensions and used technique developing indexes to measure retailer equity. They validated Aaker´s dimension, however, they proposed retailer association to be measured by subdimensions of perceived product quality and perceived value, while measuring service quality on its own. Later, several other authors applied the four dimensions conceptualization, also within the grocery context. For instance, Jinfeng & Zhilong (2009) used four dimensions of RBE conducted research in a number of hypermarkets, Musekiwa et al. (2013) in supermarket setting, or Das (2014) in food stores.

Retailer awareness can be understood as a "consumer's ability to recognise or recall that the retailer is a member of certain retailer category" (Pappu and Quester, 2006a, p. 320). For retailer equity to happen, consumers first need to be aware of a retailer to be able to have perceptions of quality, retailer associations or loyalty towards the retailer (Pappu and Quester, 2006a). According to Aaker (1996), it is an imperative and sporadically underrated component of brand equity, which in fact influences perceptions and attitudes and in some circumstances, it may be even a driver of brand choice and loyalty. *Retailer associations* are ''anything linked to the memory of the retailer'' (2006a, p. 320). They play a key role in cultivating the proposition or emotional association among consumers and are of utmost importance in defining what a brand represents throughout its existence (Ramesh Kumar, 2007). *Retailer perceived quality* signifies

[2] Note, that fifth dimension, other proprietary brand assets, is not related to consumers and is often omitted from consumer brand equity research.

the "perception of the quality of the retailer as well as the (perception of) quality of products (goods or services) offered by retailers" (Pappu and Quester, 2006a, p. 320). Perceived quality refers to customer´s judgement of the overall excellence, esteem, or superiority of a brand compared to another alternative brand (Netemeyer, 2004). Retailer quality is more abstract than any specific attribute and similarly as associations it differs from objective quality (Aaker, 1996; Keller, 1993; Zeithaml, 1988). Lastly, *loyalty* can be defined as "the attachment that a customer has to a brand" (1991, p. 39). Loyal customer base: "represents a barrier to entry, a basis for a price premium, time to respond to competitor innovations, and a bulwark against deleterious price competition" (Aaker, 1996).

After a brief introduction of the concept of Retail brand equity, the following *Section 3.3* will directly examine the Aaker´s dimensions of RBE within grocery retail industry context and review how these dimensions may have a potential influence on retailer online channel extension and consumer adoption.

3.3 Retail Brand Equity Factors and Online Channel Adoption

As suggested earlier, several authors (e.g. Dacin & Smith, 1994; Keller & Aaker, 1992) noted that brand equity plays a significant role in the success of brand extension efforts (Ahn & Park, 2006) and as such, brand equity dimension will be now inspected. Note, that in line with most brand extension studies, retailer offline awareness was not in depth looked into and will not be measured, since empirically, awareness is a precondition for other dimensions of customer-based retail brand equity (Swoboda et al., 2014). The variance in consumers' awareness in previous brand extension research studies proved to be low for the key retailers. The selected traditional retailers for this study are too well-recognized in Czech Republic, which makes a measurement of their awareness redundant.

3.3.1 Retailer Associations

The brand extension literature suggest that extensions are built on the associations of a brand name. Only recognition and quality of a parent brand may not be enough, thus associations provide a point of differentiation and advantage for the extension (Aaker, 1990). Several researchers have confirmed the positive effect of brand associations on brand extension acceptance (e.g. del Rio et al., 2001; Ahn & Park, 2006) and hence the similar effect may be assumed for retailer associations and online channel acceptance.

As noted earlier, retailer associations present anything that a consumer may have in memory associated with the retailer (Pappu and Quester, 2006a). Obviously, associations are very complicated, consisting of multiple ideas, episodes, instances, and facts, connected to each other (Yoo et al., 2000). Furthermore, unlike the other dimensions of equity (awareness, quality and loyalty) that are consistent from retailer to retailer, dimension of associations *need to be accustomed* to match the unique characteristics of the retailer (Arnett et al., 2003).

Pappu and Quester (2006a) were among the first researchers who aimed to conceptualize and offer valid measurements for Retail brand equity. They proposed that retailer associations may be captured by the presence of *retailer image measures*. Within their research, they have proposed 10 variables representing retailer associations, out of which five were validated. As a part of their recognized and often used retailer equity scale, many researchers have thus been

using these five measures to represent associations - *variety of merchandise, atmosphere, facilities, customer service, after service*). Pappu and Quester (2006a) believe that these measurements should be general enough to suit any context and this study thus assumes their suitability for grocery context, too. This is also because assortment seems to be a basic necessity for accomplishing high levels of RBE in the grocery industry (Allaway et al., 2011) and the assortment has proved to have a direct influence on consumers´ online grocery store choice (Melis et al., 2015). Furthermore, physical facilities have been recognized as direct antecedents of RBE in grocery context (e.g. Jinfeng & Zhillong, 2009) as well as service, which was acknowledged as a significant driver of grocery RBE (Allaway et al., 2011; Swoboda et al., 2007, Swoboda et al., 2009, Jinfenf & Zhillong, 2009; Oppewal and Timmermans, 1997). Note, that this study calls this associations ´´*in-store image associations*´´, or shortly ´´*image associations*´´.

Another stream of researchers, commonly use in BE research three other types of associations: organisational associations, value associations and brand personality (e.g. Aaker, 1996; Buil et al., 2008; Pappu et al., 2005). According to Aaker (1996) *organizational associations* can be especially helpful as it can play a significant role by demonstrating that a brand represents more than products and services. These associations may be represented in many forms, however, for the online contexts, especially the aspect of trust & liking (Buil et al., 2008) which were often examined by researchers (e.g. Buil et al., 2008; Pappu & Quester, 2006c) seem to be appropriate to consider. Brands with higher level of trust will have an advantage in brand extension strategies compared to less trusted competitors (Reast, 2005; Laforet, 2008).

The *value associations* appear to be worth to consider too, as merchandise together with price were recognized in literature (e.g. Allaway et al., 2011; Weindel, 2016) as common and especially strong drivers of RBE of grocery retailers, Today's customers are sensitive towards the prices of grocery products and good price is a critical driver in determining where consumers decide to shop for grocery (Deshpande et al., 2015).

Lastly, although brand *personality concept*, which reflects the human characteristics or traits that can be attributed to a brand (Ailawadi & Keller, 2004) is useful for retailers to position and differentiate themselves, this study does not aim to compare the retailers on this measure. This concept is more *retailer specific* (Aaker, 1996) and thus the brand personality for this research is not suitable. Furthermore, considering the grocery context, Aaker´s (1996, p. 113) note is significant ``using personality as a general indicator of brand strength will be a distortion for some brands, particularly those that are positioned with respect to functional advantages and value''.

Studies indicate that brand association or beliefs influence online trust (e.g. Das, 2016; Delgado-Ballester & Hernandez-Espallardo, 2008), attitude towards the extensions (e.g. Kwon & Lennon, 2009; Kwon & Lennon, 2009b, Aaker, 1991) and purchase intentions (e.g. O'Cass and Lim, 2001; Wang & Li, 2012, Delgado-Ballester & Hernandez-Espallardo, 2008). Associations concerning for instance service quality were oftentimes strongly linked with customer trust (e.g. Thaichon & Quach, 2015) suggesting that if the retailer provides a high level of overall service quality, customers would trust this retailer. Transferring these assertions online, consumers would trust that the retailer would not risk the accrued assets in its brand by assigning its name to an online service with mediocre quality (Volckner et al., 2010). Furthermore, service quality offered by the grocery retailer may be associated with consumer behavioural intentions to use its online

channel (Zhu & Semein, 2014). Likewise, brand associations, have a direct and positive effect on the intention to adopt an online retailer (Chen & He, 2003) or on the final purchase decision of the extended service brand (Ahn & Park, 2006). Within a purely online context, retailer associations have proved to have an influence on online trust, purchase intention, repurchase and recommendation (Das, 2016).

3.3.2 Retailer Quality

Perceived quality is a substantial topic in the development and implementation of marketing strategies designed at brand image building and market share growth. Consumers utilize brand quality as a very significant cue to assess the product extensions (Srivastava et al., 2013). As mentioned earlier, the basic principle for brand extensions acceptance is that parent brands that are perceived by consumers as having high quality offer superior power for their extensions compared to brands with low quality (Aaker and Keller, 1990).

Allaway et al. (2011) recognized product quality to be a significant factor for building strong brands of grocery retailers. In fact, according to their study, product quality along with assortment appeared to be more important for consumers than price. As Ailawadi & Keller (2004) note, equity of grocery retailers depends on the manufacturer brands they place on the shelves and thus "they are what they sell". Although, some authors (e.g. Swoboda et al., 2007) would claim that in grocery retailing the customer perceives the assortment as being identical, compared to clothing, this study argues, that with the arrival of discounters and their private labels brands, the merchandise indeed is not so identical. Furthermore, unlike packaged products, a distinction may be observable also in terms of e.g. fresh vegetable, fruit or meat quality. The perceived quality of products may be also a selective criterion, after several international scandals have happened on grocery markets, if taken e.g. the incident of the meat horse contamination scandal in UK, where certain food retailers had to fight to earn back trust from consumers (Hall, 2013). Therefore, it is believed that product quality is of paramount importance. Then, moving to the online environment, Zhu and Semein (2014) refer to Cho (2010) who believe that one of the main challenges for online grocery retailers is it to convince customers that the products they order online are of equivalent quality to what they can get in physical stores, particularly for perishable goods.

The study of Das et al. (2016) found that perceived quality of products influences the propensity to trust the online retailer. Therefore, a retailer that constantly sees customer quality requirements would nurture a trusting relationship with the customers (Das et al., 2016). Furthermore, researchers (Srivastava et al., 2013; Aaker & Keller's, 1990; Patro & Jaiswal, 2003), proved that quality perceptions have an influence in forming attitude towards brand extensions. Moreover, parent brand quality confirmed to be also a main factor in driving consumers' evaluations of service brand extensions (Volckner et al., 2010). The study of Zhu & Semein (2014) also indicate that product quality is a strong predictor of customer behavioural Intentions to adopt an online grocery retailer, which is similar to results of Cho et al. (2010) who examined the online purchase intentions towards perishable products.

3.3.3 Retailer Loyalty

Brand loyalty is partly influenced by the earlier mentioned dimensions, brand awareness, associations, and perceived quality (Hem & Iversen, 2003). As noted by Pappu & Quester (2006b), in most of the consumer based retail brand equity research, loyalty has been conceptualized as an attitudinal measure. That is the consumer tendency to be loyal to a retailer, as proved by the intention to purchase from the retailer as a primary choice. Based on brand extension literature it is expected that when an original brand launches an extension, there is a good probability that if consumers are loyal to the original brand they will try the extended brand, meaning that the loyalty factor will drive trial (Reast, 2005). If consumers are already accustomed to the offline store and frequently take part in its loyalty programmes, it is expected that they will shop at the online channel of their preferred offline store (Daves & Nenycz-Thiel, 2014).

The research of Rafiq & Fulford (2005) in UK grocery market confirmed that knowledge and understanding of offline loyalty can be transferred and applied to the online loyalty context. According to these authors offline loyalty to certain grocery retailer may cause that consumers looking to shop through online channel tend to adopt at the beginning their existing supermarket's online store. Melis et al. (2015) provide strong evidence that consumers are inclined to choose the online store belonging to the same chain as their favourite offline store(s) when they start buying groceries online. On the other hand, Kim & Park (2005) note that the more experience consumers have with online purchasing, the less likely they are to remain exclusive customers. A later research of Daves & Nenycz-Thiel (2014) who analysed three leading retailers (Tesco, Asda, and Sainsbury's) in grocery UK market further confirmed that online shoppers of one retailer have a considerably higher propensity to cross-shop other retailers online, in comparison with their propensity to cross-shop those other retailers in offline channels. The degree of online cross-retailer buying was found to be steadily growing over time. Another research confirming that consumers may not be loyal to one channel is that of Li et al. (2017) who confirmed that if consumers were previously purchasing from competitors' online channels it rises the probabilities that they will adopt and online channel from another company that extends its online channel later than its competitor.

Offline loyalty has been found by researchers to influence the trust towards the online channel of the retailer and confirmed to play a significant role on shopping decision-making processes across offline and online channels, impacting online shopping intentions (Doong et al., 2011). Thus, loyalty positively impacts brand extensions (Hem & Iversen, 2003). Consumers' inclination towards the extension become higher when brand loyalty moves up (Turhan, 2014).

To conclude the *Section 3.3*, retail brand equity as conceptualized by four dimensions may be applied within grocery industry too. Although the measurements for RBE exists and have been validated, discrepancies in measurements among authors were found. Arnett et al. (2003) claimed that retailer associations need to be accustomed per retailer, while author of this study believe they need to be accustomed per specific industry too. Thus, this proposition was considered. The remaining dimensions have been observed in research using rather consistent measurements. This section proved that according to the earlier studies, as in offline environment, RBE may positively influence brand extension acceptance.

3.4 Brand Extension Believes and Attitudes

As suggested in earlier sections, empirical research on brand extensions has been measuring consumer response to brand extensions most frequently by using attitudinal measures (Fishbein & Ajzen, 1975), typically measuring the overall consumer attitude (Hem & Iversen, 2003). Furthermore, trust believes, were considered by researchers as attitudinal beliefs for purchasing (e.g. Pavlou & Fygeson, 2006). Therefore, when considering online channel adoption, customer trust beliefs and attitude towards the retailer online channel have been the focus of many researchers (e.g. Kuan & Bock, 2007; Al-debei et al., 2015; Gefen, 2000; Bock et al., 2012) and too play an important role in this study. The two concepts thus are now elaborated in more depth.

3.4.1 Online Trust

With the rise of e-commerce, many studies investigated online trust and its influence on or intentions to purchase (Frasquet et al., 2015). For the multichannel grocery study contexts, it is important to consider that brand trust comes from existing attitudes and beliefs that consumer have gained from earlier experience with the physical stores. Accordingly, multichannel retail brand trust can be thus defined as the willingness of the customer to trust the retailer both offline and online (Frasquet et al., 2015).

Trust seem to be an important factor in online grocery shopping (Mortimer et al., 2016). Trust toward the retailer can greatly *diminish the risk* (Aaker & Keller, 1990), which often many consumers may fear. Interestingly, the recent study of Mortimer et al. (2016) revealed that even the most frequent and regular online grocery shoppers perceive certain risks associated with online grocery shopping. This is also because, *grocery products* are much more *heterogeneous in quality* compared to other retail sectors, they are often fresh, with limited lifetime span and the sensitive aspect is the part of retailer employees selecting the products. If the products being picked up are not fresh, the customer's trust in the retailer can be hurt significantly (Kivilahti, 2013). The qualitative research of Ramus and Nielsen (2005) found, that consumers are particularly anxious about the selection and handling of perishables like vegetables, eggs and meat products and therefore the shopping baskets of even experienced online grocery shoppers oftentimes are restricted in the range of products they buy.

Research confirms that well-known, familiar brands are more trusted (Lowry et al., 2008). As suggested, trust is significantly impacted by familiarity based on *prior interactions and experiences* with the retailer, and not only by consumers' socialized disposition to trust (Gefen, 2000). This means, that customers can build trust in retailers' online channels prior to interacting with the online websites, based on former interactions with the retailers' offline stores (Bock et al., 2012). Multichannel retailers thus must be attentive to trust beliefs that consumers bring to online channels from their physical stores (Badrinarayanan et al., 2012). Initial interaction and trust formation when it comes to experienced goods such groceries, are thus imperative for retailers (Bock et al., 2012).

Online trust is suggested to have a positive influence on online purchase intention (Kuan & Bock, 2007; Doong et al., 2011, Das et al.; 2016; Frasquet et al., 201). The study of Kuan & Bock (2007) concerning brick and click supermarket retailers confirmed that online trust positively influenced online purchase intention. In fact, online trust accounted for almost 37% of the variance in online purchase intention. The same was confirmed by the study of Badrinarayanan et al. (2012) which was conducted on the US. and the Korean market.

3.4.2 Attitude towards the Extension

As suggested earlier, the attitude towards the extension is critical in the brand-extension evaluation process (Wang et al., 2007). Attitude toward the behaviour refers ´´to the degree to which a person has a favourable or unfavourable evaluation of the behaviour in question" (Ajzen & Madden, 1986 p. 454). Differently said, attitude toward product purchasing is the consumer's assessment of the attractiveness of the product purchasing from an online retailer (Pavlou & Fygeson, 2006). Attitudes can be simply regarded as the sum of all the relevant beliefs that an individual maintains about a product or service (Pitta et al., 1995). Applying the above definitions of the attitude on the context of this study, attitude may be referred to the degree to which a person has a favourable or unfavourable evaluation towards the retailer online channel (Ajzen & Madden, 1986), or as the consumer´s evaluation of the attractiveness of the online channel of the retailer.

Brand extension attitudes have been found to be significantly influenced by brand equity (Dwivedi & Merrilees, 2013). According to research, favourable attitudes are likely to encourage using the online channel of a retailer (Pavlou & Fygeson, 2006). Several studies have indeed confirmed attitude to strongly influence online purchase intentions (e.g. Kim & Park, 2005; Rehman et al., 2013; Chen, 2002; Ha & Stoel, 2009; Lim, 2012; Van der Heiden & Verhagen, 2004; Hasbullah et al., 2016), or even actual purchase behaviour (e.g. Barkhi et al., 2008). Particularly attitude toward online grocery shopping was too found to be an important predictor of consumers´ online grocery purchase intentions (Hansen et al., 2004; Hansen, 2008). Furthermore, the attitude towards the extension that consumers have also leads to preferred choice and repeat purchase (Martinelli et al., 2016; Upamannyu & Mathur, 2013).

To conclude, the response towards multichannel extension can be measured by consumers´ online trust towards the retailer and extension attitude. Research have proved that these two concepts influence then purchase intentions. One must note, that trust in this study is conceptualized as *interpersonal trust*, i.e. trust towards the e-vendor or retailer. Trust in e-commerce studies have often been conceptualized as *institutional trust* (trust towards the website or platform) or *dispositional trust* (general trust towards the others) (McKnight & Chervany, 2001). Similarly, attitudes are conceptualized as attitudes towards the retailer extensions, rather than attitudes towards the online shopping in general. Furthermore, numerous factors influence the attitudes formation. While as discussed, retailer brand may be one of them, the following section will discuss additional relevant factors.

3.5 Non-Brand Related Factors Associated with Online Channel Adoption

Brand extension literature recognizes that a powerful strong parent brand is not the only influential factor leading to brand extension adoption. Brand extension literature further recognize other influential factors, specifically *consumer related factors* (Reast, 2005). Zhou et al. (2007) have conducted an extant literature review and identified nine such types of consumer factors, including *psychological perception, personal traits, normative beliefs, Internet experience, online experience, online shopping experience, shopping orientation, shopping motivation and demographics*.

Clearly, it is not doable to examine all the types of factors in one study and therefore a critical examination of the most relevant factors was performed. Following the suggestion of Zhou et al. (2007), *psychological perceptions*, consumers´ *perceived benefits* (usefulness), of the online grocery shopping was selected as one of the influential variable. As authors note, the perceived benefits of online shopping compared to traditional shopping in brick and mortar stores are indeed one of the powerful forces in the adoption of online grocery shopping. As consumers´ online grocery adoption has been slower to take off, and it is still not accepted as compared to other industries, consumers´ perceived usefulness or benefits of online shopping have been often a subject of many researchers in various markets (e.g. Raijas, 2002; Alamelu & Meena, 2015; Hansen, 2005; Verhoef & Langerak, 2001). Another variable that seems to be relevant to examine is *perceived complexity* (perceive ease of use), as being suggested as one of the top three influential variables on innovation adoptions. To be context specific, these factors were acknowledged also by several researchers examining online grocery adoption (e.g. Verhoef & langerak, 2001; Hansen, 2005). These two factors, will be therefore a part of conceptual model.

Furthermore, like other multichannel studies or e-commerce studies (e.g. Kuan & Bock, 2007; Bock et al., 2012, Hansen et al.,2004; Pavlou & Fygeson, 2006) this work agree that individual beliefs may be influenced by external sources, and thus the aspect of *normative believes*, as such social influence will be examined in respect. This factor seemed to be relevant to consider, mainly due to the character of the grocery shopping, which is particularly an activity often related to entire household and thus social norms may play a significant role (Hansen et al., 2004; Hansen, 2008). Lastly, *demographic characteristics* will be also discussed.

3.5.1 Perceived Benefits

Aaker (1990) in his early article noted that it is particularly vital for brand extension *to add value* if the original product is well established. If prospective customers can articulate a reason why the extensions would be attractive, then the brand is adding value. Turning to online grocery context, same may apply. If consumers perceive that use of online channel would bring them certain benefits, the extension may turn to be attractive.

Consumers in fact wants to feel sure that the innovation offers a relative benefit to them (Raijas, 2002). If consumers believe that a retailer may be useful in boosting their shopping productivity, effectiveness or ability, the attitudes towards using the online channel for purchases are found to be favourable (Childers et al., 2001). As online grocery shopping is inherently different compared to other products or service categories due to perishability, variability and regularity of shopping (Mortimer et al., 2016), not all shoppers attribute the same level of perceived benefits to online shopping (Hansen, 2006).

The literature review reveals that there are particularly certain benefits that consumers associate with online grocery shopping. The qualitative study of Ramus and Nielsen (2005) among British and Danish consumers revealed that convenience or inconvenience are factors that consumers regardless of their degree of experience with online grocery shopping associated with online grocery shopping at most. They have found out that all consumers generally believe that online grocery shopping has particularly two specific benefits. First, related to 24/7 availability and second, related to the benefit of shopping from home and ordering being less stressful than going to the grocery store during rush hours. A major advantage was perceived in avoiding the burden of carrying heavy groceries home from brick and mortar stores.

Similarly, the research of Verhoef and Langerak (2001) in the Netherlands also found that the advantages and disadvantages of physical efforts and time pressure associated with traditional brick and mortar stores positively impacted consumers' perception of online grocery shopping. Another study from UK markets (Rafiq & Fulford, 2015), found that rather than vast product assortment or cost saving, convenience is the most appreciated benefit. Alamelu and Meena (2015) also found that while, consumers shopping in grocery physical store placed the most value on service quality and goods assortment, consumers shopping online were primarily influenced by convenience. Convenience was also most significant determinant in USA studies (e.g. Morganosky & Cude, 2000). Based on the above mentioned, it may be clear that the *utilitarian benefits*, *convenience and comfort*, are particularly important perceived benefits for grocery shopping.

To conclude, specific utilitarian benefits such as convenience have revealed a significant impact on consumers' attitudes towards both, the online retailers (e.g. Al-debei et al., 2015) and multichannel retailers (Maldberger, 2006). Furthermore, researchers (Margherio, 1998; Eastin, 2002; Zhou et al., 2007; Kim et al., 2008) have demonstrated that the perceived benefits of online shopping are one of the key factors influencing adoption decisions (Al-debei et al., 2015). Many empirical studies have in general confirmed the usefulness factor in explaining consumers' intentions (e.g. Davis et al., 1989; Barkhi et al., 2008; Rehman et al., 2013) and intention shift towards online channels (Lu et al., 2011).

3.5.2 Perceived Complexity

The meta-analysis of Tornatzky & Klein (1982) revealed that complexity was among the top three characteristics that influence consumer adoptions of novelties. Complexity can be referred as "the degree to which an innovation is perceived as relatively difficult to understand and use (Rogers & Shoemaker, 1971, p. 154). Perceived complexity thus refers to the extent to which consumers consider online grocery shopping problematic to understand (Verhoef & Langerak, 2001). Complexity is presumed to be negatively connected to adoption and implementation (Tornatzky & Klein, 1982). According to Davis (1989) perceived complexity parallels perceived ease of use relatively closely. According to Davis perceived ease of use is a second major determinant of consumer acceptance of online technology, after perceived usefulness, or perceived benefits in this study.

Complexity concerns a customer's perception regarding how easy it would be to interact with the e-commerce websites. If consumers believe that interaction, search for product information or payment procedures are easy, they would positively asses the online shopping option (Cheema, 2013). The study among Finish grocery consumers revealed that heavy users on online grocery shopping have mostly complaints associated with difficulty to find products and the uncertainty of product quality (Raijas, 2002). Similarly, the earlier study of Raijas and Tuunainen (2001) also found that difficulties in finding products and uncertainty concerning product quality are often perceived as obstacles to online grocery shopping.

McCloskey (2004) confirm that ease of use (complexity) has a direct effect on whether consumer will purchase or not. The research of Verhoef and Langerak (2001) among Dutch households revealed that perceived complexity was associated negatively to the grocery online purchase intention. The research of Hansen (2006) showed that consumers may be hesitant whether to

repeat online grocery buying, or even considering an online grocery buying, if they are confronted with high online complexity.

3.5.3 Social Influence

In real marketplace circumstances, consumers are exposed to a mass of information about the extension through different sources. Their attitudes toward the extension may be easily influenced by among others for instance by press and word-of-mouth (Czellar, 2003). Researchers have also long documented the impact that friends and reference groups have on consumer decision making, and it has been generally accepted that opinions of others may influence consumers' purchasing intent (Lee et al., 2011). Researchers believe that it is essential to include social factors when investigating online shopping behaviours, as social influence demonstrated to have a significant impact on individual's beliefs, attitudes, and behavioural intentions to shop online (Lee et al., 2011).

Interesting note provided Hansen et al. (2004), who stated that especially in grocery shopping, social impact might eventually be of high importance and that online grocery shopping should not just be viewed as a matter of 'subject-channel interaction'. This is because, consumers may have several concerns when deciding whether to engage into an online grocery shopping activity. For instance, consumers think whether the groceries delivered will not be damaged, whether frozen goods will arrive safely or how difficult it will be to return the goods or exchange. Thus, inexperienced consumers may be willing to hear possible opinions from their social contacts. As considerations on whether to use an online channel may involve a risk, consumers may be therefore sensitive to normative influence (Hansen et al., 2004). If consumers learn that their peers regularly purchase from an online store, they may be more willing to involve in the similar behaviour (Barkhi et al., 2008). Verhoef et al. (2007) study confirms this fact, finding that consumers' selection of channels is influenced by the belief that people similar to them use that channel.

While online grocery studies from Denmark and Sweden demonstrate that close social environment may have an impact on behavioural intention to use online channels for grocery purchases (Hansen et al., 2004; Hansen, 2008), the study of Zhou et al. (2007) indicate that the influence of friends, family, and media recommendations may not necessarily always ensure the online purchase intentions.

3.5.4 Demographic Characteristics

Another type of consumer related factors are demographic characteristics which in online shopping research were found to have many times contradicting results and no conclusive evidence of demographic influence was supported. Considering the grocery retail, grocery shopping has been generally an activity mostly performed by women (Goodman, 2016). The study of Raijas (2002) conducted in the greater Helsinki area revealed that as in traditional brick and mortar stores, most of the online grocery customers are women. The online grocery shoppers were found to be younger (Raijas, 2002). In contrast, Alamelu and Meena (2015) or Hansen (2005) found no significant differences in terms of age among online grocery non-shoppers and shoppers. Moreover, Hansen (2005) neither confirmed such in terms of gender.

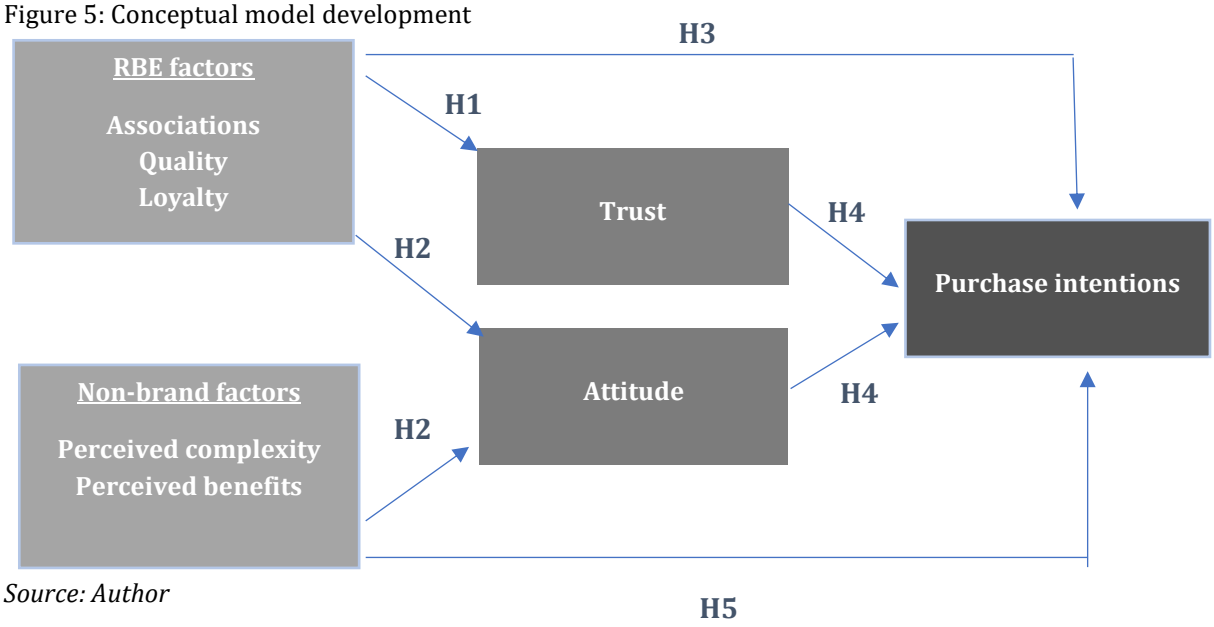
Online grocery shoppers were found to be wealthier, having higher income (Raijas, 2002; Hansen, 2005, Hui & Wan, 2009), while no significant differences were found in terms of education (Alamelu & Meena 2015; Hansen; 2005). Furthermore, Raijas found that households of the online customers have oftentimes more children, which is similar to the results of Alamelu and Meena (2015).

All in all, as suggested earlier, several non-brand related factors could have been selected for this study. However, the author has decided for including mainly the concepts of perceived complexity and perceived benefits in conceptual model, as per RQ1. This is also because a wide-spread research on online shopping behaviour have been examined by Technology acceptance model (Davis, 1989), which in previous research have acknowledged the explanatory power of perceived usefulness and perceived ease of use concepts. These are very similar to the two presently used. Furthermore, the concepts have been highly recognized in innovation adoption literature. The author believes that in the early research, such is this study, these concepts should be examined first, before proceeding to other concepts. Social influence and demographic variables will be examined in regard to RQ2.

4 Conceptual Model and Hypotheses

Based on the literature review on multichannel retailing, retailer brand equity, brand extension and grocery e-commerce, the conceptual model as presented on the *Figure 5* has been developed.

Figure 5: Conceptual model development



Source: Author

The conceptual model served as a foundation for the questionnaire development. In line with brand extension theory, the model assumes that online channel consumer acceptance will be impacted by the original brand strength, as measured by RBE created within the offline channel. It is expected that the higher the consumer based RBE, the consumers would have a higher tendency to adopt an online channel of a retailer for grocery purchase.

The conceptual model considers three dimensions of retailer brand equity, namely retailer associations, quality and retailer loyalty. Recall, that retailer offline awareness was not measured since the variance in consumers' awareness in former studies evidenced low values for the key retailers and empirically, awareness is a precondition for other dimensions. (Swoboda et al., 2014).

Retailer brand equity dimension, are believed to transfer to online trust towards the retailer (H1). They are also assumed to predict the consumer attitude towards the online channel (H2), however, the attitude is believed to be predicted by non-brand related factors, namely consumers' perceived complexity and benefits, too (H2). Retail brand equity dimensions will be tested for a direct influence on purchase intention (H3). Both trust and attitude are believed to have an impact on behavioural intensions towards the retailer (H4). Lastly, non-brand related factors are hypothesized to be a direct predictor of behavioural intentions towards the brick and click retailer (H5).

Based on the relationships within the conceptual model, the following hypotheses have been developed:

H1: The retail brand equity dimensions have an influence on trust towards the retailer online channel
H2: The retail brand equity dimension along with non-brand related factors (perceived benefits & complexity) have an influence on attitudes towards the retailer online channel
H3: The retail brand equity dimensions have a direct influence on online purchase intentions at retailer online channel
H4: Trust and attitude towards the extension have an influence on purchase intentions at retailer online channel
H5: Non-brand related factors (perceived benefits & complexities) have an influence on online purchase intentions

5 Contextual Background

The following chapter briefly presents the empirical setting of this study. First, it explains the grocery retail situation on Czech market and consumer behaviour in offline environments. Later, it will discuss the changes in the retail environment brought by digitalization. Details about online grocery trend are provided, together with discussion related to competition on the market.

5.1 Grocery Retail in the Czech Republic

The retail industry in Central Europe, thus also Czech Republic, has altered dramatically over the last 20 years, and it has become a model of fruitful transformation for emerging markets. Over that period, Central European markets have observed important changes, including trends such as internationalization, market concentration, diversification of business formats and *usage of new technologies* (Machek, 2012). In fact, there is a significant acceptance and usage of information technology among the Czech society, leading to enormous and constant pressure on everyone to accept new forms of communication (Skorepa & Vochozka, 2008).

The explicit conditions after the end of the communist era allowed fast development of a modern retail industry in Central Europe. Czech Republic together with Slovakia, Poland and Hungary represented appealing markets, especially for Western European retail chains. The competition became very high, leading to a strong concentration and intensive price wars. The expansion of modern forms of distribution in Central Europe, such as hypermarkets, supermarkets and discount stores, was extraordinary (Machek, 2012).

Compared to other European countries, especially the *density of grocery retail* in Czech Republic is unusually *high*. The Czechs live in excess of supply and the market is already saturated. Each resident has on average eight different grocery shops in its neighbourhood, but regularly purchase at only three (Špačková, 2016).

Czech households spend most of their spending in hypermarkets (33%), although the *share of discounters has increased* from 15.8% to 19% since 2012. On the other hand, the share of small stores has been decreasing over the last four years to 17.7%. Among the best-known grocery stores are the Albert hypermarket, Globus hypermarket, Kaufland and Tesco Hypermarket, supermarkets Albert, Billa and Tesco supermarkets, discounters Lidl and Penny Market and Coop (Helber, 2017).

Total purchases in discount stores grow at an above average pace in CEE countries, however, in Czech Republic the growth was significantly faster. Discounters are no longer a place only for additional small purchases, but also serve as a place for stock-up missions. Czech consumers spend in discounters the highest share of expenditure among CEE countries also on fresh categories such as baked products, fruits and vegetables and meat products (31%) (GfK, 2016a).

Promotions account for substantial part of household´s grocery purchases and Czech Republic is demonstrating the *highest share across Europe*, when packed food, home and personal care items are considered (GfK, 2015). According to GfK, in 2016, the share of fast-moving goods bought in promotion reached 52 percent, while in Poland it was 23 percent, Austria 30 percent and Germany 16 percent (Helber, 2017). Although consumers appreciate when all the items they want to purchase are found in one store, their purchasing behaviour and decision making is still

influenced by price. Almost 60% of consumers are willing to visit more stores, if lower prices or convenient offers are available elsewhere (2016b).

According to Skála, the director of GfK, consumers are price oriented, however they have also high demand in terms of quality. The grocery chains themselves got into the spiral when the financial crisis broke out on the markets and getting out of it will be very difficult. While older and poorer customers were buying before the crisis, today almost everyone needs discounts. For many people, the promotional price is a regular price they require (Špačková, 2016).

5.2 Digitalization and Online Retail

Digitalization grants diverse chances and challenges in different sectors. In Czech Republic, as anywhere around the world, companies in diverse industry sectors digitalize at a different pace. For certain retail goods categories, e.g. home electronics, the internet is becoming the leading channel, while for furnishing or clothing, the share online sales remains lower (Mc Kinsey, 2017). E-commerce accounted for about 5.5% of the turnover of all Czech retail in 2016 (in monetary value approx. CZK 81 billion per year) and the B2C e-commerce grew by about 15% per year (Spir, 2016).

Internet retailing presented in 2016 one of the fastest growing channels in value terms in Czech Republic. The market saw the surge in computers, tablets and smartphones penetration together with the rapid growth in the coverage of broadband internet and the growing usage of mobile 4G internet. Furthermore, new legislation concerning product refunds and reclaims supported the growth. In the upcoming years, internet retailing is expected to further experience the strongest growth and mobile retailing specifically will become the main topic (Euromonitor, 2017).

Two main drivers support the fast growth of e-commerce: first, online shopping acceptance in the country is *constantly increasing*; second, not only the young generation is showing *high digital literacy*, but also older individuals up to 65-year-old (Mc Kinsey, 2017). In fact, the Czech Republic has the highest share of internet users over 35 years of age in the Central and Eastern European region (62%) and together with Estonia and Hungary, also has the highest share of the oldest users 55 + (18-21%) (Gemius, 2017).

The proportion of Internet users in the last 12 months reached 83% in 2016, which is 1% below the EU28 average, while almost half of the internet users (47%) had bought or ordered goods or services over the internet in this period (8% below EU28 average). The country is experiencing *one of the largest increase* in online purchases (more than 10 percentage points) between 2012 and 2016. Furthermore, the proportion of Individuals using mobile devices to access the Internet on the move has reached already 50% (Eurostat, 2016).

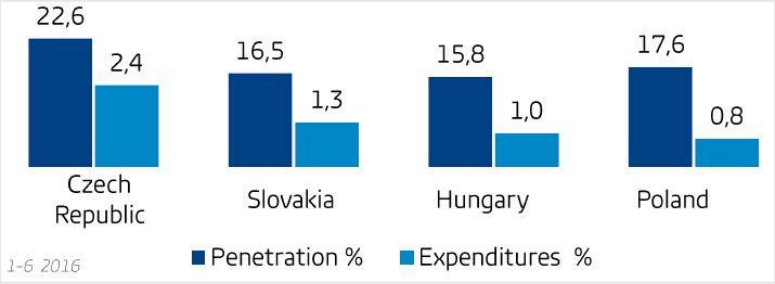
5.3 Online Grocery Retail

The sale of groceries over the Internet was one of the fastest growing categories of goods in 2016. Czech households bought food and non-alcoholic drinks last year for *three billion CZK*, 40% more year-on-year, according to data from GfK (Ctk, 2017) According to a survey conducted by Stem / Mark for Cetelem (Cetelem, 2016), food over the internet has already been ordered by 14 percent of Czechs under the age of 60. However, a quarter of Czechs assume that they could eventually make a purchase over a three-year horizon. According to the research of

KPMG (2016) one fifth of Czechs aged between 18 and 44 have already tried to buy food over the Internet, least interested are then people over 55. The research Stem/Mark for Strategie revealed that those willing to embrace online grocery shopping are primarily citizens of large cities and people with higher education.

Looking not only at food items such as groceries and beverage, non-food items such as home & personal care (FMCG) have been purchased already by more than 20% of households at least once. When compared with Slovakia, Hungary or Poland, Czech Republic is the leader in online FMCG expenditures, as depicted in *Figure 6*. Home & personal care items take on the biggest share of FMCG online shopping baskets (one third), followed by fresh & ambient (18%) and beverages (10%). To compare, a typical brick and mortar shopping basket is dominated by fresh & ambient, followed by beverages, home & personal care (Gfk, 2016c).

Figure 6 Online FMCG shopping experience (households)



Source: GfK, 2016c

The first grocery retail chain that entered an online grocery market was Tesco in 2012, making it the first Central European country (Tesco PLC, 2017). As noted by Špačková (2016), other grocery retail chains have not been that eager in opening their own online stores till now. The discounter, *Lidl* will be perhaps the second grocery retail chain entering online grocery, with intentions to start online in 2017. Lidl has been building a logistics centre for some time already. Another hypermarket chain, *Globus*, has extended the purchase of wine to its own e-shop and expanded its distribution to households as well, thereby verifying the possibility of further online sales of durable food. *Ahold* and *Kaufland* do think about online channels in the long term, while *Penny Market* (discounter) is not planning to open online channels (Spačková, 2016). The German hypermarket Kaufland, part of the Schwarz Gruppe which also owns Lidl, has been testing online selling in Germany, and if it works, it is expected to start working in the Czech Republic, too (Janíková & Mikulka, 2017). Billa and Albert (Ahold) have also already established online operation abroad.

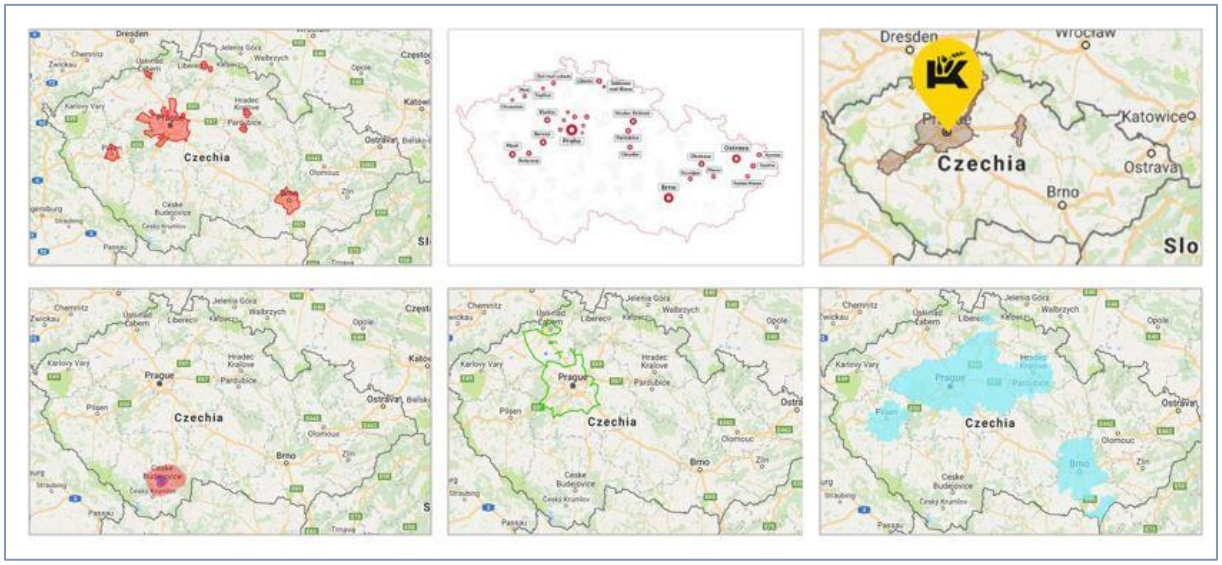
All in all, the grocery sector is currently experiencing the share of online sales at a low level (~1%), although the consulting company MC Kinsey (2017) believe that the key reason does not lie in low demand, but rather in the scares availability, as most leading grocery retailers do not run the service and only a few players have lately started in the largest cities. It is expected that when large retail chains introduce online grocery, the share for online groceries will increase similarly as in Western Europe. In fact, the research of Acomware, conducted on a sample of eight hundred respondents, showed that another online grocery store from well-known traditional chains lacks a fifth of customers. According to Acomware, the demand for online stores of well-known brands, such as Billa, Albert, Lidl, Kaufland or Globus is considerable

among Czechs consumers (Vokurková, 2015). Penkala relates the current online grocery situation to electronics years ago, where *pure online players have grown up* due to the *inactivity of the traditional chains* that joined only later (Bumba, 2016).

Pure online retailers

Currently there are several grocery retailers available on the Czech market. Among the first with successful start was *Rohlik.cz* with its launch in September 2014, while others followed, such as *Kosik.cz* in April and *Kolonial.cz* in June of 2015.Online grocery delivery is now available across the Czech Republic - mainly in cities and their immediate vicinity (Buřínská, 2017). Although most of the grocers offer their service in metropolitan city, in regard to other demographic areas they slightly differ, see *Figure 7*. Rohlik.cz for instance, is currently able to serve up to 2,5 million people, the service of Kosik.cz is available to 5,5 million, while Kolonial.cz is available to 3 million (CTK, 2017).

Figure 7 Online grocery stores - area coverage (6/ 2017)



The order of the stores: Rohlik.cz, Košik.cz, Kolonial.cz, Plnataska.cz, Potravinydomu.cz, Tesco
Source: Author (6/2017), based on online stores websites

According to Vyhnalek, the director of Kolonial.cz, the market has already been filled sufficiently in Prague and Central Bohemia, where most online retailers operate. According to their research, more than half of Prague and Central Bohemia have the experience with online grocery purchase. Food has also become the most frequently re-purchased article on the Internet. The average order at the grocery e-shop is multiple times higher than in a store (ČTK, 2016b).

The assortment of online stores includes a range of products as available in any supermarket or hypermarket - such as durable and fresh food, frozen products, fruits, vegetables, home and personal products and pet supplies. Tesco has roughly 20,000 items in the assortment, Kolonial.cz and Kosik.cz around 11,500 items, whilst Rohlik.cz around 10,000. Online stores offer both goods from classical assortment suppliers and from various specialized dealers. The delivery price is calculated by each pure player according to its own algorithm (Buřínská, 2017)

The online supermarket Rohlik.cz earned 960 CZK million CZK in revenues in 2016, while in 2015 it was 300 million CZ and the fast growth is also planned for 2017, when the business

expects to grow two or three times (Jedlička, 2017). The pure player Košík.cz estimated the turnover of approximately 350 million CZK in 2016, while the plans for 2017 is one billion crowns (ČTK, 2016a). Considering the area coverage and the increasing sales of the three pure players (Rohlik.cz, Kosik.cz, Kolonial.cz), one may observe increasing competition. Other food online store are Potravinydomu.cz, Nakupdomu.com, Sklizeno.cz, NakupteSi.cz a more.

6 Data Analyses & Research Findings

The following section elaborates on the research findings to the research questions presented in *Chapter 1*. Prior to the actual results, *Section 6.1* describes the methods and techniques used in data analysis. *Section 6.2* is dedicated to the sample characteristics overview. Preliminary analyses for Retail brand equity and research constructs, descriptive statistics and general findings are provided in there. *Section 6.3.* The RQ1 is answered in *Section 6.4*, in which proposed conceptual model will be examined and hypotheses will be tested. *Section 6.5* will be devoted to answering RQ2.

6.1 Data Analysis and Assumptions Criteria

The following section explains the statistical analysis along with the requirements and conditions that were considered for this study. Note that throughout the whole analysis process, the single retailer brands surveyed were not under the main focus, as the major aim of the study was to identify the relationships among research constructs as perceived in consumers' minds (e.g. Yoo et al., 2000). Thus, the study does not evaluate the extension evaluation performance of individual retailers.

Data screening & cleaning

Prior the analyses, dataset from Surveyxact was downloaded into an Excel file, where data screening and cleaning was performed. As only fully completed questionnaires were consider eligible for further examination, therefore there were no missing data in the final dataset. In the excel file, to each response a numerical code was assigned. The data set was then uploaded into SPSS version 24 were items were labelled and coded. The age variable was reviewed on possible number errors and converted into comparable age groups.

Data screening of Likert scale items

As a part of initial data screening, and knowing that advanced statistics will be used for the analysis, both dependent and independent variables were checked for *multivariate outliers,* as these may seriously impact the results of the analyses. As several Likert scales were employed in the research, the dataset was examined whether any cases show uncommon pattern of score on the two or more variables (Tinsley & Brown, 2000), using *Mahalanobis distances* (Pallant, 2005). Likert scales were treated as continuous variables. Few outliers have been found and it was decided to recode them into non-extreme values, meaning assign them a score that is similar to remaining cluster scores, as suggested by Pallant (2005).

Internal consistency measurement

In the initial stage of the analyses, Cronbach´s alpha was calculated to measure the scale's internal consistency, i.e. examining whether the items of the scale measure the same underlying construct. The acceptable Cronbach alpha coefficient of a scale is recommended to have the minimum of recommended value 0,7 (Nunnally, 1978), but values above 0,60 were also accepted based on recommendation of Moss et al. (1998).

Exploratory factor analyses

Exploratory factor analysis was conducted to verify and condense a large set of scale items down to a smaller, more practicable number of dimensions. This work considered the recommendation of Pallant (2005), and as such, factor analysis served as a data exploration

technique, where author is generally allowed to use own judgment when analysing and interpreting results, rather to simply rely on hard and fast statistical rules. The opinions on the sample size suitable for Factor analysis vary. Taking into consideration the sample of 120 cases, this study accepted the suggestion of Nunnally (1978), who recommend having a 10 to 1 ratio: that is, 10 cases for each item to be factor analysed. To assess the original proposed RBE scale from Pappu & Quester (2006a) composed of 11 items, the requirement was thus met. Recall, that associations dimension of RBE were for this research extended with organizational and value associations, leading to 15 items. To factor analyse extended RBE scale, more lose criterium of minimum 5 items per variable was accepted (Pallant, 2005).

Correlations among the variables were also checked, so that the coefficients are greater than 0.3. Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) were reviewed to assess the sampling adequacy. Condition of the KMO index with minimum value 0,6 (Tabachnick & Fidell, 2001) was set as a criterion for a good factor analysis (Pallant, 2005). Eigen value cut off 1.0 and scree plots were used to assess the number of factors to be retained. Additionally, Jolliffe's criterion (Jolliffe, 1986) was considered, thus retaining factors above 0,70 was acceptable (Yong & Pearce, 2013). When faced with cross-loadings, two often used approaches were utilized (Matsunga, 2010). First, the cut off value for such items was predetermined. This means, that highest factor loading needed to have a predetermined cut off value to be retained. This study followed more conservative researchers, and thus 0,6 value was selected as criterion. Secondly, discrepancies between first and second factor were compared. Only items where discrepancies between cross loadings were sufficiently high (above 0,3) were accepted (Matsunga, 2010).

Correlation analysis

Correlation analysis was utilized to define the strength and direction of the linear relationship between two variables. To interpret the values between the variables, guideline from Cohen (1988) as in Pallant (2005) was followed. Correlation of small strength would take on values between r= 0,10 to 0,29, medium correlations between r= 0,30 to 0,49, while large r= 0,50 to 1,00. Furthermore, correlation analyses for two groups with testing the statistical significance of the difference between correlation coefficients was performed and calculated based on formula provided in Pallant (2005). Condition for at least 20 cases in each of the groups was met.

Multiple regression

Considering the sample size, structural equation modelling (SEM) was not desirable, as the minimum size according to Kelloway (1998) is 200. The multiple regression analyses were thus used to evaluate a proposed conceptual model. *Standard multiple regression* was employed, as it is the most commonly type among researchers. This means that all the independent variables were integrated into the model at the same time. With this method, each independent variable and its predictive power on the dependent variable were evaluated (Pallant, 2005)

Several assumptions about the data needed to be met to ensure the quality of the outcome. Although suggestions on sample size differ per author, condition from Tabachnick and Fidell (2001) as in Pallant (2005) was accepted for this study According to authors, to calculate a sample size, researcher must consider the number of independent variables that are to be used for the analysis. They suggest formula, $N > 50 + 8m$, where m is the number of independent variables. Considering that not more than 6 independent variables per analysis were applied in this study, the condition was fulfilled. Required sample size would be 98, that is less than

available sample size of 120 cases. Furthermore, *multicollinearity* was assessed, examining whether any of the independent variables are highly correlated (r=0,9 and above), as they do not contribute well to a decent regression model. On the other hand, independent variables needed to prove at least some relationship with the dependent variable (above 0,3 recommended). Furthermore, *Tolerance* and *Variance inflation factor* (VIF) were checked *for* the presence of multicollinearity with Pallant suggested value, that is tolerance value of less than 0,10, or a VIF value of above 10 (Pallant, 2005). Both dependent and independent variables were also checked for *multivariate outliers*. Lastly, *normality, linearity & homoscedacity* were reviewed in the *residuals* scatterplots, which demonstrates the differences between the obtained and the predicted dependent variable scores. Furthermore, as noted in Pallant (2005), the Adjusted R Square value was referenced when reporting the results, due to a smaller sample size (Tabachnick & Fidell, 2001).

T-tests analyses

Independent sample T-test was used to test whether there is a statistically significant difference in the mean scores for the two groups (i.e. online grocery shoppers' vs non-shoppers). The sample size was above 100, which according to Stevens (1996) as noted in Pallant (2005) is large enough for the analyses. Differences between the groups were assessed in terms of their effect size, by using Eta squared statistics and formula provided in Pallant (2005). To interpret the strength, guidelines of Cohen (1988) were followed. Thus, small Eta squard effect was considered when =0,01; moderate effect when =0,06 and large effect when =0,14=large effect. Furthermore, paired-samples t-test were used to asses one group of respondents on two different conditions.

6.2 Sample Characteristics

The survey link was distributed online to 685 respondents. Exactly 152 respondents have initiated the survey, however, out of which 10 respondents have withdrawn from the survey at first page. Another 21 respondents have only partially filled in the survey, meaning they have left the survey before completion. Therefore 121 fully completed questionnaires were obtained and kept for further analyses. After the data screening, additionally 1 case had to be deleted, as the respondent did not match the criteria for the study. In overall, the response rate thus reached 22,2%, while the completion rate was 79,6%. The response rate is acceptable, as typical web-based survey response rates vary between 20% to 40% (Goodman et al., 2012).

The *Figure 8* provides the sample characteristics. Within the final sample of 120 respondents, women represented most of the respondents with a proportion of 77,5 %. The youngest respondent of the survey were 18 years old, while the oldest of age 55. The majority of the respondents fall into age category 25 – 34 (43%) and the average age of respondents was 31. Most of the respondents are in active employment (67%) or study (23%) and come either from metropolitan city or city above 100 000 inhabitants (each around 33%). Household size distribution varied. According to the data, 97,5% respondents have experience with online shopping and 36,7% respondents have experience with online grocery. That is, they have purchased the grocery assortment that is available at traditional offline supermarkets through internet. Note that reflection on the sample characteristics was provided in *Section 2.5.*

Figure 8 Sample characteristics

Variable	Categories	Frequency	Percent
Gender	Female	93	77,5
	Male	27	22,5
Age	up to 24	34	28,3
	25 -34	51	42,5
	35 - 44	17	14,2
	45 and more	18	15,0
Status	Employed	64	53,3
	Self-employed	16	13,3
	Student	27	22,5
	Parental leave	6	5,0
	Retired	5	4,2
	Unemployed	2	1,7
Household size	Live alone	21	17,5
	2	43	35,8
	3	25	20,8
	4 and more	31	25,8
Settlement	Metropolitan city (over 1 million residents)	40	33,3
	City (100,000- 1 million residents)	39	32,5
	Town (between 5,000 -100,000 residents)	25	20,8
	Village (under 5,000 residents)	16	13,3
Online purchase experience	No	3	2,5
	Yes	117	97,5
Online grocery purchase experience	No	76	63,3
	Yes	44	36,7
Total		120	100

6.3 Preliminary Analyses and General Findings

Cronbach alpha

To confirm reliability of the constructs, the Cronbach Alpha test for Internal consistency was conducted, examining the scales of RBE dimensions, trust and attitude towards the retailer online extension, intentions to purchase and consumer related factors. Retailer associations were inspected separately on image, organizational and value associations, as well as on total value. As presented in *Figure 9*, most of the constructs demonstrate high internal validity (above 0,80), reaching the cut-off condition of 0,70 with exception to online purchase intentions towards brick and mortar extension. This construct, however, still demonstrated reasonable reliability with a Cronbach's Alpha of 0,66, as per Moss et al. (1998).

Figure 9 Cronbach's Alpha scores of scale items

Construct	Value	No. of items
Image associations	0,809	5
Organizational associations	0,817	2
Value associations	0,845	2
Total associations	0,890	9
Quality perceptions	0,813	3
Loyalty	0,760	3
Trust	0,822	3
Attitude	0,892	2
Intention	0,666	2
Pureplay Intention	0,870	2
Perceived benefits	0,814	3
Perceived complexities	0,780	4

Dimensionality of RBE

After inspecting the reliability, the validity of the original RBE scale from Pappu & Quester (2006a) was evaluated. Recall, the RBE was composed of associations related to image, quality perceptions and loyalty. Exploratory factor analysis was performed to inspect whether the 11 items yield the proposed three factors of RBE and whether the individual items load on their appropriate factors as intended. Data were subjected to Factor analysis using Principal Component analysis and Varimax rotation technique. Using an Eigen value cut off of 1.0, a first solution provided two components, where associations and quality factors clumped together in one component, while loyalty created separate component. The analyses also revealed cross loadings of four items. Therefore, analyses were rerun few times, dropping items with critical cross loadings to find a satisfactory result that would best imitate the underlying constructs and the selection of variables that adequately represent each of these common components (Hogarty et al., 2004).

As such, three factors were requested when running further analyses. Two items LOY1 and ASS2 were extracted. The final solution *(Figure 10*) led to three components that mirror the RBE

dimensions proposed by Pappu and Quester (2006a), namely *retailer associations*, *product quality* and *retailer loyalty*. The Kaiser-Meyer-Olkin Measure (KMO) reached 0,846, the Bartlett's test was significant (p=0,000), confirming sampling adequacy and factor analysis appropriateness. Three factors explained a cumulative variance of 71, 58%. Although the three factors were below the Eigen value cut off 1.0, the scree plot allowed retaining three factors and Jolliffe's criterion was fulfilled (0,786). All factors loadings were vastly significant and they all loaded strongly on respective factors. In fact, items loadings took on excellent (more then 0,71) and very good (0,63) loading values (Comrey & Lee, 1992). As single factor loadings reached the value of 0,55, the analysis proved that they are valid indicators of construct validity (Nunnally, 1978).

Figure 10 Factor analysis: Original RBE dimensions

	Component		
	1	2	3
ASS3: Good customer service	,833		
ASS5: Good after sales service	,780		
ASS4: Good variety of products	,656		
ASS1: Good store atmosphere	,627	,327	
Q1: Very good quality	,425	,781	
Q2: Consistent quality		,769	
Q3: Reliable products		,759	,364
LOY3: No purchase elsewhere			,891
LOY2: First Choice			,802

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The second Factor analysis (*Figure 11*) included also organizational and value associations. The solution that would best represent the underlying constructs, is similar to that of the first factor analysis, including the perceived value component. To ensure the clear factor structure, note that organizational associations had to be omitted. All condition as represented in *Section 6.1* were met.

Kaiser-Meyer-Olkin Measure (KMO) reached 0,850, and the Bartlett's test was significant (p=0,000). The retained factors explained a cumulative variance of 75, 61%. Single factor loadings ranged from above 0,55 confirming the construct validity (Nunnally, 1978). All items loadings took on excellent and very good loading values. As a result, Retail brand equity is represented by the components*: retailer associations*, represented by Pappu and Quester (2006a) *retailer image* scale items & *perceived value* associations, suggested by Arnet et al. (2003); *retailer quality* and *retailer loyalty.* The internal consistency of RBE scale dimensions was rechecked with Cronbach's α and demonstrated the values: 0,802 (for retailer image associations), 0,845 (for retailer value associations), 0,813 (for retailer perceived quality), and 0,845 (for retailer loyalty).

Figure 11 Factor analyses: Original RBE extended

	Component			
	1	2	3	4
ASS3: Good customer service	,810	,325		
ASS5: Good after sales service	,778			
ASS4: Good variety of products	,661	,323		
ASS1: Good store atmosphere	,618			
ASS9: Good buy		,831		
ASS8: Good value for money		,796		
Q2: Consistent quality			,842	
Q1: Very good quality	,426	,406	,656	
Q3: Reliable products		,336	,651	,328
LOY3: No purchase elsewhere				,873
LOY2: First Choice				,785

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Descriptive statistics concerning RBE

To gain a picture how retailers in this study score on the RBE factors, descriptive statistics were summarized. Note that for the following and the subsequent analyses, the factors of the respective items have been transformed into one comprehensive concept, by computing the Factor Mean Scores. Recall that this study does not aim to analyse and compare the results on a retailer level, thus these statistics serve only for general awareness on data variability. As *Figure 12* suggests and as aimed (recall *Section 2.4.6*), the variability among retailers in terms of RBE assessment was secured. This means, that respondents exhibited different perceptions associated with RBE dimensions per retailer. For instance, retailer E was most favourably assessed in terms of value associations, while retailer A was assessed rather less positively in this respect. Same holds true for the assessment of overall RBE, as well as online purchase intentions towards the selected retailer.

Figure 12 Descriptive statistics concerning RBE and purchase intentions per retailer

Retailer		**ASS (IM)**	**ASS (VAL)**	**QUAL**	**LOY**	**RBE**	**INT**
A	Mean	**2,76**	**2,81**	**2,78**	**3,44**	**2,90**	**2,86**
	SD	,481	,987	,775	1,271	,674	1,082
B	Mean	**2,81**	**2,91**	**2,49**	**3,71**	**2,90**	**2,76**
	SD	,653	1,004	,756	,920	,670	1,002
D	Mean	**2,38**	**1,97**	**2,45**	**3,03**	**2,44**	**2,15**
	SD	,531	,413	,577	,695	,411	,702
E	Mean	**2,31**	**1,83**	**2,04**	**2,41**	**2,17**	**2,03**
	SD	,609	,591	,588	,870	,500	,717
F	Mean	**2,76**	**2,44**	**2,61**	**3,26**	**2,75**	**2,53**
	SD	,699	,846	,556	,903	,513	,874
ANOVA		**,004**	**,000**	**,000**	**,000**	**,000**	**,000**

*Retailer C is not presented as N=2

As demonstrated further in *Figure 12,* the scores of RBE dimensions and purchase intentions per retailer among the respondents were rather less variable, as the SD reached small values below 1. This means, that the opinions of respondents towards the selected retailer have been generally stable and very close to the mean. Same holds the true for the total RBE, suggesting that the respondents share rather common perceptions towards each of the retailer per se. The only higher SD (SD=1,27) was noted at Retailer A, where different respondents had a different point of view regarding loyalty, so the responses varied. Responses were also polarized, at the assessment of value association (VAL) at retailer B (SD=1,00).

ANOVA analyses further suggested that RBE dimensions scores among the retailers differ significantly, as well as the scores related to online purchase intentions. This even further supports the data variability. Based on the results, one may also observe, that retailers which have been assessed more positively in terms of RBE (lower values in figure, retailer D, E), were also more positively evaluated regarding online purchase intentions. In fact, according to the mean values, respondents would generally agree to be willing to purchase groceries online from those two retailers (M=2,03; M=2,15), as opposed to the others. This result already support the assumption as per *Chapter 4*.

Retailer selections among consumer segments

As the analyses in *Section 6.5.1* will discuss the differences among different segments of consumers in regard to RBE evaluation and retailer brand extension evaluation, it was needed to assess whether the selection of retailers was equal among the groups, so that comparisons were possible to make. Chi square test of independence thus reviewed whether the proportion of selected retailers by online grocery shoppers was different from the proportion that has been selected by non-grocery shoppers. No significant differences were found (p=0,851), thus further analyses were allowed. The same measurement was repeated for the respondents' groups that have been divided according to their pure play retailer awareness, where the result also yielded a non-significant value (p=0,725).

6.4 Research Findings to the Research Question 1

The following section presents the research findings to RQ1, i.e. focuses on the explaining the effect of offline RBE & non-brand related factors on consumer perceptions, attitudes and purchase intention towards the online channel extensions. This section is mainly composed of correlation and multiple regression analyses. Firstly, the results of analysis concerning the impact of RBE are provided (RQ1a), followed by the addition of non-brand related factors (RQ1b). Based on their results and in line with conceptual model, final overview of the model's effectiveness is presented.

6.4.1 The Effect of RBE on Online Extension Evaluation (RQ1a)

As suggested in the introduction part, bivariate correlation analysis was first conducted using Pearson's correlation. The following table demonstrates the correlation coefficients. Note that the strength of the correlation was assessed using the guidelines of Cohen (1988), as presented in *Section 6.1.*

Figure 13 Correlation matrix between RBE and trust, attitude & purchase intentions

	ASS (IM)	**ASS (VAL)**	**QUAL**	**LOY**	**TR**	**AT**	**INT**
Associations (IM)	1						
Associations (VAL)	,507**	1					
Quality (QUAL)	,656**	,603**	1				
Loyalty (LOY)	,497**	,529**	,536**	1			
Trust (TR)	,475**	,395**	,519**	,434**	1		
Attitude (AT)	,419**	,402**	,455**	,416**	,455**	1	
Intention (INT)	,472**	,558**	,494**	,539**	,517**	,591**	1

**. Correlation is significant at the 0.01 level (2-tailed).

As shown in *Figure 13,* there is a medium positive correlation between *image associations* and trust, attitude and purchase intentions. This means that the more positive offline store associations concerning merchandise variety, store atmosphere, service and after sale service of consumers´ are, the higher their positive perception and intentions towards the online channel of a retailer. *Value associations* revealed moderate positive correlations with both trust and attitude. Interestingly, a large positive correlation was evident towards the intention variable. Thus, in general, the more positive retailer associations of consumers are, the more likely is that these consumers have a positive perception towards the retailer´s online extension.

The correlation matrix further demonstrates a strong relationship between *quality* and online trust perceptions, while the correlations between quality and attitude as well as between quality and intention demonstrated medium correlations. *Loyalty* correlated strongly with purchase intention, and moderately with trust and attitude. One can thus conclude, that higher levels of quality perceptions and loyalty attitudes are increasing the level of online trust, attitude and purchase intentions. Lastly, both trust and attitude prove to strongly correlate with intention.

As indicated above, there is a positive relationship between RBE dimensions and attitudinal and behavioural intention towards the extension. Note, that moderate and strong correlations were significant on 99 percent confident interval.

Predictive Power of RBE dimensions

A series of multiple regression analyses was conducted to compare the predicted power of RBE dimensions on trust and online shopping intention; as well as those of trust and attitude on online purchase intentions. Note, that the relation towards the extension attitude will be evaluated along with non-brand related factors in *Section 6.4.2*, as per conceptual model. The results of the analyses are presented in *Figure 14.* Recall, that adjusted R^2 values are referenced.

Figure 14 Brand related factors & results of multiple regression models

Model	***Dependent variables***	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Adjusted R square
	Independent variables	B	Std. Error	Beta			
I	***Trust***						***,300***
	Associations (IM)	,194	,111	,184	1,752	,083	
	Associations (VAL)	,033	,078	,043	,418	,677	
	Quality	,270	,109	,282	2,471	**,015**	
	Loyalty	,108	,062	,169	1,746	,083	
II	***Intention***						***,395***
	Associations (IM)	,189	,140	,132	1,349	,180	
	Associations (VAL)	,311	,099	,298	3,154	**,002**	
	Quality	,106	,138	,082	,771	,442	
	Loyalty	,235	,078	,272	3,011	**,003**	
III	***Intention***						***,417***
	Trust	,425	,107	,313	3,989	**,000**	
	Attitude	,368	,064	,448	5,708	**,000**	
IV	***Intention***						***,516***
	Loyalty	,162	,069	,188	2,351	**,020**	
	Associations (VAL)	,265	,081	,254	3,251	**,002**	
	Trust	,254	,103	,187	2,464	**,015**	
	Attitude	,267	,062	,326	4,309	**,000**	

*Significant values in bold

Firstly, the RBE dimensions were entered into the regression model as independent variables to obtain their predictive power on online trust towards the retailer. The results of *Model I* indicate, that the strongest unique contribution to explain online trust is recorded by the quality dimension of RBE (β = 0,282, p= 0,015). Both associations (IM) and loyalty dimension show only a certain trend towards the significance (p=0,083), while value associations show non-significance. This suggests, that for consumers, the degree of perceived quality of products in a store is the most relevant indicator of trust believes associated with the new extension. The first model demonstrates that RBE dimensions explained 30% (R^2 = 0,300) of the total variance in the respondents' trust.

Next, *Model II* aimed to verify whether any of the RBE dimension can directly explain online purchase intentions. As the model indicates, retailer value associations (β = 0,298, p= 0,002) and

loyalty significantly predict purchase intention towards the retailer in offline channels (β = 0,272, p= 0,003), with retailer associations being a slightly stronger predictor. Based on the significance levels, it can thus be derived that the role of retailer offline image associations and quality of products do not have a power to directly lead consumer to purchase intentions. The explanatory power of RBE dimensions in this model reached 39,5% of variance in purchase intentions (R^2 = 0,395).

Model III demonstrates that purchase intentions are largely predicted by consumer attitude towards the extension and by online trust. Consumer attitude towards the extension exerted slightly stronger effect (β = 0,448, p= 0,000) compared with online trust (β = 0,313, p= 0,00). The model estimating online purchase intentions explained by these two variables was found to be significant and the two variables explained 42% of variance (R^2 = 0,417) in purchase intentions.

Learning that two RBE dimensions (value associations and loyalty) proved to be direct predictors of purchase intention, an additional *Model IV* was proposed to test their effect along the two other direct predictors, i.e. trust and attitude. By adding these two RBE dimensions to the model, the explanatory power of the variables explaining purchase intention at multichannel retailers increased from 42% to 52% of variance. This result is quite respectable (Pallant, 2005) and comparing the earlier models suggests the highest predictive power. Attitude exerted the strongest unique contribution to explain the purchase intentions (β =0,326; p= 0,00), followed by value associations 25% (β =0,254; p=0,00), loyalty 19% (β =0,188; p=0,020) and trust 19% (β =0,187; p=0,015).

6.4.2 The Effect of Non-Brand Related Factors along the RBE (RQ1b)

As suggested in the literature review and in the section of conceptual model development, two factors were suggested to additionally play a role in determining the consumer multichannel acceptance, *perceived benefits* and *complexities.* First, correlation analyses were performed to confirm the relationship between these variables and consumers´ response to extension. Correlation analyses proved that perceived benefits showed positive moderate relationship with consumer attitude (r=0,327; p=0,001) and with intention to purchase (r=0,397, p=0,001). On the other hand, as expected, perceived complexity showed a negative moderate relationship with attitude (r=-0,348; p=0,001) and with purchase intention (r= -0,352; p=0,001). The correlation analyses thus proved that these two non-brand related factors are suitable for further regression analyses, as per required assumptions outlined in *Section 6.1 Figure 15* thus shows how brand and non-brand related variables are included in two further multiple regression models – one model with attitude as dependent variable and one with intention as dependent variable.

As *Figure 15* suggests, the most significant predictor of consumer attitude towards the extension, as per *Model V*, proved to be the perceived complexity that consumer associate with online grocery shopping (β =-0,202; p=0,018). Out of the RBE factors, loyalty showed to be a significant predictor of consumer attitude towards the extension (β =0,195; p=0,047). This suggest that both brand and non-brand related factors influence the consumer attitude towards the extension.

Figure 15 Non-brand related factors & results of multiple regression models

Model	***Dependent variables***	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Adjusted R square
	Independent variables	B	Std. Error	Beta			
V	***Attitude***						***,316***
	Benefits	,278	,147	,158	1,896	,061	
	Complexity	-,302	,126	-,202	-2,401	**,018**	
	Associations (IM)	,245	,181	,141	1,353	,179	
	Associations (VAL)	,077	,130	,061	,594	,553	
	Quality	,223	,183	,141	1,220	,225	
	Loyalty	,206	,102	,195	2,011	**,047**	
VI	***Intentions***						***,568***
	Benefits	,175	,100	,122	1,748	,083	
	Complexity	-,163	,085	-,133	-1,913	,058	
	Associations (VAL)	,230	,080	,221	2,881	**,005**	
	Loyalty	,185	,068	,214	2,742	**,007**	
	Trust	,221	,101	,163	2,183	**,031**	
	Attitude	,208	,063	,253	3,272	**,001**	

*Significant values in Bold

Furthermore, two non-brand related factors were tested concerning their direct effect towards purchase intensions, as per conceptual model. Benefits proved to directly predicted purchase intentions (β=0,311; p=0,001), while complexities too (β=-0,240; p=0,007), with R^2 of 0,208. As the two factors have proved to be significant, they have been further aligned with RBE dimension to test their effect towards purchase intentions, as presented by *Model VI*.

The addition of two non-brand variables, increased the adjusted R^2 coefficient from 0,516 to 0,568 (compare *Model IV* vs *Model VI*). Two RBE dimensions, together with trust and attitude were all found to be significant predictors of online purchase intentions, meaning they have retained their significance. Attitude remained to be the strongest predictor (β=0,253; p=0,001), followed by VAL associations (β=0,221; p=0,005), loyalty (β=0,214; p=0,007) and trust (β=0,163; p=0,031). Of the non-brand related factors, perceived benefits (β=0,122; p=0,083) and perceived complexity (β=-0,133 p=0,058) did not retain their significance. This suggest that online purchase intensions towards an online channel of a grocery retailer can be largely predicted by the consumer perceptions and attitudes build in the offline channel and by perceptions and attitudes towards the extension, while the effect non-brand related factors, such perceived benefits and complexities would be rather suppressed.

6.4.3 The Effects of RBE and Non-Brand Related Factors on Extension Evaluation

As the analyses proved, the acceptance of the retailer online extension can be largely predicted by the retailer brand equity, as well as by non-brand related factors. The final model, however, especially proves the significant importance of brand related factors, proving the importance of retailer brand equity in extension acceptance. **H1 was partially supported**, as the quality dimension of RBE proved to predict trust towards the extension, while the remaining dimensions did not prove any significant power. On the other hand, it was especially loyalty and complexity that would predict the attitude towards the extension, thus also **H2 was partially supported**. The constructs measuring trust towards the retailer extension and attitude proved to be highly explanatory towards purchase intention, and same did perceived benefits and complexities, thus **H4 and 5 were supported**. Out of the measured RBE dimensions, value associations and loyalty towards the retailer could directly contribute to purchase intention towards the online channel, which **partially supported H3.** The regression analyses proved that RBE dimensions may directly or indirectly explain online purchase intentions towards the multichannel retailers. While non-brand related factors did not retain their significance in regard to purchase intention when built in a model (*Model VI*) with brand related factors, non-brand related factors proved their significance in regard to extension attitude.

Figure 16 provides a comprehensive overview about the regression analyses performed and provides results to the proposed hypothesis, as proposed in *Chapter 4.*

Figure 16 Evaluation of the hypotheses

Effects	Results	Specification (Sig.)
H1: RBE dimension → TR	Partially supported	QUAL
H2: RBE dimensions, BEN & COM → AT	Partially supported	LOY, COM
H3: RBE dimensions → INT	Partially supported	VAL, LOY*
H4: TR & AT → INT	Supported	
TR, AT, VAL & LOY → INT	Supported	
H5: BEN & COM → INT**	Supported	
TR, AT, VAL, LOY, BEN & COM → INT	Partially supported	TR, AT, VAL, LOY

* As these dimensions directly explained purchase INT they were tested in the Model IV, along with TR and AT

** As these dimensions directly explained purchase INT they were further tested in Model VI, along with TR, AT, VAL, LOY

6.5 Findings to the Research Question 2

The following chapter will firstly in *Section 6.5.1* examine whether there are any significant differences in two consumer segments, i.e. between *consumers that do not have an experience* (*non-shoppers*) with online grocery shopping and *those who do* (*shoppers*). The segments are compared in terms of demographics, in terms of the relationship between RBE dimension and purchase intentions, as well as consumers´ perceived benefits and complexities, social influence, pure play awareness and purchase intentions. *Section 6.5.2* then look at the pure online retailers' assisted awareness and purchase intention on the market. Consumers´ demographics are also considered.

6.5.1 Online Grocery Experience & Consumer Segments Differences (RQ2a)

Demographics characteristics across two segments

To evaluate whether there are any demographic characteristics that would differentiate online grocery shoppers from non-shoppers, five demographic variables were measured. The results of the conducted X^2 -tests show that household size is a variable in terms of which shoppers and non-shoppers differed significantly (p=0,017). Approximately 54% of people living in a household of two have experience with online grocery shopping, while only around 29% of those living alone or in a household of 3+ (37%). Settlement was also a significant variable (p=0,027). Around 45% of respondents residing in places over 100 000 inhabitants have purchased groceries online, while it was only 27% respondents from smaller cities bellow 100 000 inhabitants. The remaining demographics (gender, occupation status, household size) have not proved to be significant.

The relationship between RBE and purchase intentions across two segments

As the literature review suggested, the importance of a retailer brand may be different depending on the customer experience level with online grocery shopping. Thus, the correlation between RBE factors and intention to use the online channel for grocery purchases were reviewed, as depicted in *Figure 17.* Furthermore, the statistical significance of the difference between correlation coefficients of the two segments was tested.

Figure 17 The relationship between RBE and purchase intentions across two segments

		AS(IM)	AS(VAL)	QUAL	LOY
Online grocery Non-shopper	**Intention**	,566**	,626**	,459**	,591**
	Strength of correlation	strong	strong	medium	strong
	Coefficient of determination	32,0%	39,2%	21,0%	34,9%
Online grocery Shopper	**Intention**	,213	,356*	,401**	,347*
	Strength	NS*	medium	medium	medium
	Coefficient of determination	NS*	12,7%	16,1%	12,0%
	Z obs (significance)	2,18	1,86	0,36	1,63

Correlation is significant at the 0.01 level (2-tailed).**

Correlation is significant at the 0.05 level (2-tailed).*

If –1.96 < *zobs* < 1.96: correlation coefficients are *not* statistically significantly different.

If *zobs* ≤ –1.96 or *zobs* ≥ 1.96: coefficients are statistically significantly different.

*NS: Not significant

As presented in the figure above, one may observe that correlation coefficients between RBE factors and intention to use the online channel for grocery purchases are generally higher for the

online grocery non-shoppers segment. This means that more non-shoppers perceive these dimensions, the more the level of online grocery shopping intensions increases. Specifically, interesting was the finding of no correlation between image associations and purchase intentions among online grocery shoppers, while for non-shoppers the trend of the relationship between two variables was found to be strong. The strength of correlations also differed for value associations and loyalty among the two segments. However, when testing for statistical significance, only image associations appeared to be the factors where the two groups significantly differed. Thus, the more positively the image of a retailer is perceived, the more the intention to purchase increases for non-shoppers, whilst for online grocery shoppers this dimension is rather not relevant.

Extension evaluation across two segments

An Independent-samples t-test was conducted to compare the two segments in regard to the extension evaluation and purchase intentions, as per *Figure 18.* Recall, that the higher mean of the concept means lower level of agreement within the Likert scale.

Figure 18 Extension evaluation across two segments

	OGE	Mean	SD	Sig.	Eta squared	Effect size
Trust	Non-shopper	2,37	,634	,001	,096	Moderate
	Shopper	1,95	,630			
Attitude	Non-shopper	2,26	1,08	,006	,063	Moderate
	Shopper	1,69	1,05			
Multichannel intention	Non-shopper	2,56	,920	,000	0,102	Large
	Shopper	1,97	,735			

There were significant differences between online grocery shoppers and non-shoppers in terms of trust perceptions (M=1,95; M=2,37; p=0,001) and extension attitude (M=1,69; M=2,26; p=0,006). Online shoppers have evaluated both concepts more favourably and the effect size of the difference between the two segments was moderate. Online grocery shoppers would also more likely accept the potential online channel extension of offline retailer for grocery purchase (M=1,97) compared to non-shoppers and (M=2,56; p=0,000). In fact, the effect size advocates a large difference. This means, that as suggested in the literature review (*Section 3.3.3*), respondents with online grocery experience expressed a higher willingness to accept another extension.

Perceived benefits, complexity and social influence across two segments

An Independent-samples t-test was further used to compare the complexity and benefits scores for the two segments. There was a significant difference (p=0,000) found in terms of perceived complexity. As one would presume, shoppers perceived online grocery shopping to be less complex (M=3,62), compared to non-shoppers (M=3,02). Online grocery shoppers also associated more benefits with online grocery shopping compared to the second segment (M=1,67; M=2,02; p=0,006). While the effect size of differences was large in terms of perceived complexities, benefits generated moderate effect.

Figure 19 Perceived benefits, complexity and social influence across segments

	OGE	Mean	SD	Sig.	Eta squared	Effect size
Complexities	Non-shopper	3,02	,553	,000	,131	Large
	Shopper	3,62	,852			
Benefits	Non-shopper	2,02	,547	,006	,062	Moderate
	Shopper	1,67	,695			
Social perception	Non-shopper	2,80	,712	,003	,074	Moderate
	Shopper	2,30	,954			
Relative with online grocery experience	Non-shopper	3,72	,810	,001	,105	Large
	Shopper	3,07	1,108			

In terms of social influence, two questions were measured. First, it was looked at to what extent respondents believed that people who are important to them would think that purchasing groceries online is fine (Social perception, SN1). The two segments have differed significantly in this respect, with a moderate effect (M=2,30; M=2,80; p=0,003). Approximately 66% of shoppers would provide support to the statement, whilst only 33% of non-shoppers would. Thus, it seems that important people to non-shoppers are rather conservative in this respect. A large significant difference was found in the second statement (SN2) between shopper and non-shoppers (M=3,07; M=3,72; p=0,001), where respondents should evaluate to what extent they believe that people who are important to them purchase groceries online. Out of all non-shoppers, only 5,3% would agree that people who are important to them purchase groceries online, while 60,5% would disagree. The social influence of non-shopper is thus different to shoppers, where 27,3% agree to the statement, and only 36,9% did not support the statement.

Although the segments differed in this respect, correlations analysis did not prove strong or if any relationship between social norms and purchase intentions. For online grocery shoppers, there was no relationship between the two statements (r=0,264; p=0,084 and r=0,060; p=0,699). For non-shoppers, the first statement (SN1) was not significant (r=0,182; p=0,116), second statement (SN2) proved small relationship (r=0,237; p=0,039). This suggest that for non-shoppers, if they acknowledged to know that their close relatives do purchase groceries online, the relationship in regard to their purchase intentions existed. Thus, it may be assumed that the role close relative play is more significant for non-shoppers.

Pure play awareness and purchase intentions across segments

An interesting result was yielded by scores related to the assisted awareness of the grocery pure play retailers available on the market, see *Figure 20* Online grocery shoppers naturally hold a higher awareness compared to non-shoppers as they have recognized 1,9 online retailers on average, compared to non-shoppers who recognized 1,4 retailers. Although presenting statistically significant difference (p=0,037), the effect size was in fact small (Eta squared = 0,037). Recall, that currently there are three significant pure players on the market. These results suggest that one should not underestimate the level of pure online retailers' awareness among both segments.

Both segments have also significantly differed (p=0,012) in terms of purchase intentions towards these retailers. While non-grocery shoppers generally demonstrated lower willingness (M=2,74) compared to grocery shoppers (M=2,24), the effect size was once again small (Eta

squared=0,052). These results therefore continue to underlie the importance of tracing both segments, current shoppers and non-shoppers.

Figure 20 Pure play assisted awareness and purchase intentions across segments

	OGE	Mean	SD	Sig.	Eta squared	Effect size
Pure play awareness	Non-shopper	1,41	1,267	,036	,037	Small
	Shopper	1,91	1,217			
Pure play intention	Non-shopper	2,74	,950	,012	0,052	Small
	Shopper	2,26	1,048			

6.5.2 Examination of Pure Online Retailer Awareness (RQ2b)

Pure online retailer awareness & demographics

Chi Square test of independence discovered that there are significant differences in terms of demographics and awareness. Settlement was one variable that represented such significant differences (p=0,000). At least one pure online retailer was recognized by 95% of respondents from metropolitan areas, while in towns, cities and villages the awareness declined below 70%. Another significant variable was age (p=0,000), where respondents over 45 were aware the least (less than 30%) compared to younger respondents up to 34, where on around 80% recognized at least 1 pure online retailer. Significant differences were also found in terms of employment status (p=0,039). Not surprisingly, retired respondents were aware the least, with only 20% demonstrating the awareness of at least one of pure player, while the remaining categories made up the values above 67%.

Purely online retailer intentions & demographics

ANOVA further revealed that respondents from metropolitan areas demonstrate the highest purchase intentions (M=2,13) toward purely online retailers, significantly differing from residents of cities (M=2,71; p=0,009), towns (M=2,74; p=0,014) and villages (M=3,03; p=0,002). Thus, settlement is a demographic variable that may possibly influence the adoption of retailer extension, due to highly competitive situation in metropolitan areas, where purchase intentions towards competitors are most likely. The remaining demographics did not show significant differences on intentions.

Level of awareness & purchase intentions

Next, it was also examined how the level of consumer awareness of available online grocery retailers on the market can differentiate among consumers and their online purchase intentions.

Figure 21 Level of awareness and purchase intentions

		N	Mean	SD	Sig.
Multichannel intention	Zero awareness	34	2,34	,885	,499
	Some awareness	52	2,25	,825	
	Wide-spread awareness	34	2,49	1,026	
Pure play intention	Zero awareness	34	**3,21**	,914	**,000**
	Some awareness	52	**2,38**	,993	
	Wide-spread awareness	34	**2,19**	,838	

Respondents have recorded the amount of online grocery retailers they have heard of.
Zero awareness (absolutely no knowledge), some awareness (1-2 retailers), wide spread awareness (3+ retailers)

As exhibited in *Figure 21,* the results indicate that regardless of the level of awareness of the available online competitors, future online shopping intentions toward multichannel retailers would be approximately similar among the groups, as there are no significant differences (p=0,499). This implies, that even if consumers have heard of several available retailers, the likelihood of purchase intention would be rather similar to those who hold zero knowledge. Thus, one may infer that a higher level of pure play retailers' awareness, does not necessarily lead to much lower purchase intentions towards the multichannel retailer.

On the other hand, there are significant differences (p=0,000) among consumers with different levels of awareness and their purchase intentions towards these online pure players. Particularly, those who have absolutely no knowledge demonstrated significant difference to those with some knowledge (p=0,000) and those with widespread knowledge (p=0,000). These respondents would have a generally lower tendency to purchase at available pure players on the market. The highest willingness to purchase from pure only retailers was demonstrated by those with wide-spread awareness.

Purchase intentions comparison

Conducting paired sample T-test, as depicted in *Figure 22*, an additional interesting finding may be revealed. Those respondents with zero knowledge of online competitors demonstrated significantly higher future purchase intentions towards the retailer online extension compared to online players (p=0,000). The remaining respondent groups did not reveal any differences. Note, that respondents with zero knowledge demonstrated a similar level of purchase intentions towards multichannel retailers as respondents with some or wide-spread awareness. This suggests that they are seriously impacted by their level of pure play retailer awareness, thus willingness to pursue a grocery shopping at purely online retailer.

Figure 22 Level of awareness and intentions comparison

		Mean	SD	Sig.
Zero awareness	Pure play intention	**3,20588**	,914	**,000**
	Multichannel intention	**2,33824**	,885	
Some awareness	Pure play intention	2,38462	,993	,359
	Multichannel intention	2,25000	,825	
Wide-spread awareness	Pure play intention	2,19118	,835	,191
	Multichannel intention	2,48529	1,026	

All in all, the RQ2 proved that online grocery experience is a source of differentiation among consumers segment. The two segments, those with online grocery experience and those without such experience, differed in various aspect, including RBE dimensions significance, perceived benefits, complexities, social influence aspect and purchase intentions. The research question also proved that consumers awareness of pure play retailers significantly differs per settlement and age and that consumers from metropolitan area are most inclined to purchase from these retailers. Consumers with limited knowledge of pure play retailers demonstrated lower purchase intentions towards pure play retailers. Purchase intentions towards the multichannel retailers remained at same level, regardless of competitor knowledge.

7 Discussion

The current study adds to the developing body of grocery multichannel & e-commerce literature and brand marketing. The theoretical part explained the background of Retail brand equity and the insights were transformed into a conceptual model were several hypotheses were proposed. The significant part of this study thus investigated the impact of consumer based retail brand equity, along with other non-brand related factors on the success of online channel extensions of grocery retailers. As a basis for the research model, the conceptualization of RBE as defined by Pappu & Quester (2006a) based on Aaker´s (1991) conceptualization of brand equity was adopted. Based on the proposals and studies of other authors, additionally two subdimension of RBE associations were introduced to be measured along the scale of Pappu & Quester. Specifically, value associations, proposed by Arnett et al. (2003) and organizational associations, which were proposed in Aaker´s later research (1996) and applied for instance by Buil et al. (2008).

The Factor analyses under defined criteria's and assumptions proved that the extension for the particular research context was practicable, yet, the author had to look for a solution that would best reflect the concepts under investigation to fulfil the research objective. Along the way to a four components solution (image associations, value associations, quality, loyalty) that was used for subsequent analyses, the author faced cross loadings of items, and non-separability of associations and quality items in the initial analysis. Thus, few scales items had to be omitted. Note that this is not uncommon, as several other researchers (e.g. Yoo et al., 2000; Yoo and Donthu, 2001; Washburn and Plank, 2002) in their studies also faced inseparability of certain dimension and have studied the construct of brand equity with accustomed dimensions of the original proposal of Aaker (1991). As Rashmi et al. (2016) contemplate, retailers' perceived quality may be in fact just one, although very significant, of many brand associations. Rashmi et al. work also provides an excellent overview on RBE operationalization and measurement in research, proving the variations applied by researchers. Despite the variations and small refinements, most of the researchers are directed by dimensions proposed by Aaker, as followed in this study. As a result of the analyses, this research provides evidence about the multidimensionality of Retail brand equity. Furthermore, the associations represented by image and value provide a support to the statement of Yoo et al. (2000) anticipating that associations are very complicated, consisting of multiple thoughts, facts from different areas and different linkages, proving that extension of original RBE scale was reasonable. The results identified the dimension of associations, as reflected by retailer in-store image and perceived value, quality dimension and retailer loyalty.

7.1 Discussion to the RQ1

The *first research question* was a major part of this study, that reflected upon the importance of retail brand equity and its transference to extension evaluation, as discussed in depth in the theoretical part of this study. The results of correlations analyses revealed a significant positive relationship between retailer equity dimensions and customer trust towards the retailer online extension, as well as a positive and significant relationship towards the extension attitude and subsequently purchase intentions.

Regression analyses then tested whether retail brand equity dimensions are able to predict online trust towards the retailer extension (H1). As suggested earlier, trust in multichannel retailers encompasses a fundamentally different development than that exploited by pure online retailers (Bock et al., 2012). Interestingly, out of all retail brand equity concepts, only retailer product quality significantly predicted online trust towards the online channel. Perceived quality of products has been a significant predictor in other studies (e.g. Das, 2016), thus the results are not surprising. However, taking into account that the model´s other dimensions have not proved to be significant, this calls for more understanding of the quality importance in this respect. This result may be associated with the findings of Weindel (2016) who based on her longitudinal cross-sector research proved, that assortment is one of the most important aspects of retail brand equity in grocery industry. Considering the online contexts, consumers often worry that they incorrectly assess some products because of inadequate presentation and fear the selection and handling of perishable items (Hanus, 2016). This may explain why quality observed in offline setting was regarded as the most significant driver of online trust. Also, as suggested in the theoretical part, grocery products are much more heterogeneous in quality compared to other retail sectors, and the sensitive aspect of online shopping is the part of retailer employees selecting the products (Mortimer et al., 2016). Thus, the way a retailer presents itself in the offline channel, and the way it cares about delivering certain and reliable quality level of products offered in store, this way the retailer forms the perceptions towards online channel trust. This means, that consumers´ perception of the same behaviour of competence, benevolence and integrity will be ensured.

In store image associations and loyalty have only been approaching the level of significance, while value associations proved insignificant results towards online trust (H1). While it would be generally understandable that value associations would have less influence on trust compared to quality associations, also referring to results of correlation analysis, it was intriguing that in-store image associations did not prove to be a significant predictor of trust towards the extension. A closer look on descriptive statistics, however, provides room for further questions associated with this measurement. In fact, in comparison with the other dimensions and all scale statements in this study, in-store image assessment yielded the highest proportion of neutral responses. Consumers in most of cases were neither inclined to give positive nor negative assessments. For instance, almost 52% of consumers were neutral in their response towards in-store atmosphere and 42% of consumers could neither decide whether the retailer offers a good service, nor good after sale service (58%), which raises the question of potentially vague results. If consumers are not able to generally asses the service in-store, it may be assumed to be problematic to evaluate a potential extension. Furthermore, this study did not find support for loyalty being a predictor of online trust, as the value was only almost reaching a significance level. This result is also intriguing, nonetheless, asks either for more understanding on conceptualization of loyalty or for introducing more consumer related factors to explain the online trust, as will be outlined in limitation section.

Regression analyses also tested the predictive power of RBE and non-brand related factors towards extension attitude (H2). The consumers´ attitudes towards the extension were largely predicted by perceived complexity of online grocery shopping together with retailer loyalty. This suggests that consumer attitude towards the multichannel retailer may be formed both by retailer brand and non-brand related factors. In fact, the theoretical part discussed that

complexity was among the most influential factors in innovation adoption (Tornatzky & Klein, 1982) and its significance was even confirmed in this study. This is in line with several other authors, who have claimed perceived complexity to be the obstacle to online grocery shopping (Raijas & Tuunainen, 2001; Verhoef & Langerak, 2001; Hansen, 2006). Interestingly, the significance of perceived benefits was not revealed, suggesting that its effect is less relevant. This contradicts the assumption of Davis (1989), who suggested that perceived usefulness (benefits) comes first, and perceived ease of use (complexity) comes later, as consumers are motivated by the functionality rather than how easy it is to use technology. On the other hand, an interesting explanation was provided by Haydon (2016) who said that, consumers may not see the usefulness of online grocery entirely due to the high density of grocery stores and discounters in certain European countries and, as added by Hansen (2005) especially in small countries. Therefore, the results of this study the author relate to these suggestions. Yet, as the findings RQ2 explained, the relevance of these factors also depended on consumer experience with online grocery shopping.

Furthermore, the fact that offline loyalty proved to be significant suggest that the most loyal consumers would hold the most favourable attitude towards an extension, which gives support to several other researchers (e.g. Turhan, 2014). On the other hand, remaining dimensions (value and image associations, quality) proved not to be significant, which contradicts some authors (e.g. Rio et al., 2001; Yang et al., 2013), but also provides support to others (Ahn & Park, 2006). At this place, however, is worth to remind that although the remaining factors have not directly influenced the extension attitude, many researchers have argued (e.g. Hem & Iversen, 2003) that the remaining dimensions influence loyalty, which was found to be true. Furthermore, the attitude towards the extension thus is believed to be influenced by other non-brand related factors that were not investigated in this study.

Two retail brand equity dimensions could directly explain online purchase intentions, namely value associations and again loyalty (H3). This suggests that if consumers believed that price/quality ratio was correct and they felt loyal to the retailer, they would be willing to purchase even from a retailer´s new online channel. These results are similar to Verhagen (2007) who in his study also found only value for money associations to trigger online purchase intentions, while he found no relationship between merchandise, store layout and store service dimensions. In fact, considering the market under investigation, the results are realistic, recalling the discussion in *Section 5.1*. Leading grocery retailers on the market are providing a good price/quality ratio, as indicated in the Nielsen Admosphere study (Aust, 2016) or study of Wellen (Kučera, 2016), confirming the relevance of value associations aspect to Czech consumers. It also gives support to the fact that, as noted by Skala, sales and discounts in Czech grocery stores have for long been and continue to be the most intense in Europe (Sovová, 2016). However, Czech customers have logically learned to use what the store offers and to buy good quality products at a good price (Sovová, 2016). This means, that as in offline, consumers would naturally look for good value also online.

Furthermore, retailers that proved to hold a solid position in terms of consumers offline preference – as reflected by statements such “When buying groceries, a selected retailer is my first choice ´ or ´Even when items are available from other retailers, I tend to buy from selected retailer´, were able to transfer this advantage to the online channel too. The results of this study are very much in line with Rafiq and Fulford (2005) on the UK market, as those retailers who scored highest on online purchase intentions demonstrated to be the leading retailers in offline

channels. These results are naturally in line with other brand extensions studies (e.g. Turhan, 2014; Hem & Iversen, 2003, Wang & Li, 2012).

This study's findings also proved that higher level of consumer trust towards the retailer extension may enhance their shopping intention at the retailer online channel (H4). This confirms result of other multichannel studies (e.g. Doong et al., 2011; Badrinarayanan et al. (2012) or even studies from supermarket retail setting, from which the scale for trust measurement was applied (Kuan & Bock, 2007). For the purposes of this study, the concept of brand trust encompassed the measurement of competence, benevolence and integrity. Those consumers who believed that retailer will fulfil the obligation, will not act opportunistically and will be honest proved more willingness to shop on that retailer's website.

To conclude, the last regression model of RQ1 that has combined brand related factors together with non-brand related factors proved that retailer extension acceptance may be mainly predicted by consumer perceptions build in offline channels and consumer perception concerning new extension. While the non-brand related factors yielded significant predictive power, when being the only independent variables of intention (H5), they lost this significance once the brand-related factors were added to the model'. This highlights the importance of retail brand equity in forming the multichannel retail acceptance and proves that yet another study confirmed the transference of offline brand effect to online channel. This is not to say that non-brand related factors are not important at all, given the fact that consumer extension attitudes were primarily predicted by non-brand related factor such as perceived complexity. However, it leaves a space for the investigation of other non-brand related factors and their effect in regard to online grocery acceptance among Czech consumers.

7.2 Discussion to the RQ2

The *second research question*, aimed to firstly discuss the differences between consumers with online grocery shopping experience and those without such experience (RQ2a). This was to recognize, where retailers need to employ particular initiatives suitable for each of the segments. As first, demographic characteristics were compared, revealing that except of household size and settlement, there were no significant differences in terms of gender, age and occupation status. Given the non-conclusive evidence of the demographic characteristic and their role in online grocery shopping, the results are in line with some researchers (e.g. Alamelu & Meena; 2015 or Hansen, 2005), however, would contradict the results of others (e.g. Raijas, 2002). Those who conducted the online shopping earlier were consumers living in the households of two, or those living in cities above 100 000 inhabitants. The results are reasonable, considering that online grocery service in Czech Republic is available mostly in metropolitan city and bigger areas, recall the discussion in *Section 5.3*. Given the sample of respondents being young in this study, the author assumes that online shoppers are thus young professionals, without children.

An interesting finding was offered by the correlation analyses concerning the relationship between RBE dimension and online purchase intention between two segments. As suggested earlier, all brand equity dimensions were also positively correlated with purchase intention at both segments and the analyses proved that the correlations among three RBE dimension are not significantly different between groups. Only one dimension, image associations, proved that while there was no significant relationship evident for online grocery shoppers, for non-grocery

shoppers indeed was. This suggests, that for consumers who have never performed an online grocery shopping, the meaning of all brand equity factors is more important. One may assume that due to no prior online grocery experience, non-experience shoppers would orient themselves and rely on a complete picture of a retailer build in the offline channel.

Online grocery shoppers were found to be more trustful towards a potential extension and also demonstrated a more positive attitude. This may be assumed to be associated with their earlier shopping experience, where the shoppers have possibly overcome the initial barrier and risk perceptions associated with online grocery shopping. This is similar to the study of Mortimer et. al (2016) who proved that regular online grocery shoppers, experience less perceived risk and higher levels of trust due to their regular online transactions and experience with the online retailer. The results also suggest that compared to non-shoppers, online grocery shoppers would also more likely accept the potential online channel extension. An intriguing fact is that the effect size advocated a large difference between the segments. This gives support to the findings of Kim & Park (2005), who noted that with an increasing online purchase experience, consumers are less likely to remain loyal to only one retailer. One may generally assume, that those who purchased groceries online, conducted their purchase at potential competitors. The openness towards the extension adoption of a new retailer, also closely confirms the results of Li et al. (2017), who founded that earlier experience with competitor leads to higher probability to try the service of late entrant.

A large difference between the segments was identified in terms of perceived complexities, suggesting that complexity is a decisive factor in shaping consumers' attitudes. The finding demonstrates that most of the non-grocery shoppers are discouraged to use the online channel as they cannot see and feel the products and believe that it is problematic to find certain grocery items online. Although the complexity associated with placing an order was less discouraging, still the non-shoppers would perceive it more negatively. The two segments have also differed significantly in terms of perceived benefits, which gives support to Hansen (2006) who reported that not all shoppers credit equal levels of perceived benefits to online shopping. Literature review suggested that convenience and comfort are two particular benefits associated with online grocery. Online grocery shoppers associated themselves strongly in this respect, and proved higher level of the believe that online shopping allows them to shop 24/7, safe effort and hassle of visiting traditional stores or waiting at the queue.

Differences between two segments were also found in terms of social influence aspects. While shoppers generally believe that people who are important to them would be fine with online grocery shopping or purchase online groceries already, non-shoppers were rather opposite in this respect. What is however important to emphasize is that, correlation analyses suggested a positive small relationship between the statement evaluation shoppers´ recognition that their close relatives purchase groceries online and their online purchase intentions. This supports the findings of Verhoef et al. (2007) or Barkhi et al. (2008) saying that if consumers believe that people similar to them or their peers use that channel, this influence their channel choice and they be more willing to engage in similar behaviour. Furthermore, as reported by Hansen et al. (2004), inexperienced consumers may be willing to hear possible opinions from their social contacts. The non-significant relationship for the segment with online grocery experience gives support to Zhou et al. (2007) who claimed that the influence of friends, family, and media

recommendations may not necessarily always ensure the online purchase intentions. Thus, social influence would play rather role for inexperienced shoppers.

Online grocery shoppers also logically maintained a higher awareness of pure online retailers on the market compared to non-shoppers, however, the results suggested that the statistically significant difference was small. These suggest that active retailers have in the meantime build a satisfactory level of awareness. This may presumably be related, as explained by Kardes & Kalyanaram, 1992), cited in Kim et al. (2002), by the fact that first-movers more easily build consumer brand awareness and brand equity. Except of first mover brick and mortar retailer on the market, author believe that pure play retailers that entered the market caused the respectable halo effect. Since there was not much competition, creating awareness was very simple. These results suggest that one must not underestimate the level of pure online retailers' awareness among both segments. As Aaker (1996) reminds, awareness is treated as underrated component, however, it impacts perceptions and attitudes and in some situations, may eventually even be a driver of brand choice and loyalty. Once consumers are aware of certain retailers, they may include them into a consideration set (Kim et al., 2002) if they happen to be in a situation when they consider online grocery purchase. Also captivating is the fact that although non-grocery shoppers demonstrated significantly lower online purchase intentions towards the pure retailers, in comparison to shoppers, the effect was rather small.

The RQ2b demonstrated that the highest assisted awareness of pure play retailers was among respondents from metropolitan area, while the awareness in remaining areas was lower. This is again very realistic, as *Section 5.3* suggested. Respondents from metropolitan areas also demonstrate the highest willingness to purchase from these retailers. Respondents over 45 demonstrated the lowest awareness. The interesting finding was that the higher level of awareness did not lead to a significantly lower purchase intention towards the traditional retailer. So those who have heard and are aware of several available retailers, are the same likely to purchase from the retailers as those with zero knowledge. On the other hand, the situation is rather different when faced with the choice to purchase at purely online retailers. In this respect, those who did not recognized any of the purely online retailers were more sceptical about a future purchase intention. As suggested by Pappu and Quester (2006a) consumers first need to become aware of a retailer to be able to have perceptions of quality, retailer associations or loyalty (Pappu and Quester, 2006a), which if not provided, most likely caused the hesitancy among consumers. On the other hand, those who recognized the most online retailers, also demonstrated the highest willingness to perform a purchase.

8 Conclusion

8.1 Managerial Implications

There are several managerial implications resulting from this study. First, the multichannel movement phenomenon is gaining its momentum not only in established markets, but smaller markets such as Czech Republic are asking for the attention too. Consumer habits in terms of technology usage are rapidly changing, and so do their consumption and purchases behaviours. Grocery industry is not an exception. Consumers´ expectations are changing and in the long run, retailers will need to adjust their offerings or find their unique competitive advantage to be able to cope with the competition. To succeed in the multichannel environment, retailers will need to concentrate their efforts towards the development and continual strengthening of their brands, which in the past was for many years an area rather neglected.

Before initiating the development of an online channel with grocery delivery services or other convenient options, i.e. starting an e-commerce business, retailers will need to consider enormously, how strong their brand in the offline channel is, how stable and loyal their consumer base is and how these may be effectively interlinked with new online channels. Given the massive resources and capabilities required for an online store establishment, proper consideration of such efforts is needed. In fact, most of the retailers have been realizing the complexity of such, as the launch of online grocery by multichannel retailers has been rather slow. Retailers may consider whether there are any possibilities how to get closer to customers, before completely plunging into the development of online stores, particularly at the new markets, such as Czech Republic. As grocery is rather habitual and continual behaviour, online grocery presents a change of habit in consumers. Consumers needs to learn to use the online channels of grocery retailers. Hence, retailers may first utilize their efforts on building their online channels to offer beneficial information and engagement content, to provide a customer with some additional value and to let consumers accustom to the usage of the online channels. As such, retailers need to gradually alter their online offerings.

Furthermore, retailers need to consider that consumer evaluation and purchase intentions towards an extension are influenced by consumer attitudes and trust perceptions towards the extension, of which one of the antecedents is retail brand equity build in the offline channel. Thus, consumers create these perceptions based on earlier interactions with the retailer. Especially factors such as value associations and manifested loyalty towards the retailer were decisive predictors in Czech Republic. Loyalty, however is partly predicted by associations and quality perceptions, meaning that retailers needs to coordinate their effort along the various dimension of retailer equity. Retailers should, however, distinguish among attitudinal and behavioural loyalty. This means that continuous purchases measured by loyalty programs do not necessarily imply that consumers hold positive perceptions of retailer equity dimensions and thus would eventually become a segment eager to adopt an online channel. On the other hand, retailers need to realize that attitudes are composed of a full range of factors that are not solely predicted by retail brand equity but also by non-brand related factors.

Czech retailers are presumably aware of Czech consumers being value oriented, as the promotions and discounts are still intense techniques employed. Even if every retailer has a different strategy and key value proposition, this fact should be considered when moving into the online channel. If pricing policy is not the main competitive advantage, retailers need to

think of employing strategies and tactics to employ to compete with this proposition. To save time and effort, consumers often simply shop at the closest store, even if their preferred store offers cheaper prices. However, online consumers, would most probably not shop from online store with higher prices, if it is not a preferred store. Thus, offering additional value or a unique selling proposition, such as shorter delivery time, loyalty programme, advanced website features, niche products would be essential.

The retailers in this study, have underperformed in terms of image associations assessment compared to other dimensions of brand equity. The ambiguous responses underline the importance for retailer to improve in the area of in-store atmosphere and service quality associations. Since grocery shopping is a routine activity, customers often look beyond the functional benefits of a physical store and those retailers who can alter the usual shopping experience into an exciting shopping experience can distinguish themselves (Kraft & Matrala, 2010). Although the atmosphere itself may not lead directly to purchase intensions it may increase the level of attitudinal loyalty toward the retailer.

The fact that online trust has a significant influence on purchase intentions, retailers operating or extending to online environments should aim at reducing consumers' perceived risk in this respect by setting up high quality control standards to continuously track the way the individual grocery items are selected, as well as for the packaging, transport and delivery of groceries to the customer (Ramus & Nielsen, 2005). Competence related to fulfilling the commitments in terms of e.g. money-back guarantee was one aspect of perceived online trust and as such, quality control should be accompanied by a comprehensive and appealing compensation and replacement policy for undesirable or damaged items to address consumers' concerns (Ramus & Nielsen, 2005). This study has only examined trust towards the retailer performance, although retailers should also realize that trust is multidimensional and may not necessarily only relate to their performance but also for instance consumers´ individual level of risk.

Positively may be seen that even those shoppers with prior online grocery experience have demonstrated willingness to adopt the retailer online channel. Retailers thus need to drive trial and assure that the first order will exceed the consumer expectations. Retailers should focus especially on loyal customers, who after a positive experience may spread the positive word of mouth. Retailers must ensure a seamless integrated shopping experience, adopting an omnichannel strategy. Still, they must be attentive, as pure online retailers on the market have in the meantime built satisfactory awareness among consumers and a stable consumer base. Thus, their efforts may face obstacles along the way. They should also expect that consumers might demonstrate cross-shopping behaviour.

As the study discovered, a brand does not necessarily fully guarantee consumer acceptance of an extension. There is a full spectrum of other factors that may influence consumer adoption. This study looked only at few, however retailers needs to ensure to evaluate other important criteria too. If retailers want to encourage their customers to use their online channel either for the information search, grocery ordering or other purposeful activities, they need to clearly advocate the benefits that consumers may obtain. The importance of communicating the benefits is especially important at a stage where consumer do not have any experience with the online grocery yet. These consumers have not fully acknowledged the functional aspects of online grocery. To be successful, retailers developing or operating online platforms need to

properly plan, provide and track competitive benefits to assure that once competing in an online environment, they are able to face the benefits advocated by both, competing multichannel and pure online retailers. As noted earlier, online grocery shopping mostly provides utilitarian benefits, in terms of saving time or efforts, but it additionally allows customers to make better decisions. Learning that value associations have been a strong predictor of online purchase intentions, retailers may especially employ the tactics of emphasizing to customers, that over the internet, impulse purchase in-store behaviour can be avoided and more considerable decisions may be done (Zavodnikova, 2017).

Moreover, the fact that groceries are easily available may cause consumers to be redundant towards online grocery. Retailers need to consider how to break down the complexity associated with online grocery shopping. The e-commerce website should equip consumers with complete information and guidelines how to purchase groceries, from looking up the product till delivery. Retailers should be ensuring that high quality information regarding products is offered to minimize the effect of non-ability to feel and touch the products. Consumer should be able to easily search the products, compare them and place and order. Reviews or online customer support would be highly appreciated in this regard. In fact, brick and mortar retailer can take an inspiration from one of the leading pure players on the market, which in the opinion of the author, have truly utilized various techniques to grasps potential customer issues. These skills, they have demonstrated for instance by advanced navigation functions (e.g. main search bars, filters, visible add to cart buttons, no need of customer prior registration etc.), ´how to shop videos´ available at multiple online touch points (e.g. retailer social media, blog, website), purchase memory option or desk-top interface connected to mobile app. The retailer offers even an option for customers to write the grocery shopping list by hand, which if send to retailer, is processed to an online order. Such features may decreaseconsumers´ frustration or potential confusion. While these features can be ensured online, multichannel retailers may also utilize their stores for demonstration purposes, either to introduce the service or ongoing supportive communication. Retailers should also bear in mind that complexity may be linked to the age of consumers, and act on it. Conceptual framework considering various aspects of virtual store acceptance from Chen et al. (2004) may serve as a beneficial guideline.

Furthermore, results also suggested that social influence among the segments differs. As word of mouth is spreading very quickly, especially in the digital age, retailers should continuously work on delivering superior experience that would naturally support consumers to word-of-mouth. Referral programs and incentives can also serve as a supportive technique.

Retailers must be attentive to the fact that, in the meantime, pure online retailers have built a satisfactory level of associated awareness especially in bigger cities. Multichannel retailers, thus cannot rely that in long run their brand will help them over the battle of pure online retailers. There is also a trend of a movement from online to offline channel as demonstrated by the leading Czech online grocer that plans to expand its service to pick up stores and supply points, e.g. gas stations (Janíková & Mikulka, 2017). By doing that, they are supporting their brand equity and in fact attract those customers who were till now hesitant to grocery delivery. In this way, they compensate for their disadvantage of not having physical stores. This only supports the fact that the lines between offline and online are blurring (Nielsen, 2015).

8.2 Limitation and Future Research

This study has a several limitations. First, this study employed an online survey that has been distributed over social media by using convenience sampling and snow ball technique. As such, there is a certain potential of sample bias, as for instance respondent below 35 were overrepresented in the sample. Note, that the disadvantages of non-probability sampling together with thorough and critical assessment of reliability, validity and sample bias were vastly clarified in *Section 2.5.* To recall issues of generalizability, the results of this study are best applicable to grocery consumers who exhibit the characteristics of the sample and to those who are likely to answer a survey conducted in a similar manner, i.e. with same distribution technique (Wang et al., 2012).

Secondly, this study examined consumers online purchase intentions toward grocery retailers. Although it is believed that intentions are antecedents of actual purchase, online shopping patterns may eventually lead to different results (Hansen, 2008). It's important to note, that this study applied a cross-sectional design, at a particularly given time. Behaviour discrepancies may occur due to developments and changes along the way, for instance consumer characteristics, internet characteristics or situational factors etc. (Hansen, 2008). Furthermore, consumer attitudes and perceptions towards the brands may be influenced by satisfaction throughout the time and so the cross-sectional design of this study cannot reflect the dynamic relationship between retailer equity and online extensions (Ahn & Park, 2006). Furthermore, in real marketplace conditions, consumers attitudes toward the extension are sensitive to competitor activity, information sources & retailer exact decisions (Czellar, 2003). For instance, the influence of close relatives may be assumed to have a potential on an online adoption too, as the significant differences between two consumer segments - with and without online grocery experience - were found. Accordingly, continuous search for an understanding of aspects influencing consumer perception and attitude towards multichannel retailers are needed. The *Section 3.5* named additional potential consumer related factors, which may serve as a source for attention in future research.

This study has applied a measurement of Retail brand equity based on Aaker´s brand equity conceptualization, using scales defined for measurement of retail brand equity proposed by Pappu & Quester (2006a). These scales have been extended by organizational and value perception associations that were anticipated to be suitable for the research context. However, unlike the brand equity research, there is yet not enough studies concerning retail brand equity that would offers enough guidelines in this respect. It was presumed that all proposed associations will lead to a complete association component, as also tested by Pappu & Quester (2006a) research, however, this was not obtained. Two separate factors were confirmed, value associations and Pappu & Quester scale associations related to in-store image. This was assumed to be reasonable, as Rashmi et al. (2016) or Arnett et al. (2003) have proposed to study associations as a subdimension rather than as one single concept. Although factor analysis proved the strength of the value association concept and so did the internal consistency, three items scale statements would be more satisfactory.

Although scales from Pappu & Quester are claimed to be general enough, the author believes that there is still room for more research in this area. This dimension asks for more validated scales that specifically match certain associations. For instance, in this study, organizational

associations were measured in terms of general likeness and trust, as measured for instance by Buil et al. (2008) or proposed by Aaker (1996), however, Rashmi (2016) relate organisational associations to the retail chain's corporate identity, which customers can learn from a retailer´s community involvement and other corporate social responsibility activities. Hence, consistent operationalization of diverse associations again leaves a room for more research in the area.

The study is related to one concrete market, thus results in different markets may vary. As the contextual background suggested, good price/quality ratio were highly relevant to the Czech grocery market, yet they may not necessarily apply to the rest of the European countries, where the grocery market is not so dense, the approach towards promotions is rather different or purchasing power of consumers is stronger. Future studies may also attempt to apply cross-cultural analyses to deepen the understanding of the role of retail brand equity on multichannel grocery adoption. The results of this study may not reflect other industry sectors, for instance value associations may be less imperative elsewhere. It may be also assumed that retailer brand equity may have higher importance on less developed online grocery markets or on markets where uncertainty towards online grocery shopping exists. Perceived risk was often a factor in brand extension studies, and thus the level of uncertainty avoidance of a particular country may for instance be a factor that is worth to examine along with brand equity.

Only assisted awareness was measured in this study, as this approach is common for new brand. Yet, awareness levels can often be affected intensely by cueing symbols and visual images. Therefore, for further studies it might be useful to move beyond retail name awareness to awareness of the symbols and visual imagery (Aaker, 1996).

Lastly, note that this study has examined consumer purchase intentions from brand perspective. However, technological standpoint that recognizes that consumer acceptance may be impeded by technology-based factors should not be omitted. Even if a retailer is a preferred destination for consumers in the offline environment and online purchase intentions suggest the same for online, technical limitation connected to e-commerce website, such as slow transmission connection, poor quality of merchandise presentation, may obstruct initial intentions. Hence, it is necessary to consider the potential value adoption from consumer perspective (Jarvenpa & Todd, 1996).

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Appendix

Questionnaire (Czech version)

Vážení respondenti,

Jsem studentkou Mezinárodního marketingu na Aalborg univerzitě v Dánsku a tento průzkum je součástí mé diplomové práce. Průzkum zkoumá vnímání a postoje spotřebitelů k nákupu potravin skrze internet u českých (on-line) obchodníků s potravinami.

Vyplnění dotazníku vám zabere maximálně 10 minut. Vaše odpovědi zůstanou anonymní a bude s nimi zacházeno s maximální důvěrností. Všechny shromážděné informace budou zkoumány pouze na agregované úrovni.

Poznámka:

Připomínám, že pod pojmem potraviny se rozumí **všechny produkty denní spotřeby**, které se týkají **potravin** a **nepotravinářských výrobků**, které lze zakoupit v tradičních supermarketech, hypermarketech nebo prodejnách diskontů. To znamená:

- ✓ Potraviny a nápoje
- ✓ Péče o domácnost (čisticí prostředky, úklidové potřeby, toaletní papír apod.)
- ✓ Drogerie a kosmetika (péče o ústní dutinu, péče pleť, péče tělo apod.)
- ✓ Péče o kojence (plenky, kojenecká výživa apod.)

Oceňuji Váš čas a děkuji za souhlas s účastí v tomto průzkumu.

A: Vyberte si prosím jednoho z prodejců z níže uvedeného seznamu, u kterého jste nedávno uskutečnili svůj nákup a kterého dobře znáte. Uchovejte jméno prodejce ve vaší mysli. Následující otázky se budou týkat tohoto prodejce.

Vyberte si jednoho z následujících prodejců: Albert, Billa, Globus, Kaufland, Lidl, Tesco.

DIS: Jak daleko je od Vás vzdálený tento prodejce?

a) Do 10 min
b) Do 20 min
c) Do 30 min a více

Zhodnoťte prosím, do jaké míry souhlasíte s uvedenými výroky
(1 = zcela souhlasím 2 = souhlasím 3 = neutrální 4 = nesouhlasím 5 = zcela nesouhlasím)

ASS1: Vybraného prodejce mám rád
ASS2: Vybranému prodejci věřím
ASS3: Vybraný prodejce nabízí dobrý poměr kvality a ceny
ASS4: Zboží u vybraného prodejce považuji za výhodné
ASS5: Vybraný prodejce nabízí velmi dobrou atmosféru na prodejnách
ASS6: Vybraný prodejce nabízí velmi výhodné vybavení.

ASS7: Vybraný prodejce nabízí velmi dobré služby zákazníkům.
ASS8: Vybraný prodejce nabízí velmi dobrou paletu produktů.
ASS9: Vybraný prodejce nabízí velmi dobré servisní služby.

Q1: Vybraný prodejce nabízí produkty velmi dobré kvality.
Q2: Vybraný prodejce nabízí produkty s konzistentní kvalitou.
Q3: Vybraný prodejce nabízí velmi spolehlivé produkty.

LOY1 Považuji se za loajální vůči vybranému prodejci.
LOY2 Pro nákup potravin je vybraný prodejce má první volba.
LOY3 Nenakupuju potraviny od jiných prodejců, pokud mohu koupit stejné položky u vybraného prodejce.

B: Následující otázka se týká nakupování online u Vámi vybraného prodejce. Pokud Váš vybraný prodejce nenabízí online nakupováni potravin, představte si hypoteticky, že by prodejce spustil možnost online nákupu. Zhodnoťte prosím, do jaké míry souhlasíte s uvedenými výroky:
(1 = zcela souhlasím 2 = souhlasím 3 = neutrální 4 = nesouhlasím 5 = zcela nesouhlasím)

ONT1. Vybraný prodejce jedná/by jednal v mém nejlepším zájmu (například dbal na mé blaho, když si od něj koupím potraviny)
ONT2. Vybraný prodejce zachovává/ by zachoval své závazky vůči mně (například plnil záruky vrácení peněz a další prodejní politiky apod.).
ONT3. Vybraný prodejce je schopný/by byl schopen splnit většinu mých potřeb jako zákazníka (například v případě potřeby provést příslušné změny u mých online objednávek atd.).

Nákup potravin online u vybraného prodejce je / by byl
AT1: Chytrý / pošetilý
AT2: žádoucí / nežádoucí
AT3: Dobrý nápad / Špatný nápad

INT1: Jsem / byl bych ochotný / byla bych ochotná nakupovat potraviny online u vybraného prodejce
INT2: Kdybych chtěl/chtěla nakupovat potraviny online, zvážil/a bych použití vybraného prodejce

---

C: Nyní prosím vyplňte zbývající otázky

AW: Označte prosím všechny online prodejce potravin, o kterých jste slyšeli? *

- o Rohlik
- o Kolonial
- o Kosik
- o Plnataska
- o Potravinydomu
- o Žádný
- o Jiný: ____

Zhodnoťte prosím, do jaké míry souhlasíte s uvedenými výroky.
(1 = zcela souhlasím 2 = souhlasím 3 = neutrální 4 = nesouhlasím 5 = zcela nesouhlasím)

CINT1 Jsem ochoten nakupovat potraviny od jednoho z prezentovaných online prodejců
CINT2 Kdybych chtěl/a koupit potraviny online, uvažoval/a bych o použití jednoho z výše uvedených online obchodů.

D: Zhodnoťte prosím, do jaké míry souhlasíte s uvedenými výroky.
(1 = zcela souhlasím 2 = souhlasím 3 = neutrální 4 = nesouhlasím 5 = zcela nesouhlasím)

BEN1: Díky nákupu potravin online, mohu nakupovat kdykoliv chci
BEN2: Nakup potravin online mi ušetří námahu s návštěvou tradičních obchodu
BEN3: Nákupem potravin online se mohu vyhnout potížím
BEN4: Díky nákupu potravin online nemusím čekat ve frontě na zaplacení

COM1: Online nakupování potravin je složité, protože nemohu vidět a ohmatat výrobky
COM2: Je těžké najít potřebné produkty při nákupu potravin přes internet
COM43: Objednat potraviny online je obtížné
COM4: Online nakupování potravin je obecně velmi složité

SN1: Většina lidí, kteří jsou pro mě důležití, by si mysleli, že je v pořádku nakupovat potraviny online
SN2: Většina lidí, kteří jsou pro mě důležití, nakupují online potraviny

E1: Už jste někdy nakoupili cokoli na internetu?

- Ano
- Ne

E2: Už jste někdy nakupovaly potraviny dostupné v tradičním supermarketu na internetu?

- Ano
- Ne

E. Nakonec, prosím o sdělení některých osobních informací:

D1: Jaké je Vaše pohlaví?

- Žena
- Muž

D2: Uveďte prosím svůj věk_____

D3: Jaký je váš současný stav?

- Student
- Zaměstnaný
- Samostatně výdělečně činný
- Na mateřské dovolené
- V důchodu
- Nezaměstnaný

D4: Kolik lidí žije ve vaší domácnosti

- Bydlím sám/a
- 2
- 3
- 4 a více

D5: Které z následujících údajů nejlépe vystihuje místo, v němž žijete/bydlíte? *

- Metropole (více než 1 000 000 obyvatel)
- Velkoměsto (100 000 – 1 000 000 obyvatel)
- Město (5 000 – 100 000 obyvatel)
- Obec (méně než 5 000 obyvatel)

Děkuji za Vaši účast.

Appendix B: Questionnaire (English version)

Dear respondent,

I am a student of International Marketing at Aalborg university in Denmark and this survey is part of my Master thesis. This survey examines the consumer perception and attitudes towards online grocery purchasing at Czech (online) grocery retailers.

The completion of this survey should take approximately up to 10 minutes. Your answers will remain anonymous and will be treated with the utmost confidentiality. All collected answers will be examined on aggregate level only.

Note:
Please be reminded that under the term groceries one can understand **all food** and **non-food related daily used items** that may be purchased at traditional supermarkets, hypermarkets or discounter stores. This means categories including:

- ✓ Food and beverages
- ✓ Home care (detergents, cleanskin goods, toilet paper etc.)
- ✓ Drugstore and cosmetics (Oral care, skin care, body care)
- ✓ Infant care (nappies, baby food)
- ✓ Pet care etc.

I appreciate your time and thank you for agreeing to take part in this survey

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A: Please select one of the retailer from the below list where you have shopped recently and that you are familiar with. Keep the name of the retailer in your mind. You will be then presented with several statements related to that retailer.

Choose from the following retailers: Albert, Billa, Globus, Kaufland, Lidl, Penny Market, Tesco,

Please state the level of your agreement with the following the statements.
(1= strongly agree 2=agree 3=neutral 4=disagree 5=strongly disagree)

ASS1: I like the selected retailer
ASS2: I trust the selected retailer
ASS3: Merchandise at selected retailer stores are of a good value for money
ASS4: I would consider the merchandise at selected retailer stores to be a good buy.
ASS5 Selected retailer offers very good store atmosphere.
ASS6 Selected retailer offers very convenient facilities.
ASS7 Selected retailer offers very good customer service.
ASS8 Selected retailer stores offer very good variety of products.
ASS9 Selected retailer offers very good after sales service.

Q1 Selected retailer offers products of very good quality.
Q2 Selected retailer offers products of consistent quality.
Q3 Selected retailer offers very reliable products.

LOY1 I consider myself to be loyal to selected retailer stores.
LOY2 When buying groceries, selected retailer stores are my first choice.
LOY3 I will not buy groceries from other retailers, if I can buy the same item at selected retailer

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B: The following question relates to online shopping at your selected retailer. If your selected retailer does not offer online grocery option, please imagine hypothetically that the retailer would launch the online delivery option. Please state the level of your agreement with the following the statements. (1= strongly agree 2=agree 3=neutral 4=disagree 5=strongly disagree)

TR1: Selected retailer would act/acts in my best interest (i.e., look out for my welfare when I purchase groceries from it)
TR2: Selected retailer would keep/keeps its commitments to me (i.e., fulfil money-back guarantees and other sales policies, etc.)
TR3: Selected retailer would have/has the ability to meet most of my needs as a customer (i.e., make appropriate changes to my online orders when necessary, etc.)

Online grocery shopping at selected retailer is/would be:
AT1: Good idea/Bad idea
AT2: Wise/Foolish
AT3: Desirable/Undesirable

INT1 I am/would be willing to purchase groceries at [selected retailer] online store
INT2 If I were going to purchase groceries online, I am/would consider using [selected retailer]

C: Now, please fill in the remaining questions

AW: Please mark all online grocery retailers that have you heard of? *

- Rohlik
- Kolonial
- Kosik
- Plnataska
- Potravinydomu
- None
- Other: ___

Please state the level of your agreement with the following statements.
(1= strongly agree 2=agree 3=neutral 4=disagree 5=strongly disagree)

CINT1 I am willing to purchase groceries from one of the presented online retailers.
CINT2 If I were going to purchase groceries online, I am/would consider using one of the above online retailers.

Please state the level of your agreement with the following the statements.
(1= strongly agree 2=agree 3=neutral 4=disagree 5=strongly disagree)

BEN1: Shopping groceries online I can shop whenever I want
BEN2: Buying groceries online can save me the effort of visiting traditional stores
BEN3: Buying groceries online I can avoid hassle
BEN4: Buying groceries online I do not have to wait to be wait in queue for paying'

COM1: Online shopping of groceries is/would be complex because I cannot see and feel the products
COM2: Online shopping of groceries is/would be in general very complex
COM3: It is/would be hard to find the needed products when shopping groceries via the internet
COM4: With online shopping of groceries it is/would be difficult to order products

SN1: Most people who are important to me would think that it is fine to purchase groceries online
SN2: Most people who are important purchase groceries online

E1: Have you ever bought anything on the internet?

- Yes
- No

E2: Have you ever bought groceries available at traditional supermarket stores on the internet?

- Yes
- No

E: Lastly, please share some details about you:

D1: Please select your gender

- Female
- Male

D2: Please state your age __

D3: What is your current status?

- Studying
- Working
- Self-employed
- On maternity leave
- Retired
- Unemployed

D4: How many people live in your household?

- I live alone
- 2
- 3
- 4 and more

D5: Which of the following best describes the type of settlement in which you reside? *

- Metropolitan City (over 1 million residents)
- City (100,000- 1 million residents)
- Town (between 5,000 -100,000 residents)
- Village (under 5,000 residents)

Thank you for your participation.