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Understanding the Antecedents for Business Model Innovation

A Case Study on the U.S. Grocery Retail Market

by

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Abstract

The primary purpose with this study is to explain how different external factors act as antecedents for business model innovation in relation to the building blocks of a business model. Furthermore the study was conducted with an abductive approach using a qualitative case study of the U.S. grocery retail market, with three sub-cases consisting of firms within the industry. The analysis followed a process with two steps. Firstly, business model changes were identified using a predefined framework. Secondly, the changes were linked to external factors using triangulation of three different primary sources. Moreover, the study has its foundation in Business Model Innovation as theoretical perspective. The findings in the study are based on three different primary sources: (1) interviews with thirteen industry experts, (2) annual reports from three retailers from year 2005 to 2016 and (3) several industry reports published between 2005 and 2018. The findings show that external factors play an important role in relation to business model innovation. Furthermore the study also shows that the relationship between different building blocks have certain types of relationships to different external factors.

Keywords: Business Model, Business Model Innovation, Business Model Building Blocks, External Factors, U.S. Grocery Retail Industry, Antecedents.

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1 INTRODUCTION

1.1 Background

1.1.1 Industry Background

The grocery retail industry of the United States is the largest in the world and is expected to generate a revenue of US$ 660 000 million in 2018 (Statista, 2018), which makes it an important industry for most of the world. The traditional grocery retail industry consisted of supermarkets but the number of formats for selling food in the last 30 years have increased and today the market is both fragmented as a whole but also rather consolidated in amongst the largest players (Euromonitor, 2018). The way to sell and buy food has long been through brick and mortar stores and it is still the largest channel for groceries (Statista, 2018). However, in the recent years competition from non traditional players have caused turbulence in the discussion surrounding gricery retail, especially as Amazon in 2017 acquired the brick and mortar grocery retailer Whole Foods and distinctly signaled their plans to enter the grocery space (Bloomberg, 2017). Important to notice though is that the turbulence is within the discussion rather than in the actual retail space. Amazon has disrupted retail in many areas but the online space for grocery retail is still only fraction of the market and the physical retail space stills seems incredibly important (Euromonitor, 2018). Albeit, the online market is growing at a fast pace so even though the physical space might not disappear, online grocery are predicted to become a very important channel as well (Statista, 2018).

Regardless of online, the retail industry is characterized by a very competitive environment where low margins and switching costs make it a challenging business to be in. New competitors and formats enter the space but in the same time the big established retailers have never been as big and powerful as today. So for some reason they seem to have been able to combat the changing environment and stay relevant, at least up until today.

1.1.2 Theoretical Background

New information technology enables easier and cheaper transactions and collaborations among actors on a market, this comes with the consequence that industry boundaries becomes more and more blurred, which leads to a problem defining an industry (Osterwalder, Pigneur and Tucci, 2005; Tapscott et al., 2000; Amit and Zott 2001). This has made the “industry” as a unit of analysis difficult to use and instead an increasing amount of literature on the business model concept has been growing, with the focal starting point of a firm and its related network (Osterwalder et al., 2005; DaSilva and Trkman, 2014; Sorescu et al. 2011). Research on the evolution of business models can be categorized into two separate approaches as explained by Demil and Lecoq (2010): One static approach that describe the business model as non-reflexive (George and Bock, 2011), and one transformational approach that suggest that a business model needs constant refinements (Demil and Lecocq, 2010). As part of the latter approach innovating one’s business model is argued to be a crucial ability for achieving a sustainable competitive advantage (Trimi and Berbegal-Mirabent, 2012; Teece, 2010; Chesbrough and Rosenbloom, 2002)

Furthermore, the ability to innovate one's business model has been concluded to be a important for achieving high firm performance (Hamel and Välikangas, 2003; Pohle and Chapman, 2006; Mitchell and Cole, 2003; Zott and Amit, 2007). Subsequently, research has been conducted in order to understand what is needed, and how to achieve business model innovation in firms (Berglund and Sandström, 2013; Girotra and Netessine, 2013; Chesbrough, 2010; Osterwalder et al., 2005; Doz and Kosonen, 2010) However, research on business models and business model innovation are two relatively novel areas of research (Osterwalder et al, 2005; Wirtz et al., 2016), and they lack clear definitions as well as a strong theoretical base (Foss and Saebi, 2017; O’Connor and Yamin, 2011; Morris et al., 2005; Zott et al., 2011). Due to this, much remains to be discovered in terms of antecedents, consequences and various other angles of the concept of business model innovation (Sorescu et al., 2014).

1.2 Research Problem

The importance of business model innovation has been concluded to be strong (Hamel and Välikangas, 2003; Pohle and Chapman, 2006; Mitchell and Cole, 2003; Zott and Amit, 2007). However, in regards to what affects business model innovation, the limited amount of research on the topic have suggested that both internal as well as external factors influence business model innovation (Sorescu et al., 2011; Demil and Lecocq, 2010; Osterwalder and Pigneur, 2010; De Reuver, Bouwman and MacInnes, 2009). Primarily external factors have been pointed out as drivers and technology has been suggested a one of the more significant factors (Reuver et al., 2009). However, there has not been much discourse about how different external factors influence business model innovation and in what part of the business model the innovation occurs. This is surprising, especially since Teece (2010) propose that a process for successful business model innovation includes evaluating each element of a business model and relate it to factors in the environment. One could argue that in order to do this successfully one would need an understanding for how these two parts relate to each other. Moreover, most early literature has focused on business models related to e-business and there is less research on traditional brick and mortar companies (Zott, Amit and Massa, 2011), furthermore Sorescu et al., (2011) describe the research within retail that is related to business model innovation as "deficient". In conclusion the understanding for antecedents for business model innovation and the theoretical foundation of the field remains in discussion and research call for further elaboration on the topic (Morris, Schindehutte and Allen, 2005; Sorescu et al., 2011). Consequently our research question is: *How do different external factors act as antecedents for business model innovation in relation to the building blocks of a business model?*

1.3 Research Purpose

We build on the findings of (Sorescu et al., 2011; Demil and Lecocq, 2010; Osterwalder and Pigneur, 2010; De Reuver, Bouwman and MacInnes, 2009) that external factors affect business model innovation. By analyzing different changes in the building blocks in business models of three large retailers in relation to categorized external factors, during a period from year 2005 to 2017, we will be able to draw conclusions about business model innovation in a novel way. In regards to this our contribution of this study is twofold. Firstly, a theoretical contribution as we react on the request from various scholars (Sorescu et al., 2011; Morris, Schindehutte and Allen, 2005) to increase the understanding of antecedents in relation to business model innovation. Secondly, we also make a managerial contribution by providing insight to decision-makers on the dynamics of changes in the external environment that give rise to different kinds of business model innovation in the retail industry.

1.4 Research Limitations

Since our study was conducted over a time period of ten weeks we have been restricted in terms of a feasible scope of the study. To begin with the three sub-cases were all related to the grocery retail industry and as is discussed in the method section, case studies have been criticized for the lack of generalizability (Eisenhardt and Graebner, 2007), therefore the generalizability of this study to other retail sectors can be questioned. We may however reasonably assume that many of the found characteristics apply to other retail companies as well. Furthermore the sub-cases we used are all listed companies of considerable size related to the grocery retail industry. On the one hand the generalizability to minor private companies could be questioned, on the other hand we argue that the pros of having all listed companies and as a consequence access to important information that would be difficult to get in a small private firm contributed to the quality of the paper. Our research is also limited in terms of the ability to theoretically explain the full process between the external force and the business model change. In order to fully explain this process of how an external force are affected by other aspects before it reaches a company, it would require different theoretical angles and that is simply out of the scope for this research. With that said we have been able to identify different external forces and analyze how different business model building blocks change as a response when it has reached the company, but the process in between is not the focal point of this study.

1.5 Outline of the Thesis

The following chapters will proceed as follows: The second chapter will provide a literature review of the field of business model research where we examine definitions and discuss the existing literature, focus of existing research and the position of business models in within the strategy field. Following this we perform an extensive literature review on the related field of business model innovation, where we go through research of definitions, drivers and enablers for business model innovation. We put effort into understanding the major themes as well as the gaps and uncertainties that surround the field. The chapters end with a conceptualization of our theoretical framework. The third chapter describes and discusses our methodological approach to give a complete understanding for the strengths and weaknesses of the study other than the research limitations. The fourth chapter present the empirical data from 26 industry reports, 13 interviews, and 36 annual reports. Chapter five analyzes and discusses the findings in accordance with existing literature. Chapter six concludes the study by highlighting the theoretical and practical implications as well as gives suggestions for further research.

2 LITERATURE REVIEW

The following contains an extensive literature review of the research relevant for our study. We first go through the concept and definition of business models and different way to work with the concept. This is followed by an in depth review within the field of business model innovation where we examine different definitions as well as research on enablers and drivers for business model innovation.

2.1 Business Models

2.1.1 The Concept of Business Models

In 1957 Bellman et al. were the first to use the term "business model" in a scientific paper and in 1960 it was used in the title of a paper for the first time (Nenonen and Storbacka, 2017). However, it was not until the 1990s that the term reached a widespread usage among researchers (Osterwalder et al., 2005; DaSilva and Trkman, 2014). In the beginning the business model concept was mainly used as an operative plan for information system. But, subsequently, as the technological development advanced and with the establishment of e-commerce, the concept gained greater significance when management started to use it to support decision-making since it could offer an integrated presentation of the company organization (Wirtz, 2015, Demil and Lecocq; DaSilva and Trkman, 2014).

In order to understand and explain the complexity of the term business model it could be argued that it is important to combine both a resource-based view (RBV) and a transaction cost economics perspective (TCE) (DaSilva and Trkman, 2014). It is common to use a RBV perspective, which focus on internal resources and capabilities (Barney, 1991), to explain a business model (DaSilva and Trkman, 2014). For example is IKEA's business model described by Hedman and Kalling (2003) trough its resources such as design skills, supplier relations and sourcing networks. The reason why the TCE-perspective is important to add to this is because resources alone have no value (Chesbrough, 2007) but need transactions in order to create value (DaSilva and Trkman, 2014). Furthermore, DaSilva and Trkman (2014) define the term business model as "a combination of resources which through transactions generate value for the company and its customers".

The business model concept and the relation to transaction cost economies could explain its relationship to technology (Osterwalder et al., 2005). With the rise of the information technology, the cost of coordination and transactions fell significantly (Tapscott, Ticoll, Lowy, 2000; Amit and Zott 2001). This enabled companies to work in value webs, which changed the firm boundaries as well as blurred many industry boundaries and had the effect that the business model concept became increasingly important as a unit of analysis instead of looking at an industry (Osterwalder et al., 2005).

2.1.2 Definitions of a Business Model

The term business model does not yet have clear and fully determined definition among researchers (Trimi and Berbegal-Mirabent, 2012). According to Porter (2001) a definition for the business model is "murky" at best, and Zott et al. (2011, p. 23) conclude, "…scholars do not agree on what a business model is". Furthermore, DaSilva and Trkman, (2014) state that "no consensus regarding its meaning has been established". Table 1 gives an overview of different definitions of the term "business model".

Table 1: *Selected definitions of business model (ordered chronologically)*

Authors	Definitions
Amit and Zott (2001)	"A business model depicts the design of transaction content, structure, and governance so as to create value through the exploitation of business opportunities."
Chesbrough and Rosenbloom (2002)	"The business model provides a coherent framework that takes technological characteristics and potentials as inputs, and converts them through customers and markets into economic outputs. The business model is thus conceived as a focusing device that mediates between technology development and economic value creation."
Osterwalder, Pigneur and Tucci	"A business model is a conceptual tool containing a set of objects,

(2005)	concepts and their relationships with the objective to express the business logic of a specific firm. Therefore, we must consider which concepts and relationships allow a simplified description and representation of what value is provided to customers, how this is done and with which financial consequences.”
Chesbrough (2007)	“It defines a series of activities, from procuring raw materials to satisfying the final consumer, which will yield a new product or service in such a way that there is net value created throughout the various activities.”
Demil and Lecocq (2010)	“the description of the articulation between different BM components or ‘building blocks’ to produce a proposition that can generate value for consumers and thus for the organization”
Doz and Kosonen (2010)	“business models stand as cognitive structures providing a theory of how to set boundaries to the firm, of how to create value, and how to organise its internal structure and governance”
Osterwalder and Pigneur (2010)	“A business model describes the rationale of how an organization creates, delivers, and captures value”
Teece (2010)	“a business model defines how the enterprise creates and delivers value to customers, and then converts payments received to profits”
Zott and Amit (2010)	“business model as a system of interdependent activities that transcends the focal firm and spans its boundaries”
George and Bock (2011)	“A business model is the design of organizational structures to enact a commercial opportunity.”
Sorescu et al., (2011)	“A business model is a well-specified system of interdependent structures, activities, and processes that serves as a firm’s organizing logic for value creation (for its customers) and value appropriation (for itself and its partners)”.

Furthermore it could be argued that it is necessary to distinguish between business model and business strategy since they are often misused and mistaken from each other’s (Chesbrough and Rosenbloom, 2002; DaSilva and Trkman, 2014). First of all, a business strategy focus on the relationship between the company and the ecosystem it operates in (Pynnonen, Hallikas and Ritala, 2012; George and Bock, 2011). On the contrary a business model is considered to be the tool to implement the business strategy (Pynnonen, Hallikas and Ritala, 2012), similarly Casadesus-Masanell and Ricart (2010) conclude that strategy and business model are related and that the business model is a direct result of strategy, but is not itself strategy. Moreover, a business model is considered an instrument to exploit opportunities that arise for a particular company (George and Bock, 2011; Amit and Zott, 2001). In addition to this a change in business model often occurs more frequently than a change in strategy, this since almost all strategy changes also have the effect that the business model also needs to change, but a change in business model can more easily fit in the current strategy framework (Sorescu et al., 2011). In the Figure 1, DaSilva and Trkman, (2014) illustrate how they differentiate the terms “strategy” and “business model”.

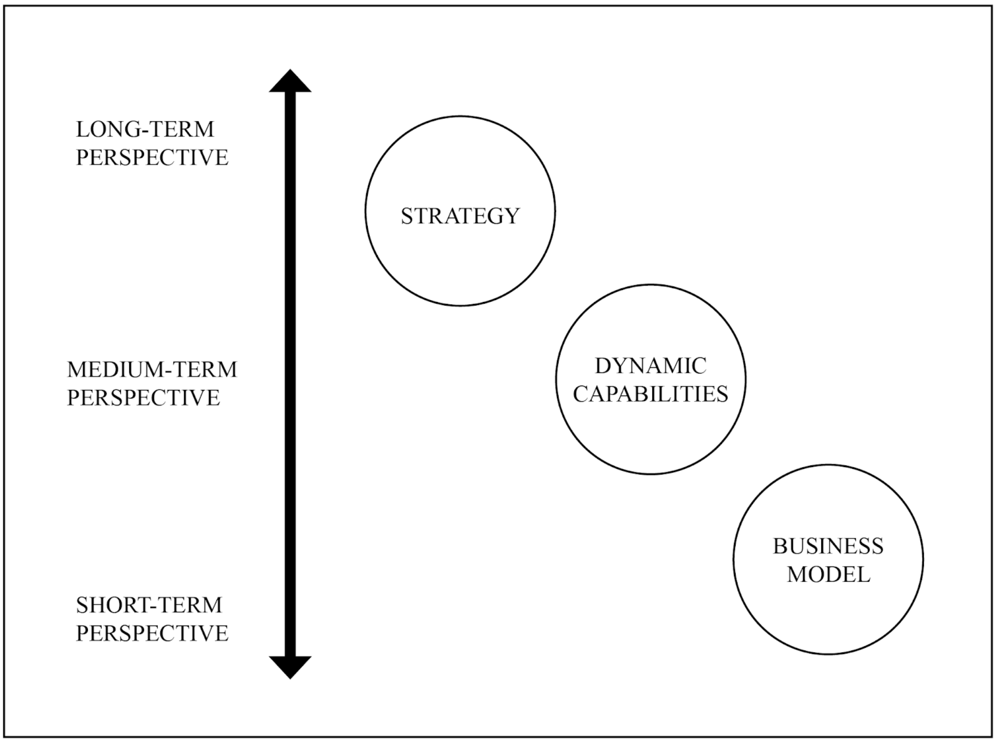

Figure 1: Generic Framework DaSilva and Trkman, (2014)

According to McGrath (2010) the practical use of a business model is to contribute to the analysis of companies in order to get a deeper insight in the firm’s activities. Moreover, the central thing with a business model is to commercialize a business idea in a way that enables the company to capture the highest possible value (Chesbrough, 2010; George and Bock, 2011; Teece, 2010; Zott, Amit and Massa, 2011). In addition to this, the ability to create a business model that ensure the best fit between value creation and value capturing can be argued to create a competitive advantage (Chesbrough and Rosenbloom, 2002; Chesbrough, 2007; Morris et al., 2005; Teece, 2010).

In Demil and Lecocq's (2010) research about business model evolution the authors present two different uses of the term business model, one static view and one transformational. The static approach, which focuses on the coherence between core components and by this the business model, helps managers describe how an organization's activities create value. George and Bock (2011) support this static view of the business model and argue, "a business model is inherently non-reflexive". One way to get an overview of a business model and its different components is with Osterwalder's (2004) well-known business model canvas ontology (Spieth, Schneckenberg and Ricart, 2014). Osterwalder and Pigneur (2010) state that it is "a tool for describing, analysing and designing business models".

2.1.3 The Business Model Canvas

The canvas consist of nine building blocks that together form the business model and covers the four fundamental areas of a company, which are; customer, offer, infrastructure and financials availability. The nine building blocks are; customer segments, value proposition, channels, customer relationship, revenue streams, key resources, key activities, key partnerships and cost structure (Osterwalder and Pigneur, 2010).

Building Block 1: Customer Segments
"The Customer Segments Building Block defines the different groups of people or organizations an enterprise aims to reach and serve" (Osterwalder and Pigneur, 2010, p. 20). Furthermore according to Osterwalder and Pigneur 2010 the business model can serve a single or several customer segments and customer groups represent different segments if: (1) their needs require and justify a distinct offer, (2) they are reached through different Distribution Channels, (3) they require different types of relationships, (4) they have substantially different profitabilities and (5) they are willing to pay for different aspects of the offer.

Building Block 2: Value Proposition

”The Value Proposition Building Block describes the bundle of products and services that create value for a specific Customer Segment.” (Osterwalder and Pigneur, 2010, p. 22). According to Osterwalder and Pigneur (2010) this is what differs between companies and give the customer a reason to choose a particular company over another. Furthermore, some value propositions are new and disruptive and others similar to already existing offers with added features and attributes.

There are different ways you can create value for a customer by; (1) satisfying new needs, (2) improving performance of a product or service, (3) customize the offer to a specific customer’s need, (4) offering a superior design, (5) the message a brand brings with it, (6) offering a solution to a lower price, (7) helping the customer save money, (8) reduce risk, (9) making an offer available to new segments and (10) making a something more convenient to use or consume (Osterwalder and Pigneur, (2010).

Building Block 3: Channels

“The Channels Building Block describes how a company communicates with and reaches its Customer Segments to deliver a Value Proposition” (Osterwalder and Pigneur, 2010, p. 26). According to Osterwalder and Pigneur (2010) the channel building block includes the different ways the company interact with their customers during the entire purchase and consuming process: (1) raising awareness of the offerings, (2) letting them evaluate the value proposition, (3) allowing the customer to purchase a specific product or service, (4) delivering the service and (5) post-purchase support (Osterwalder and Pigneur, (2010).

Building Block 4: Customer Relationship

“The Customer Relationships Building Block describes the types of relationships a company establishes with specific Customer Segments” (Osterwalder and Pigneur, 2010, p. 28). Osterwalder and Pigneur discuss several different ways to work with customer relationship that may co-exist: (1) personal assistance through human interaction, (2) dedicated personal assistance through specific customer representatives, (3) self-service by providing tools for customer to help themselves, (4) automated services that give personalized service through data information about the customer, (5) creating communities for the customers related to the services and products provided by the company and (6) co-create value together with customers.

Building Block 5: Revenue Stream

”The Revenue Streams Building Block represents the cash a company generates from each Customer Segment” (Osterwalder and Pigneur, 2010, p. 32). Osterwalder and Pigneur (2010) present several ways to generate revenues: (1) selling the ownership right of a physical product, (2) taking a fee to use an offered service, (3) subscription fee, (4) lending or leasing the right to a product for a determined time, (5) taking a licensing fee for the right to use an intellectual protected property.

Building Block 6: Key Resources

”The Key Resources Building Block describes the most important assets required to make a business model work” (Osterwalder and Pigneur, 2010, p. 34). According to Osterwalder and Pigneur (2010) the resources are what enable the company to create a value proposition, maintain relationship with customer segments and earn revenues. Furthermore they present different categories of resources: (1) physical assets, (2) intellectual resources, (3) human resources and (4) financial resources.

Building Block 7: Key Activities

”The Key Activities Building Block describes the most important things a company must do to make its business model work” (Osterwalder and Pigneur, 2010 p.35). The key activities can be categorized in three different ways according to Osterwalder and Pigneur (2010): by (1) solving a problem for the customer, (2) production of a superior product and (3) if the key resources are dominated by a platform the key activities will be related to manage that platform.

Building Block 8: Key Partnership

“The Key Partnerships Building Block describes the network of suppliers and partners that make the business model work” (Osterwalder and Pigneur, 2010 p.38). Osterwalder and Pigneur (2010) discuss four different types of partnerships: (1) strategic alliance with a non-competitor, (2) cooperation with competitors, (3) joint ventures, and (4) build a relationship to suppliers to assure supplies.

Building Block 9: Cost Structure

"The Cost Structure describes all costs incurred to operate a business model" (Osterwalder and Pigneur, 2010 p.40). Osterwalder and Pigneur (2010) argue that there are two important classes of cost structures and that companies often operate somewhere in the spectra between the two extremes: cost-driven, which means you aim to reduce cost wherever possible and value-driven, which means you focus more on maximizing value creation and less concern related to cost. They discuss four aspects that can change the cost structure: (1) economies of scale, (2) economies of scale, (3) fixed cost and (4) variable cost.

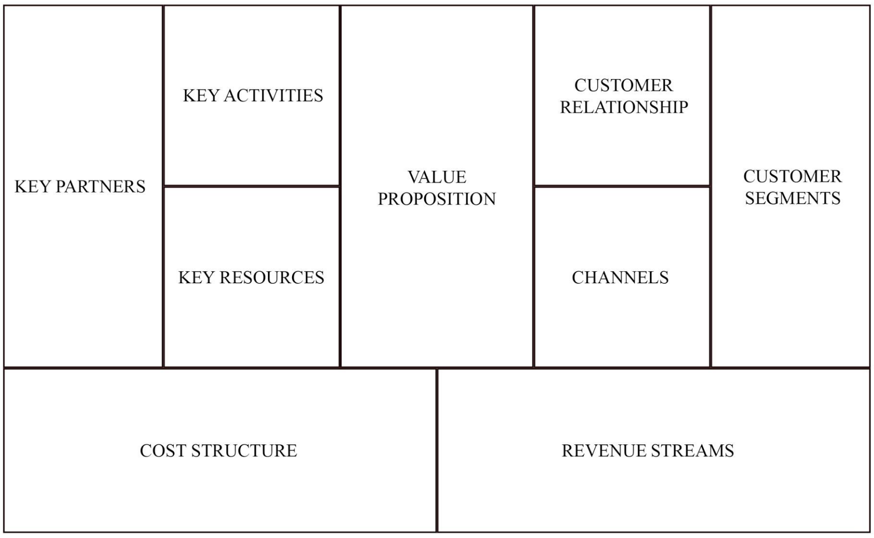

Figure 2: *Business Model Canvas (Osterwalder and Pigneur, 2010)*

2.2 Business Model Innovation

In contrast to the static view however, the transformational approach focus on the business model as a tool to address change in the organization or the business model itself. Furthermore this approach suggest that a business model is not perfect from start but require progressive refinements in order to adapt to its environment (Demil and Lecocqs, 2010). Related to this view of the business model Teece (2010) argue that since a business model easily can be imitated, it needs to be updated and differentiated to enable a competitive advantage. This is a notion that is shared with other scholars that argue that in order to achieve a sustainable competitive advantage firms must strive to accomplish business model innovation (Trimi and Berbegal-Mirabent, 2012; Teece, 2010; Chesbrough and Rosenbloom, 2002).

2.2.1 Definition of Business Model Innovation

As the underlying concept of business models consists of many different definitions so does the concept of business model innovation (Foss and Saebi, 2017). Scholars give different suggestions to what defines business model innovation and it varies in different dimensions. One dimension is the degree or intensity of change as it ranges from modification of one or more elements in a business model (Sorescu et al., 2011; Abdelkafi et al., 2013; Frankenberger et al., 2013), or activities (Santos et al. 2009), to more drastic definitions such as replacements of business models (Mitchell and Coles, 2004; Johnson et al., 2008), discovering of fundamentally different business model in an existing business (Markides, 2006), or introduction of new business model (Berglund and Sandström, 2013). Furthermore, there is also a dimension of different foci for what is changed, where some evolve around the ongoing process of change in business models (Mitchell and Coles, 2004a; Bucherer et al., 2012), as well as defining it as the search for the firms logic (Khanagha, Volberda and Oshri, 2014) and consequently in addition many refer to it as novelty in the approach to generate new sources of profits from a firm's underlying assets (Gambardella and McGahan, 2010; Yunus et al., 2010; Casadesus-Masanell and Zhu, 2013; Frankenberger et al., 2013).

Table 2: *Selected definitions of business model innovation (ordered chronologically)*

Authors	Definitions
Mitchell and Coles (2004, p. 17)	"By business model innovation, we mean business model replacements that provide product or service offerings to customers and end users that were not previously available. We also refer to the process of developing these novel replacements as business model innovation."
Markides (2006, p.20)	"Business model innovation is the discovery of a fundamentally different business model in an existing business."
Santos et al., (2009, p.14)	"Business model innovation is a reconfiguration of activities in the existing business model of a firm that is new to the product service market in which the firm competes."

Gambardella and McGahan (2010, p.263)	"Business-model innovation occurs when a firm adopts a novel approach to commercializing its underlying assets."
Osterwalder and Pigneur (2010, p. 5)	"business model innovation is about creating value, for companies, customers, and society. It is about replacing outdated models"
Yunus et al., (2010, p. 312)	"Business model innovation is about generating new sources of profit by finding novel value proposition/value constellation combinations."
Sorescu et al., (2011, p. 7)	"As a change beyond current practice in one or more elements of a retailing business model (i.e., retailing format, activities, and governance) and their interdependencies, thereby modifying the retailer's organizing logic for value creation and appropriation."
Bucherer et al., (2012, p. 184)	"We define business model innovation as a process that deliberately changes the core elements of a firm and its business logic."
Abdelkafi et al., (2013 p. 13)	"A business model innovation happens when the company modifies or improves at least one of the value dimensions."
Berglund and Sandström (2013, p. 276)	"A BMI can thus be thought of as the introduction of a new business model aimed to create commercial value."
Frankenberger et al., (2013, p. 253)	"business model innovation can be defined as a novel way of how to create and capture value, which is achieved through a change of one or multiple components in the business model"
Casadesus-Masanell and Zhu (2013 p. 464)	"At root, business model innovation refers to the search for new logics of the firm and new ways to create and capture value for its stakeholders; it focuses primarily on finding new ways to generate revenues and define value propositions for customers, suppliers, and partners."
Khanagha et al., (2014 p. 324)	"Business model innovation activities can range from incremental changes in individual components of business models, extension of the existing business model, introduction of parallel business models, right through to disruption of the business model, which may potentially entail replacing the existing model with a fundamentally different one."

Khanagha et al., (2014, p.324) suggest a broad definition of the different degrees defining a business model innovation when stating that "Business model innovation activities can range from incremental changes in individual components of business models, extension of the existing business model, introduction of parallel business models, right through to disruption of the business model, which may potentially entail replacing the existing model with a fundamentally different one". Together with Frankenberger et al.'s (2013 p.253) comprehensive definition of business model innovation as "a novel way of how to create and capture value, which is achieved through a change of one or multiple components in the business model" these covers many of the dimensions and foci of definitions. Furthermore as our research is focused around retail also Sorescu et al.'s (2011) definition of business model innovation "as a change beyond current practice in one or more elements of a retailing business model (i.e., retailing format, activities, and governance) and their interdependencies, thereby modifying the retailer's organizing logic for value creation and appropriation" is of high relevance.

2.2.2 Enablers of Business Model Innovation

In order for firms to successfully accomplish business model innovation and gain a competitive advantage from it Teece (2010) suggest, in line with the resource-based view, that a business model should be non-imitable. In addition to this, others argue that the success of a business model is not a permanent fact due to the dynamics in the environment (Chesbrough, 2007a, 2010; Lindgardt et al., 2009), therefore business model innovation need to be an ongoing process (Mitchell and Coles, 2003; Osterwalder and Pigneur 2010), and the ability to reinvent the firm's business model is increasingly important in order to stay competitive (Hamel and Välikangas, 2003). As mentioned earlier the research of business model innovation does not rest on a particular theoretical foundation. However, the discourse about non-imitability and ongoing reinvention of business models relates a lot to the theoretical fields of the resource-based view and dynamic capabilities (Schneider and Spieth, 2013). The resource-based view highlight firm heterogeneity with referring to imitable, rare, valuable and non-substitutable resources as sources of competitive advantage (Barney, 1991; Wernerfelt, 1984; Teece, 1984). Following this, Morris et al. (2005) argue for a business model's possibility to mobilize and use the resources of a firm. Research on dynamic capabilities express the need for firms to innovate and renew themselves to stay competitive (Grant, 1996; Teece and Pisano, 1994; Dierickx and Cool, 1989; Schreyögg and Kliesch-

Eberl, 2007). The idea that firms need to find novel ways of combining resources and capabilities to stay competitive aligns well with the concept of business model innovation (Schneider and Spieth, 2013).

No matter where to position the research on business model innovation it has become an interesting topic of discussion for many researchers (Schneider and Spieth, 2013). In order to enable business model innovation Berglund and Sandström (2013) emphasize the open system perspective as a basis for designing a firm's business model. It favors involvement of externals and outsiders and opening up the process to the environment. Furthermore, in order to deal with business model innovation researchers have proposed different frameworks and tools (Girotra and Netessine, 2013; Chesbrough, 2010; Osterwalder, 2004; Doz and Kosonen, 2010). To elaborate on a few, Girotra and Netessine's (2013, p.1) four W-questions framework of "What decisions are made, When they are made, Who makes them, and Why they are made" is one example. They argue that if a firm can modify one of the W:s then a new business model could develop. Osterwalder's (2004) famous business model canvas, which is elaborated on above, that maps the business model as nine building blocks, can also function as a tool for enabling innovation in the components. Furthermore Doz and Kosonen's (2010) developed a tool for this purpose but with a focus more on the executive's ability to drive business model innovation. In spite of the existing tools and frameworks that exist, according to Chesbrough (2010) they are not enough and business model innovation is still hard to accomplish. He argues that in order to enable for business model innovation the organizational processes must also change and those are not depicted in the frameworks. To accomplish this, firms need to take more experimental approach to business models and also appoint leaders in charge of the changes that are required (Chesbrough, 2010). This perspective is shared with McGrath (2010) who argues for what he refers to as a discovery driven approach. Also Achtenhagen, Melin and Naldi (2013) came to many of the same conclusions as they describe their findings on what capabilities firms should have as "an orientation towards experimenting with and exploiting new business opportunities, a balanced use of resources, and achieving coherence between leadership, culture, and employee commitment"

In addition to the research carried out regarding the skills and capabilities needed for business model innovation, research has also been conducted on the actual process for business model innovation itself. Research that focus more on depicting the different stages of business model innovation and aiding managers in how to act in a particular stage of the process by providing frameworks and tools (Foss and Saebi, 2017). Demil and Lecocq (2010) as well as Mitchell and Coles (2003) have in their research on this topic portrayed the process of business model innovation as a continuing process of adaptation as a result of external changes. McGrath (2010) and Sosna, Trevinyo-Rodriguez and Velamuri (2010) brings a second characterization as they describe the process more like double-looped learning. Both approaches however agree on that it is an iterative process (Demil and Lecocq, 2010; Mitchell and Coles, 2003; McGrath, 2010; Sosna, et al., 2010).

Research seem to suggest that having an open approach to the surrounding environment as well as being open for experimenting with the current business model on allows for successful business model innovation (Berglund and Sandström, 2013; Chesbrough, 2010; Achtenhagen, Melin and Naldi, 2013). Furthermore, in addition to the useful skills and tools, the stages and process for business model innovation has also been researched and described in order to give managers better guiding on along the way (Foss and Saebi, 2017; Demil and Lecocq, 2010; Mitchell and Coles, 2003). However, even though some has regarded business model innovation as adaptation to external changes (Demil and Lecocq, 2010; Mitchell and Coles, 2003), few have yet provided managers with an understanding of how different changes in the external environment affect different parts of their business models and become antecedents for business model innovation.

2.2.3 External Drivers of Business Model Innovation

As research on business models and business model innovation is a relatively early stage there are still many areas to discover in terms of the drivers of the phenomenon (Wirtz et al. 2016). Furthermore as the concept of business models itself lacks a steady theoretical base (O’Connor and Yamin, 2011; Morris et al., 2005; Zott et al., 2011), so does the research on business model innovation (Schneider and Spieth, 2013). However, different scholars have found evidence suggesting that both internal as well as external factors drives the antecedents of business model innovation (Sorescu et al. 2011; Demil and Lecocq, 2010; Osterwalder and Pigneur, 2010; De Reuver et al., 2009). Osterwalder and Pigneur (2010) identify external factors to be drivers of business model innovation and refer to it as adapting an ill-functioning business model to the changes in the environment, technology and to what the future may hold. Sorescu et al. (2011) bring up consumer trends and technological trends as important external drivers. De Reuver et al. (2009) further emphasize the particular importance of external factors as drivers by showing evidence that technology- and market driven antecedents are significant for business model innovation. In their research market factors include competitors copying, new entrants as well as changing demands. Also Casadesus-Masanell and Ricart (2011) contributes to this by listing globalization, deregulation, and development in communication and information technology, all external factors, as drivers for business model innovation. As can be concluded from the literature above, technological advancements and development related to these advancements is a recurring external driver found in research. Khanagha et al.'s (2014) research further confirms the role of technological innovation as a key driver of business model innovation. Furthermore, Teece (2010) claims "Business models are often necessitated by technological innovation which creates both the need to bring discoveries to market and the opportunity to satisfy unrequited customer needs." Teece (2010) also elaborates on the antecedents of business model innovation by acknowledging that it can come from many different sources. He further concludes that the ability to understand the needs of customers and how competitors are fulfilling or not fulfilling these needs are characteristics of a business model inventor.

However, what Teece (2010) also points out is that business models in themselves can be a form of innovation and as Chesbrough (2010) argues technological innovations in themselves do not create value. Instead the value of a technological innovation lays in the firm's ability to innovate their business model (Chesbrough, 2010; Chesbrough, 2007; Chesbrough and Rosenbloom, 2002). By this the ever present need for competitive advantage has become a driver for business model innovation. Competitiveness lays in the firm's ability to commercialize a new invention by a suitable business model (Berglund and Sandström, 2013; Casadesus-Masanell and Zhu, 2013), and by that being able to capture value from its innovations (Chesbrough, 2010; Chesbrough, 2007; Chesbrough and Rosenbloom, 2002).

This research on business model innovations' importance for competitiveness is proven by the correlation between firm performance and the degree of business model innovation in firms (Pohle and Chapman, 2006; Mitchell and Cole, 2003; Zott and Amit, 2007). Pohle and Chapman (2006) studied and compared the financial performance of competing firms and analyzed the results in relation to the amount of focus that was put on business model innovation. They concluded that companies with a large focus business model innovation experienced significant operating margin growth. While as companies focusing on product, market, service or operational innovation was able to sustain their margins over time (Pohle and Chapman, 2006). Mitchell and Cole (2003) also discussed the idea and concluded that top performing firms have a high degree of business model innovation. According to them, firms changing the business model as often as every other year was the most successful (Mitchell and Cole, 2003). Further Zott and Amit (2007) analyzed this relationship and were also able to show that the positive relation was sustained over time, despite changes in the environment.

There seems to be evidence that external factors are affecting and causing business model innovation (Sorescu et al., 2011; Demil and Lecocq, 2010; Osterwalder and Pigneur, 2010; De Reuver et al., 2009; Casadesus-Masanell and Ricart, 2011), and furthermore that firms that are able to achieve it have higher performance (Berglund and Sandström, 2013; Casadesus-Masanell and Zhu, 2013; Pohle and Chapman, 2006; Mitchell and Cole, 2003; Zott and Amit, 2007). However, research on how different external factors actually affect the business model and become antecedents for business model innovation seems to be scarce.

2.3 Relevance of Research

As found from our review of literature on the topic of business models and business model innovation it is important for firms to be able to innovate their business models in order to stay competitive and achieve high performance (Pohle and Chapman, 2006; Mitchell and Cole, 2003; Zott and Amit, 2007). However, the concept seems to be lacking a solid theoretical base and that much research remains to be conducted in order to gain a more comprehensive understanding of the area (Wirtz et al., 2016, O'Connor and Yamin, 2011; Morris et al., 2005; Zott et al., 2011). Surescu et al. (2011, p. 13) states:

"A rich theory that elaborates on antecedents, consequences and various facets of business model innovation needs to be developed and linked to extant theoretical frameworks such as value chain (Porter 1998), configurational theories (e.g. Meyer et al. 1993), or the resource based view (Barney 2001)"

We aim to answer to this call by in an abductive way apply different theoretical foundations to our findings. Furthermore, and more central to our study, is the fact that it is found that external factors are crucial drivers of business model innovation (Reuver et al., 2009;

Casadesus-Masanell and Ricart, 2011; Khanagha et al., 2014). Yet, still little research has been done to understand how different external factors acts as antecedents for business model innovation in the different building blocks of a business model. We believe this is an important understanding much in line with what Teece (2010, p. 188) propose as an approach to successful business model innovation by stating that the process should involve an "...evaluation of each element with an idea toward refinement or replacement. The elements of a business model must be designed with reference to each other, and to the business/customer environment and the trajectory of technological development". By looking at how different factors from the environment affect specific components of a business model we can add to the understanding, which is much needed in order to pursue Teece's (2010) proposed approach.

On a more practical note, early research on business models have focused mainly on firms with internet based business models (Zott, Amit and Massa, 2011), and to provide more relevant practical knowledge to practitioners in other industries it is relevant to base a study in this kind of context. Furthermore it is also relevant for managers to have knowledge about how different factors give rise to business model innovation in specific areas of their business model. This understanding can further help managers to know which trends to monitor more closely in order to be agile once changes occur and being able to achieve business model innovation with little delay.

2.4 Theoretical Framework

2.4.1 Defining a Business Model Innovation

The definition of business model innovation is, as found in our review, a multifaceted area of research. As pointed out, Khanagha et al.'s (2014) together with Frankenberg et al.'s (2013) definition of business model innovation provides a broad but yet clear definition of the general concept. By partly combining these with Sorescu et al.'s (2011) more retail focused definition of business model innovation we have found what we consider a good definition of the concept for this paper. We define a business model innovation as:

A change beyond current practice in one or multiple building blocks in a retailer's business model. The changes can range from small incremental changes to replacing the existing model with a fundamentally different one.

2.4.2 Formulating a Theoretical Framework

As discussed earlier researchers have proposed different frameworks and tools to deal with business model innovation (Girotra and Netessine, 2013; Chesbrough, 2010; Osterwalder, 2005; Doz and Kosonen, 2010). Girotra and Netessine's (2013) present a four W-questions framework of "What decisions are made, When they are made, Who makes them, and Why they are made" and argue that if a firm can modify one of the W:s then a new business model could develop. Furthermore Doz and Kosonen (2010) presented another tool for business model innovation with focus on the executive's ability to drive business model innovation. While we acknowledge the work of these researchers we argue that another framework suits the case of our study better, namely the business model canvas firstly presented by Osterwalder (2004). This since it represents a comprehensive tool for describing and analyzing a business model. Furthermore the framework has been widely adopted by both practitioners as well as scholars (Spieth, Schneckenberg and Ricart, 2014).

We will use the business model ontology, and subsequently, business model canvas as described by Osterwalder and Pigneur (2010) in order to define changes in business model building blocks. Furthermore this will work as a foundation for identifying a business model innovation aligned with aforementioned definition used in this study.

As previously discussed the aim for our study is to add understanding to which external factors that drive business model innovation in different building blocks of the business model. An important foundation for our research is previous literature that shows evidence that external factors are drivers of business model innovation (Osterwalder and Pigneur, 2010; Reuver et al., 2009; Casadesus-Masanell and Ricart, 2011; Khanagha et al., 2014). Especially technological factors have previously been pointed out as important drivers (Reuver et al., 2009; Khanagha et al., 2014), as well as social factors (Sorescu et al., 2011). This will strengthen the causality of the linkages of external factors affecting business models. In regards to this Teece (2010) emphasizes the role of competition in relation to customers needs as part of the link and Reuver et al., (2009) points out market factors such as new entrants and copying competitors are affecting the business model innovation process. By combining our definition of a business model innovation, the business model canvas, and an in depth, triangulated empirical research of external factors in relation to changes in building blocks, we will be able to contribute to existing research in regards to how different external factors affect specific building blocks and becomes antecedent for business model innovation. An important aspect though, is that we further acknowledge that the industry and surrounding forces are extremely complex. This implies that the way an external factor de facto influence a firm is a very complex and debated matter, as suggested from research in the the fields of for example Industrial Organization Economics (Porter, 1980, 1985), Competitive Dynamics (Bettis and Hitt, 1995; D'Aveni, 1994) and institutional theory (Scott, 1995). We do not aim to question, strengthen or in other means elaborate on this area, instead we simply accept that the organizational environment is complex in its nature and that the way that it affects companies can differ. To conclude, we identify an external factor that could potentially affect business model innovation and as we see that it does we study which parts it effects and what kind of external factor it is. Whether it is the competitive environment or other influences that has created momentum along the way is not the scope of this study. We have illustrated the areas of focus in below.

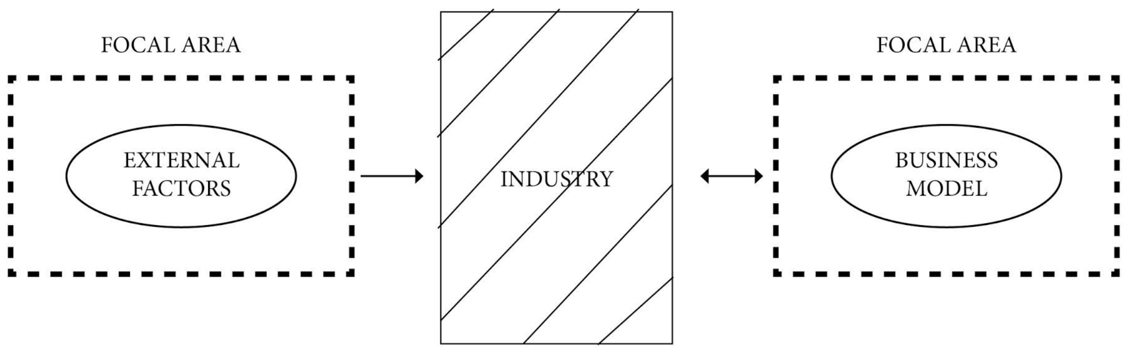

Figure 3: *Illustration of theoretical framework and relationship between changes in the external environment and changes in business model*

3 METHODOLOGY

In the following section we go through how the empirical data was gathered and subsequently how it was analyzed. Firstly discussing the research approach from which the research design and research method are derived sets a foundation. Secondly, we explain the different steps of the data analysis. And lastly we reflect upon the research quality.

3.1 Research Approach

According to Bryman and Bell (2015) there are different approaches that typically can be used for a research and the two most common ones are the deductive approach and the inductive approach. However, a third approach has increased its popularity for qualitative research, namely the abductive approach. The deductive process starts with selecting the theory and related hypothesis that the researcher wants to test followed by the process of gathering data. However, the inductive approach conducts the data first and from that attempts to build new theory (Alvesson and Sköldberg, 2009). Criticism has been pointed towards the deductive approach for its reliance on a strict logic of theory testing and the issue of selecting a theory. However the inductive approach has been questioned in regards to the difficulty to build new theory from empirical data (Bryman and Bell, 2015). As a response to the criticism of both the deductive and inductive approach the abductive approach emerged (Alvesson and Sköldberg, 2009), which was proposed as a way to overcome above-mentioned limitations (Bryman and Bell, 2015). The abductive approach uses elements of both the deductive and the inductive approach and it includes going back and forth between empirical data and theory in order to bring clarity to a phenomenon (Bryman and Bell, 2015). Since we want to increase the understanding of how different factors act as antecedents for business model innovation in specific business model building blocks, guided by theory on business models and business model innovation an abductive approach will be used in this study.

3.2 Research Design

This paper used a qualitative research approach and an case study design with the focal point of analysis being the grocery retail industry in the United States. To begin with, the case study design is a widely used design for business research (Eisenhardt and Graebner, 2007). Furthermore Eisenhardt and Graebner (2007, p.26) argue that case studies are particular good for the development of an "accurate, interesting, and testable" theory. In addition to this, since our research paper aim to find answers to questions like "how" and "why" in relation to business model changes, our decision to use a case study as research design could be strengthen by Yin's (2014) argument that it is a suitable design to extend knowledge about dynamics and processes. In similar manner Gioia, Corley and Hamilton (2013) argue that a qualitative study are able to show processes that simply not are able to study with a quantitative research. Based on above arguments consider that the case study approach is suitable for our purpose since we want to understand how the different building blocks change in relation to different external drivers.

3.3 Limitations of Research Design

Hancock and Algozzine (2016, p.8) state "Neither approach is right or wrong, better or worse, although one approach may be more appropriate than the other depending on the nature of the research question and predisposition of the researcher". Furthermore, Easterby-Smith et al. (2015) present both strengths and weaknesses with both the qualitative and the quantitative approach. Building on that notion, even though we argue a qualitative case study research design is the most suitable one for this research, there are important negative aspects of this choice that needs to be elaborated on.

Firstly, the analysis and interpretations of a qualitative research could be argued to be difficult and also depend on tacit knowledge of the researchers (Easterby-Smith et al., 2015) In similar manner, qualitative research is criticized for being subjective and that the findings are to much affected the researchers personal view of what is important and not (Bryman and Bell, 2015). Moreover, the generalizability from a case study could be discussed, but on the other hand Yin (2014) stress that it is a difference between theoretical proposition and populations in terms of generalizability. Furthermore Yin (2014) argues that the goal of a case study is to make analytical generalizations of theories and not statistical probabilities.

Another aspect with qualitative research approach is the time-consuming gathering of data (Easterby-Smith et al., 2015) and that a case study can result in “massive, unreadable documents” (Yin, 2014). Taking this into consideration and also acknowledge the fact that the time frame to conduct this research is ten weeks we have chosen to limit our scope to one industry as unit of analysis with three sub-cases. We do not aim to get an in-depth understanding of the sub-cases but rather to use them as sources of information in relation to business model changes that have occured within the industry we study.

3.4 Selection of Case and Sub-cases

Our choice to study the U.S. retail market is based partly upon its size and impact on the overall world-economy, which makes it an interesting case to build a study upon. Furthermore the changes that has been occurring and the fact that the big retailers has grown even stronger in spite of increased competition and a changing environment raises questions of “how?” and “why?”. Since Mitchell and Cole (2003), Further Zott and Amit (2007) and Pohle and Chapman, (2006) found that the ability to achieve business model innovation leads to better performance this is a signal that there should be examples of business model innovation happening in this market that can act as basis for our study.

The choice of sub-cases, and in this case the particular companies we use as sources for business model innovations, are to a large extent based on the same reasons. Walmart Inc (Walmart), The Kroger Company (Kroger) and Costco Wholesale Corporation (Costco) are the three largest companies in the U.S. retail industry and also in the world in terms of sales (Deloitte, 2018). This makes them an enormous part of the industry and what they do in terms of their business models have long going consequences for all stakeholders. Furthermore, interestingly they all have very different business models, which make them an even better case to study as it covers a broad range of potential business model changes. Moreover, the fact that all three companies are publicly listed makes the process of finding and accessing relevant data easier.

3.5 Data Collection Method

We have chosen to use primarily three different sources of information to conduct our research; (1) Interviews with industry experts, scholars and a former executive, (2) annual reports from three companies operating in the industry we are studying between 2005 and 2016 and (3) industry reports published between 2005 and 2018. These sources have provided us with a comprehensive understanding of the industry and most importantly the possibility to triangulate information between the different sources in order to increase the reliability of our empirical data.

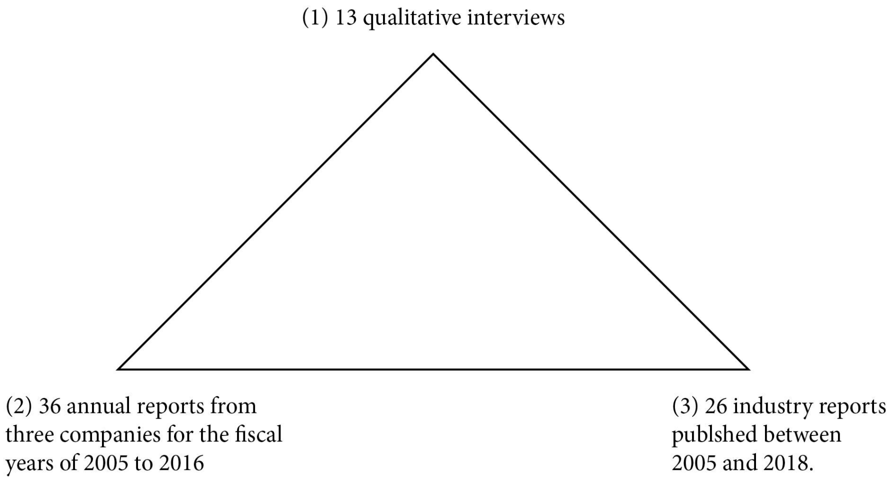

Figure 4: *Illustration of the triangulation of the three primary data sources*

3.5.1 Interviews

To use qualitative interviews as an approach for data collection, is appropriate when the step-by-step logic of a situation is unclear (Easterby-Smith et al., 2015), which is the situation in our research. Furthermore interviews can be structured in three different ways: market research interviews (highly structured), guided open interviews (semi-structured), and ethnographic interviews (unstructured) (Easterby-Smith et al., 2015). Since our research aims to bring clarity to different business model changes related to different kinds of changes in the external environment it was important to have a predefined structure in order to cover different areas and not risk to miss out on important aspect. On the other hand, being able to ask follow-up questions can lead to a more in-depth discussion (Easterby-Smith et al., 2015).

Taking this into consideration we argue that semi-structured interviews provide us with a necessary good mix of flexibility and structure and thus that is the structure we have used. Furthermore the strengths with qualitative interviews related to our research is mainly the insightful data that we can not gather from archival documents. Another aspect is that interviews can potentially help us identify other relevant sources of evidence. But there are also some other important aspects to keep in mind when using data from interviews. To begin with, there is a risk of reflexivity from the interview object, which means that the person adapt the answers in a way they think aligns with what the interviewer is looking for. Furthermore poorly articulated questions can lead to biases and furthermore when the interviewees answer questions they might also be affected of biases due to poor ability to recall exact information from events (Easterby-Smith et al., 2015). To mitigate the risk of inaccurate data we use the approach suggested by Easterby-Smith et al. (2015, p. 113) and collect data from multiple sources.

Table 3: *List of Interviewees*

Name	Description	Company/Organization
David Dillon	CEO (2003-2013)	The Kroger Company
Keith Anderson	SVP Strategy and Insights - Profitero	Profitero
Brian Harris	Senior Partner and Managing Director, North America Leader, Retail	Boston Consulting Group
Neil Stern	Senior Partner	McMillanDoolittle
Greg Ferrara	EVP of Advocacy, Public Relations, and Member Services	National Grocers Association
Laura Strange	VP, industry relations, communications and marketing	National Grocers Association
Jeffrey Neville	SVP, eCommerce and Digital Marketing Practice Lead, Consultant	Boston Retail Partners
Karen Short	Managing Director, Food and Staples Retail Analyst	Barclays Capital
Steven Dennis	Growth Strategy and Innovation Advisor in retail	SageBerry Consulting
Barbara Kahn	Professor of Marketing and Director of the Jay H. Baker Retailing Center	Wharton School of Business at University of Pennsylvania
Mark Cohen	Director of Retail Studies, Adjunct Professor of Business	Columbia Business School at Columbia University

Bala Iyer	Professor and Dean of Faculty	Babson College
Paul Ferris	Professor of Business Administration	University of Virginia Darden School of Business
Paula Payton	Applied Behavioral Scientist	Columbia University School of Professional Studies

3.5.2 Archival documents

As previously mentioned the primary data gathered from archival documents are primarily of two different types; annual reports and industry reports. The annual reports provide us with extensive amount of information related to the sub-cases and more specifically the changes they make in their business model. These reports also provide us with information of why some strategic actions are made. Furthermore the industry reports provide us with comprehensive information about the case industry and since the reports are published during every year of the studied period we have been able to follow changes in the industry. The main strengths with archival records and documentation related to our research are that they can be reviewed repeatedly and they can give us information about events spanning over a long time (Easterby-Smith et al., 2015). With this said we are also aware of the risks associated with these form of data collections. Firstly, there is a risk of being biased when selecting the data sources. Secondly, data could be phrased in a biased why based on the intention of the author, especially in the annual reports. Thirdly, important information could be withheld from the companies if the information is sensitive for their organization (Yin, 2014).

3.6 Data Analysis

The process of analyzing the data followed a sequence where each of our primary sources, consisting of interviews, annual reports and industry reports, were first structurally coded and categorized. Subsequently we triangulated information from all sources in order to identify linkages between business model changes and external factors. Below follows a description of the process of the data analysis related to each of the primary sources of data.

In regards to the annual reports the main focus was to provide information of changes in the business models of the sub-cases representing the case industry during the entire studied period. This was achieved with a four-step approach where we first gathered information related to strategic changes for each year and each company. Followed by a categorization of the strategic changes into different areas presented in the empirical findings. Thirdly these strategic changes were classified in regards to if they gave rise to a business model innovation or not. This was achieved by using the Osterwalder and Pigneur's (2010) definitions of a change in a building block, described in the literature review. Finally we combined these findings with our other data sources in order to analyze which business model changes that could be linked to different identified external factors. Furthermore, related to the interviews a three-step approach followed after the transcribing the interviews. Firstly we coded the information into different concepts frequently occurring. Subsequently we sorted the different concepts into the following categories; technological, political and legal, sociocultural and economical. Finally we analyzed the information together with the data from other sources in order to find trends that could be linked to identified business model changes. Moreover, the analysis of the industry reports followed a three-step approach, where information first was gathered on the premises that it was relevant either as an indicator of a trend, business model change or could explain the link between a trend and a change related to the sub-cases. Subsequently we categorized the information from different years and different reports into aspects relevant for the research aim and purpose. Thirdly the information was used in the triangulation process to identify links between external trends and changes in specific business model building blocks.

3.7 Quality of the Study

3.7.1 Validity

According to Bryman and Bell (2015, p. 50) validity refers to "the integrity of the conclusions that are generated from a piece of research". Furthermore validity can be divided into external and internal validity (Yin, 2014). The internal validity refers to what extent the results could be related to alternative explanations (Bryman and Bell, 2015). Moreover, a study with high internal validity means that the causal relation between two parts could be motivated (Yin, 2014). In contrast to the external validity, the qualitative studies generally have higher internal validity compared to the quantitative studies (Bryman and Bell, 2015). In order to increase the internal validity we have used three different primary sources of data as a foundation for our empirical findings. Furthermore the data from the sources have been triangulated in order to check that the results are not contradicting and more important to use multiple sources to strengthen causuality between external factors and changes in business model building blocks. To have multiple sources of information is argued to increase the validity (Cohen et al., 2013). Although we acknowledge that the causality is complex since both internal and external factors drives the antecedents of business model innovation (Sorescu et al., 2011; Demil and Lecocq, 2010; Osterwalder and Pigneur, 2010; De Reuver et al., 2009). Because of this we have not been able to draw conclusion from changes in business models that we have not been able to identify the link to an external driver. The external validity refers to the degree of generalizability of the results of the study to other contexts. Generally, qualitative studies have lower degree generalizability compared to quantitative studies (Bryman and Bell, 2015). Furthermore Saunders and Lewis (2009) discuss that generalizability is an issue due to few and thus not representative amount of respondents. However, as we use a case study approach with multiple sub-cases and our findings are supported by existing literature on business model innovation a certain degree of generalizability can be addressed to our study (Eisenhardt and Graebner, 2007).

3.7.2 Reliability

Reliability refers to the consistency, stability and repeatability of the study (Selltiz, Wrightsman and Cook, 1976) and concerns whether the result would be the same if the study was conducted again (Bryman and Bell, 2015). This also includes the ability of the researchers to conduct the empirical evidence in an accurate way (Selltiz, Cook and Wrightsman, 1976). In regards to the reliability we have used a predefined definition (Osterwalder and Pigneur, 2010) in order to distinguish a change in a business model building block, which enable us to be objective in that regards. Furthermore we have used different kinds of sources since we acknowledge the pros and cons with both qualitative interviews and archival data discussed in the data collection section. This has enabled us leverage the positive aspects of the different types and to triangulate important findings. Furthermore our interviews were recorded and later on transcribed. This enabled us to pay full attention to the interviews and to use probing and laddering methods to bring clarity and depth to the interviewees' answers (Easterby-Smith et al., 2015).

4 EMPIRICAL FINDINGS

In the following chapter we will go through the relevant empirical data gathered. First we account for the findings in the industry reports, followed by findings from the interviews and finally the findings from the corporate annual reports. The data is structured according to general identified main themes.

4.1 Industry Reports

4.1.1 Consumer Trends

In the beginning of the studied time period there was a trend towards more healthy food, both fueled by the general consumer opinion but also by increased awareness in media of the growing obesity problem in America. This allowed grocery retailers to charge higher prices and margins on healthy and quality products (Datamonitor, 2006; Datamonitor, 2009, Deloitte, 2008). However, in their 2007 "Food Retail in the United States" report, Datamonitor still state that up until 2006 price and convenience were the most important factors for consumers in terms of buying decisions. Although, in their 2009 report, they describe that in the years leading up to 2008 price and convenience, the previous dominant deciding factors for consumers, are challenged by the health and quality aspect. Also social responsibility is a growing trend in consumers' minds and they demand higher responsibility from the corporate world (Deloitte 2007).

This trend is counteracted in 2008 as price secures its premier position as deciding factor also fueled by the growing use of price comparison sites for food (Datamonitor 2009). In their 2011 "Global Powers of Retail" report, Deloitte describes the consumers' attitude during the period 2009 to 2010 as:

"As for U.S. consumers, they appear to be operating within the realm of a "new normal." After a near orgy of debt-financed spending over the past decade, greater sobriety is now in evidence. While good for individual households, this new frugality is not necessarily good for retailers. It is manifested in greater value orientation, more price sensitivity…"

In 2014, consumer trends begun to shift again and consumers did not settle for only low prices anymore. The changing retail landscape made consumers demand more experience when they shop. They still want low prices and convenience but in addition to that retailers are now required to give something more that entertains the consumer. Following this is also an increased expectation of personalization in marketing and communication and in stores (Deloitte, 2015). In 2011 personalization was getting increased attention as data analytics and technical tools enabled for it but in 2014 the expectation has moved up further (Deloitte, 2012; Deloitte, 2015).

In the recent years the interest and adoption of voice-controlled electronic devices powered by artificial intelligence technology (e.g. Amazon Echo, Apple Siri and Google Home) has been growing rapidly. The adoption and use of these kinds of devices for purchasing is expected to further continue to grow in fast pace (Deloitte 2018).

4.1.2 Competitive Landscape

In 2005 and 2007 private label products are described as an important part of grocery retailers business model to drive revenues and margins in order to stay competitive in the price focused environment (Datamonitor, 2006; Datamonitor, 2008). Also self-checkout is described as a way to improve margins in the highly competitive market by lowering the staffing levels (Datamonitor, 2006).

Supermarkets are in 2005 defined as the biggest segment in the U.S. grocery retail market with 55,8% of the total market value (Datamonitor 2006). This however, marks the high point of supermarkets' market share as they in 2006 are losing space to hypermarkets/supercenters/superstores as well as hard discount formats, and continue to lose in significance, with an exception of in 2008 where they are seeing a small recovery (Deloitte 2008, Datamonitor, 2010). In 2009 many retailers put major efforts into cutting cost and adjust inventory levels in response to a more passive consumer (Deloitte, 2011). The recession also cause a wave of consolidation as smaller supermarkets struggles to stay a float, which further decrease the supermarket segment in relation to the bigger format segment (Marketline, 2011).

In the years between 2005 and 2008 grocers compete also in the space for CSR as a response to increased consciousness of consumers. The CSR efforts has moved into high priority for retailers and cannot only be window dressing (Deloitte, 2005; Deloitte 2008). This is shown as grocery retailers position themselves in the top of Deloitte's 2009 Global Powers of Retailing ranking of CSR communication of all retailers.

In 2014 the development of online retail is fueling the importance of data and data analytics. From marketing to forecasting or to determine expansion strategies, harvesting data from operations is a major focus of most of the big retailers. Investments in technology for better data gathering also in the physical retail space are a part of this (Deloitte 2016). This along with many other trends makes the shape of a retailer to become less defined and in the 2017 Global Powers of Retailing report Deloitte comments on the development as: "In years past, it was easy to spot a retailer. It bought and sold goods, either in store or online. The maker movement, the sharing economy, and other factors have made it increasingly difficult to define what a retailer is and does".

The 2015 to 2017 years are dramatic for the composition of the grocery retail industry with a large company consolidation wave in 2015, Amazon's acquisition of Whole Foods in 2017, and an increased price war with the German discounters Aldi and Lidl taking market share (Deloitte 2017; Deloitte, 2018). This, together with the growing enabling technology, puts the consumer more firmly in the driver seat than ever before (Deloitte 2018). The priorities and conditions of many of the newer players in the market, especially in the online field, is different from the traditional brick and mortars. They focus more on growth and customer acquisitions, rather than generating profit. This puts established players at risk of losing customers to competition with different prerequisites to compete (Deloitte, 2018). However, the traditional players are also investing to stay relevant both in online as well as technical improvements for efficiency. Walmart is among the retailers that is now trying out in-store robots to execute routine and mundane tasks to improve efficiency and service (Deloitte, 2018).

4.1.3 Online

In 2005 many grocery retailers are starting to look into the opportunity to offer their goods online as a way of driving increased revenue, decreased cost and to take position for future development of the segment. The interest is derived from the spread of broadband in the U.S. but the geographical spread of customers is described as a major barrier for the development (Datamonitor, 2006). Deloitte reports that in 2006 many retailers that try out an online channel fail to integrate it smoothly with their existing physical channels (Deloitte 2008). In 2008 more companies start to develop online capabilities but there is still much room to further grow this channel (Deloitte 2010).

In 2011 the significant growth of mobile is commented on in Deloitte's 2012 Global Powers of Retail report:

> *"Mobile consumers are no longer just early adopters: They represent a broad range of consumer segments and have become part of the mainstream population. For retailers looking to remain relevant in this connected consumer environment, the ability to leverage mobile to deliver an improved customer experience will be a critical success factor."*

The growth of smartphone use also opens up an opportunity for consumers to take stronger charge in their shopping. It makes it possible for an individual consumer to access information from millions of sources to make their buying decisions (Deloitte 2012).

One way that traditional brick and mortars adapt to the changing in environment is by acquiring knowledge about the online retail space in order to build better offers especially within brick and click. This is often done by acquiring ecommerce websites or internet companies with relevant technologies (Deloitte 2016). Further in 2015, many retailers slim their physical portfolio in order to focus more on online and trim costs (Deloitte 2017). However, online-only retailers are also moving in the opposite direction by establishing physical store presence (Deloitte 2016), of which Amazon's acquisition of Whole Foods in 2016 might be the most prominent example (Deloitte 2018). The physical space still represent an important channel not least to provide distribution for online but also as a channel for marketing and experience (Deloitte 2017).

Another way that traditional grocers try to compete in the online market is by partnering with companies that possess attractive capabilities. Walmart for example partnered with Google in 2017 in order to take up the fight against Amazon in voice enabled purchases and many others are signing up with Instacart to handle their last mile online grocery deliveries. The list of retailers connected to instacart in 2017 includes Kroger, Price Chopper, Publix, Stop and Shop, Wegmans and Aldi (Deloitte, 2018).

4.1.4 Recession

In 2005 the U.S. housing market showed signs of a weakening bubble when the amount of unsold homes increase (Deloitte, 2007), however the the grocery retail industry remained at a steady growth up until 2008 with a growth of 5% in 2007 (Marketline, 2008). In the middle of 2007 the housing bubble begun bursting and the credit crunch was a fact. This led to stagnating consumer spending and consequently a stop in employment growth in 2008 (Deloitte 2009). The recession hit all parts of the economy and even though food was one of the more resilient industries the cautious consumer wallets became very value focused and reduced their overall spending (2010).

In 2010 a rebound was seen for the retail industry with rising sales even though the economy was still beaten and remained turbulent. This continued onto 2011 and in 2012 the economy started to really recover and new households that had been waiting for better times formed as a consequence. This fueled consumption in most sectors but the rising inequality made the consumption growth numbers skewed as they mainly came from the upper-income households (Deloitte, 2016). In 2014 the economy had recovered from the recession and the consumption was back on track, fueled by a strong job growth, declining debt, lowered energy prices as well as higher wages (Deloitte, 2016).

4.2 Interviews

4.2.1 Ecommerce

One of the areas brought up the most by interviewees was the growing trend of ecommerce. Neil Stern state "If we look broadly, the retail landscape over the last ten years – the most significant thing that has happen is the growth and continuing growth of ecommerce." Similarly Brian Harris discusses the emergence of ecommerce as one of the most impactful changes for grocery retailers during the last decade. In similar manner Keith Anderson brings up ecommerce and the growing dominance of Amazon as one of the three most important changes in the retail industry during the last ten years. In addition Barbara Thau says that "Obviously online is one of the biggest changes in the retail landscape". Keith Anderson also describes the scenario where Amazon entered the grocery sector and started offering online purchase and home delivery, which affected some of the more traditional grocery companies to also provide that service, and when more competitors started offer the service the pressure on others grew even stronger. Likewise Greg Ferrara describe Amazon as "a disrupter that forcing competitors including our member to go into ecommerce." Laura Strange agrees that Amazon has been a disrupter but also add that some of the members of National Grocers Association a started with ecommerce already 2005, but on a more personal and less scalable level by providing home keys to the delivering grocery store.

On the topic of barriers for grocery ecommerce Barbara Thau brings up the fact that dealing with perishable products is a challenge logistically. Furthermore Neil Stern argues that ecommerce within grocery retail is a hard category because of several reasons, one reason is because you have to deal with shelf-stable, refrigerated and frozen products. Another aspect that Neil Stern discusses is that there is a great deal of variability of products that sells. The challenge with product stock is something that Keith emphasizes as important also since it is difficult what product to select instead if something is out of stock and what to charge for it. A related issue that Neil Stern brings up is the challenge that you also have fresh and perishable products that are not standardized. As an example Neil Stern discuss the likelihood of two people having different preference of how yellow a good banana should be and that the variability make it difficult to select a product. The selection problem is something that both Jeffrey Neville and Keith Anderson emphasize also. Barbara Thau discuss that there is a growing health trend within the U.S. that premiers fresh food and that you do not connect that with buying food online. On the other hand Barbara Kahn believes that consumers will increasingly accept ordering perishables online because of the convenience. Neil Stern also brings up the fact that it is a low margin business and that the business model many grocery stores operate with was developed 60 years ago on the notion that customers doing a lot of the work with picking, packing and bringing home the products.

Barbara Kahn discuss that solving the last mile delivery of an online purchase is often the most expensive part for companies. Because of this it is a favorable alternative for grocery stores to offer a solution where customers buy online and pick up at the store, which she calls click-and-collect. She further believes that this concept will grow increasingly in the future. In a similar manner, Paul Farris discuss the opportunity for established retailers to leverage their physical stores with click-and-collect solutions to compete with new online entrants.

To handle the delivery of online purchased groceries Keith Anderson mentioned the alternative to partner up with intermediaries such as Instacart but that many companies want to keep strategic important functions within the company. Similarly Neil Stern argues that the pros with such partnership are that you can quickly set up an ecommerce and without to spend a lot of capital. On the other hand Neil Stern also argues that you have to either pay the third party or increase the price for customers ordering online. In addition to that Neil Stern also argues that giving the control of the customer "might have some pretty significant long term consequences to it". On the same note Barbara Thau argues that it is hard to make online profitable for brick and mortars and that they are trying to make their stores to be online fulfillment centers to cut cost from online.

Keith Anderson further believes that some store layouts and configurations might change a bit to become more efficient for click and collect but also that bigger changes are to happen when the volume of online pick-up and delivery grow, then they might transition to centralized model, which could mean closing of an existing store for customers or opening a new central pick-store. In a similar manner Greg Ferrara state that: "I don't think Amazon has figured out ecommerce within food yet. But they will one day." In addition Barbara Thau states that

“Walmart focus hard on winning grocery online now”. Another argument brought up by Barbara Thau is that “Food is still tiny but it is changing”.

4.2.2 Convenience

Barbara Kahn argues that the entrance of Amazon have completely changed the consumer’s expectation of shopping in terms of convenience. She believes as they constantly keep innovating to remove pain points for the customer these expectations are past on to their competitors. Consumers get used to Amazon’s return policies, dynamic pricing and benefits of their Prime membership program. Furthermore Barbara explains that Amazon keeps innovating in new areas for the purpose of convenience, such as voice activated hardware that makes it possible to order products online. She believes that this focus on convenience is what has contributed to Amazons explosive growth.

Greg Ferris also points out the increased expectations from today's consumers by stating that: “Customers want what they want, when they want it, and they want it delivered in the format that is easiest for them. They will reward the store that fulfills all this”. In similar manner Mark Cohen argues that the omni-channel is crucial for the success of a company today.

Barbara Thau speaks about the same matter and makes a comparison from in the earlier 21st century when Walmart as an example could just set up new stores and customers came. She concludes that today the customer demand so much more in terms of convenience for example, and that is important to live up to as a retailer. An interesting point on this topic is brought up by David Dillon who elaborates on what way convenience in other forms than delivery is important. He does not think that customers want digital just because they want delivery. Instead he thinks that digital tools in stores and for communication for example is a way to gain convenience aside from online delivery, which is also how Kroger has worked with it.

4.2.3 On-demand Shopping

Neil Stern pinpoints a change that has been happening in the last ten to fifteen years in the way that consumers live their lives and consequently the needs that this new lifestyle entails. He states that: “During this period of time consumers lifestyle are becoming increasingly complicated, the breakdown of the traditional family has changed, we don’t have traditional family styles anymore.”

Neil further explains that most of today's grocery stores where built on a traditional family of a married couple and 2-3 kids at home. The way consumers shopped was by creating a shopping list and going to the store once or maybe twice a week to buy the goods. He believe that this has changed dramatically and the number of, what he refers to as stock-up trips, where you buy a big number of products have decreased in the same time as the number of fill-in trips for smaller purchases has increased. Following this trend, the requirements for a store has changed from the way traditional supermarkets look like.

The trend in how the demand for certain retail formats have changed is something that Greg Ferrara also brings up as a big shift in the industry. Greg tells that around the millenium and the beginning of the 21st century consumers as well as retailers had the idea that bigger was always better. This trend led to the rapid growth of the so called big box format where huge stores were built outside cities and in suburban areas and shoppers could go in and find super-wide assortments and basically everything you would need for the household in one store. In the later years this has changed a lot and people are more keen on shopping less products each time and more frequently, which makes them value stores that are in closer proximity to their homes instead, and in a size that makes them quick to go in and out of.

Paula Peyton also highlights this shift in what is considered an optimal store. She argues that much of the competition today is about setting up the optimal stores, made for the shoppers of today, which often is the same thing as building smaller. Greg Ferrara gives an example for this trend by referring to the way Walmart has been expanding throughout this time period. In the beginning of the century he explains that Walmart opened up an enormous amount of big stores but from the recession and onwards this expansion has slowed down dramatically and shifted. According to him the focus is now on the smaller formats instead. He believes this trend is due to a resurgence of urban America caused by millennials that want to move into the cities. In the same time the kids of the baby boomer generation is moving out which means that they do not need the same big houses. Neil Stern also acknowledge that Walmart is still struggling with this shift in demand for store formats and states:

"The other challenge walmart has had and still haven't quite solved is, the Walmart supercenters which really is their primary growth engine. These 170 k m2 stores they worked really well for walmart in rural America and suburban America. It's not been a particular good box for the urban market."

4.2.4 Smartphone

Keith Anderson argues that one of the biggest changes for grocery retailers that has happen during the last ten years is the emergence of the smartphone. Similarly Paula Peyton states: "Everybody is talking about mobile". Barbara Thau further argues that the smartphone and thus enabling internet access everywhere has been the biggest changes in retail during the last ten years. She argues that the smartphone and online have changed the consumers lifestyle and that most products purchases today involves online in some way. Furthermore David Dillon discuss how consumer's expectations of digital communication have changed due to experience with different mobile devices: "All of those experiences in other sectors, other areas, other ways all causes the consumers to say I can do that with groceries.".

Moreover, Keith Anderson discuss that the smartphone has lead to more transparency since it has increased the availability of information. On the same notion Greg Ferrara states that: "Consumers now have access to more information and they want transparency". Furthermore Mark Cohen discuss that this availability has given consumers access to alternatives on a fundamentally new level. Barbara Thau argues that the information availability has lead to increased customer power and also higher expectations, this because you can more easily compare different competitors and offerings.

4.2.5 Experience

In her newly developed matrix "The Kahn Retailing Success Matrix" Barbara Kahn pronounce the experience part of retail to be one of the four areas that retailers needs to be cautious about in today's changing environment in order to win. On the same topic Jeffrey Neville argues that the role and picture of a retailer has changed as a result of the changing environment, he states that:

"Retail used to be driven by merchants, it was a big deal. People trained to sell stuff and maximize sales in stores. Now it's more about who has the customer, this means who has the relationship with the customer and can build business on that".

Barbara Thau explains this by the fact that the consumer has changed and raised many of its social expectations on a retailer. She describes a shift from when the retailers only thought about how to best design their stores in order to increase sales, were as today the retailer has to care much more about what the customer actually wants and values in a store. One way that Laura Strange has seen traditional grocery retailers develop in line with this trend is by focusing on the experience in the store. She gives examples of stores that increases their selection of fresh products like preshibles or meat and even adds in-store butchers to offer the customers better and more fresh food and a better shopping experience. Before the last couple of years she tells that Americans moved away from locally produced products but now that trend has really started to get a foothold. In line with this, many grocers promotes those kind of local products and stories behind them in order to increase the experience for the customers and improve their connection to their food.

A first hand perspective is given from David Dillon who explains that in the years leading up to the millennium much focus was put on price and that Kroger had a hard time balancing their quality offer with price. In the early years of the century they realized trough much research that they had to improve the service and experience in their stores, as this was something that people were requesting and missing. This was part of the reason for Kroger to launch their "Customer 1st" strategy to change the course. Greg Ferrara adds to the importance of experience this by stating that "The U.S. is moving from what used to be about having the largest selection and the lowest price to still holding price and selection as important but also adding experience as another factor." This is something that Barbara Thau brings up as a way that traditional retailers takes a stand against the raising competition from e-commerce and mainly Amazon. However, Neil Stern understands this as a problem for Walmart and he refers to it as

"I would say customers like their prices but don't like much else with Walmart. We see research that they really score badly in every element except in price. They are trying to change the perception among customers about their quality and service to stay competitive, in other words it's not just about price".

Keith Anderson believe that this is one of the ways that especially smaller grocers can survive today, focusing on higher quality, better service etc.

4.2.6 Voice Technology

The voice technology is according to Paula Peyton possibly the newest trend within retail and she further mentions that there are reports estimating this trend to be massive in the upcoming three to four years. According to Keith Anderson voice technology related to smart speakers are growing exponentially and the adoption is fast amongst customers. Bala Iyer argues in similar manner that: "Everything will be connected in the future". Keith Anderson further state that: "All of the big players, Amazon, Facebook, Microsoft, Apple, Google want to have a presence in voice but Amazon is still having significant momentum."

In regards to how voice technology related to shopping will affect big brands of consumer products Keith Anderson think it is bad for them in the sense that those companies will have to pay up to the companies controlling the voice platform to position themselves favourably. But on the other hand he does not think that Amazon, or other companies controlling the voice platforms, only will show their own private label. On the same notion Paula Peyton argues that she does not think that voice shopping will damage big brands. Keith Anderson further discuss that established companies within grocery retailing such as Kroger and Walmart are taking basic steps to adopt to the voice technology and as an example he brings up Walmarts agreement with Google:

"Walmart actually signed an agreement with Google and they are obviously aligning with Google Voice, Google Home Speaker and Google Assistant for shopping. And I think that makes a lot of sense for Walmart."

4.2.7 Environmental Concern

"Organic and fresh products has continued to grow faster than conventional food over the last years. I think that the trend is going to continue as the next generation of consumers comes along since it is more important to them to know where their products are coming from

and care about issues such as sustainability and traceability." (Neil Stern)

Neil Stern brings up Whole Foods as an example of a player that really have been pushing this development and succeeding in their efforts. He talks about their different programmes and initiatives for providing sustainable offerings and helping consumers to shop in a more sustainable way. Neil believes that Whole Foods is a product of the growing consumer trend for organic and sustainable products. He also recognize that even though Whole Foods was the pioneers in the U.S., their growth has now slowed because conventional grocers has jumped on to that trend, so they don't have it exclusively for themselves.

Barbara Thau also recognize the environmental trend and that grocery shoppers has become more conscious by referring to the fact that also traditional retailers has adopted their offerings to include more of this kind of products. She states: "Who would have thought that Walmart would have an organic assortment?". She further agrees with Neil on the fact that it is the younger generation that has been and will be driving this trend and will be willing to pay for these products, even though she also believes that it is not only millennials that care. According to Barbara also older consumers, at least in some regions, have the same kind of consciousness in their buying behavior as the millennials grew up with.

Regarding the willingness to pay Paula Peyton argues that organic and sustainable products still are more expensive and that limits the trend's ability grow, also in the younger generations. This is a standpoint that Jeffrey Neville shares and in his opinion the truth is that in general the wallet is most often the deciding factor and that much of the trend is more talk than actual action. Furthermore he pinpoints that there are a lot of regional differences in terms of this trend and he argues that in the North East it might be a fairly influential trend while as it in other more rural states is rarely even talked about, even less so acted upon. He think it is partly a result from the fact that it is so easy to look away from the consequences of non environmentally friendly habits in a big developed country such as the U.S. Also Neil Stern agrees with that the wallet is still the most important factor when making a purchase and refers to the big absence of discourse concerning the environment and organic products during the recession. He still see this trend during recent years as stronger than before, though.

4.2.8 Customer Insights

David Dillon argues that one of the big mega trends in food business during the last decade is the use of big data in order to help companies make decisions. He further explains that Kroger started collecting data in the late 1990's but that "we did not really knew what to do with data like that". In similar manner Paula Peyton discuss that many grocery retailers used to be very reliant on the consumer insights that their product suppliers brought to them. As examples she mentioned Coca-Cola, Nestlé and Procter and Gamble and argues that they have always had the budget and the expertise to really understand consumer insights. She further states that up until the last few years retailers have been fairly dependent on their suppliers to help them understand the consumers. According to her many retailers still are to some degree but she further states:

"More and more they [The retailers] realize that they have to move a little bit away and not be so reliant on what for example Nestlé is going to bring to them about what kinds of beverage that the consumer drink, because they know that it is possibly a little bit biased."

In order to increase capabilities within customer insights Paula Peyton mentions that both Kroger and Walmart have acquired companies and through that purchased capabilities to understand customers. Neil Stern has a parallel argument related to increased capabilities of consumer insights:

"Technology with loyalty cards and CRM program and essentially trying to become much more intelligent about your consumer and these programs have been around for 30 years... But retailers becoming much more sophisticated in terms of how they run and manage those programs, that has really been driven the last 10 years in the U.S.“

Furthermore when Keith Anderson discuss Walmart's partnership with Google, that will integrate Google's platform for voice activated smart technology to enable online purchases of Walmart's products, he also brings up the issue with sharing customer data:

"It will require them to partner very closely with Google because they will not have total ownership of the voice platform, as Amazon does with Alexa, and they will also have to share some customer data with Google."

Greg Ferrara argues that Kroger is probably one of the companies within grocery retailing that has leveraged and collected data the best. He further states that Kroger incentivize their customers to use the loyalty card much of the reason to get customer data.

4.2.9 Governmental Regulations and Policies

Barbara Kahn argues that governmental regulations have not had a big impact on the development of the grocery retail industry during the last decade. Furthermore Jeffrey Neville also argues that the evolvement of the retail industry is not due to any governmental actions. Neil Stern brings up a similar argument and thinks that changes are more driven by competition and consumers than politics and that the U.S. market remains a fairly open place.

Jeffrey Neville discuss that the current administration in the U.S. with Donald Trump as President has made the market even more open. Neil Stern brings up a similar argument: “When someone like Trump is in charge of the U.S. you are seeing a move away from environmental sustainable practices.” Furthermore Neil Stern believes that because of all the shifts on a national level, regarding environmental policies, it has been difficult to get sustained practices coming through. Furthermore Greg Ferrara argues that the government is “reactionary” and he discuss that there has been a growing trend towards healthier food and more transparency, but when the government make a decision to affect in the matter, the consumer trend has already made the grocery retailers to start changing before.

4.2.10 Recession

Keith Anderson tells that the biggest impact of the recession was to make those consumers that were already value conscious to be even more so. In addition to this he adds that also many of the people that were not already value conscious became so. This paved way for the hard discount stores such as the German chain Aldi and also dollar stores such as Dollar General. Keith also thinks that this focus on value still exist in many consumers mind even today, many years after the recession. Following this so does the low price retail formats. Barbara Thau also recognize this trend and tells that these kind of low-price retailers has since the recession become a large part of the retail market. Keith Anderson believes that it is partly due to that shopping in cheap stores became more common since it turned okay or even cool to do it. Neil Stern also think that many people stayed with the cheaper alternatives after the recession because once they traded down in terms of products and stores for the first time they actually liked what they saw. Karen Short believes that Walmart later lost it's value focus between 2012-2015, which affected their growth in a pretty substantial way given the trend of low price and value and the therefore growing competition from har discount stores.

One thing that Keith Anderson brings up as one of the accelerators of this trend towards value and price was the technological tools that enabled for better price comparison and also promotion and coupons. Furthermore he argues that the recession itself also speeded up the development of technology for seeking value. He explains that today many consumers still use these tools for finding the best bargain on particular items and that is very different from before. In line with this Paula Peyton also thinks that the consumer has become more deal prone from the recession and puts energy into finding the best deal. She thinks this has put many retailers in a position where they are struggling with their margin because of the hard price and promotion competition between different retailers. Greg Ferrara also remember the lowered margins that came as result of the recession and the fact that as America was coming out of it there was some food deflation, further pushed margins in the competitive environment. For the smaller supermarkets and stores this meant very tough times and it lead to consolidation in many areas, as only the big players could remain afloat. Although, Greg emphasize that for the most part the economy has now rebounded in most places in America, except for the areas that are very much dependent on the oil and gas industry, which has been punished by low prices for those commodities.

Another trend that seems to be connected to the recession and tougher economic times is the environmental trend according to Neil Stern. He saw that the recession quite abruptly ended the trend that was growing in the years leading up to the housing bubble and financial crisis. Both consumers and subsequently also retailers moved away from organic assortments and put more emphasis on price and value.

4.2.11 Health Concern

Steven Dennis states, "Organic and more healthy products is definitely a trend that is growing." He further concludes that there are three ways in which the market evolves with this trend. The smaller grocery stores that starts positioning themselves as being about organic and healthy food, the chains such as Whole Foods that builds a brand around their health and environmental image and finally the larger traditional retailers that are widening their shelf space for organic and healthy choices. David Dillon tells that this trend has been growing for at least 15 or even 30 years and he explains that what fueled this trend was the fact that once stores such as Whole Foods started offering more healthy food, consumer saw that this was something they liked. This made even more stores, including Kroger, to start offering these kind of products and as this lowered prices it kept on growing. However, as Steven discuss this topic he also bring up the fact that its is only a part of the market that is shifting in this direction and that there is also another trend that moves towards a stronger focus on value and convenience. According to him these two trends are polarizing the market and consumers move in either of the directions resulting in a weakening in between-market.

Paula Peyton holds a bit more skeptical approach and argue that retailers has been trying to lead the development to more healthy choices but struggled to make it work. One reason she thinks is that in the same time as they are promoting more vegetables in the diet, they still give offers on chips and snacks, which they make a lot of money on. This damages their credibility as health advisors. Greg Ferrara still believes that things have changed in the health area even though he does not want to state it as a dramatic change. What he sees from the grocers he work with and others is that the offering in terms of health is becoming broader and also store layout have come to include bigger sections of healthy products.

Barbara Thau connects the health trend a lot to the environmental trend and believes it is a trend that is not going away and keeps developing. However she also see that the growing online trend in some ways is competing with the health trend in regards of the fresh goods. She argues that since fresh goods obviously are not as suitable for online shopping as for example canned food shoppers do not want to buy fresh food online. She thinks this will be a barrier for online shopping in terms of attracting the health conscious consumers and it goes both ways. However, Barbara Kahn is of the opinion that the contradiction between online and fresh will diminish as the future unfolds and that this will not be an issue in the future.

4.2.12 Capital Dynamics

"Retail is huge and everyone once a piece of it. You can afford to gamble many times in order to get a market share of even only 1%. This is why capital is flowing for disruptive ideas."
(Bala Iyer)

Steven Dennis also recognize the attractiveness of retail in the eyes of investors and explains what he sees as an interesting shift in the way that venture capitalists are looking at the industry. Steven believes that new technology, which gives the rise to potential opportunities for scalable businesses, has made venture capitalists more interested in the retail industry. This has made venture capitalist more accepting to less solid business cases with big opportunities that rely on the idea than before. He explain that this creates a different dynamics in the competition since newer disruptors are able to compete without creating profit, while as the traditional players who are funded by more conservative methods is under pressure to generate profit. Dave Dillon confirms this by stating:

"It [The disruptor's value] is not based upon the case flow that they produce, where Kroger and most other companies that I know of, are valued based on the case flow that they produce. And given that difference, if you embark on too many things that do not produce much cash flow you may end up happy with your sales but you are not going to be happy with your profit and your shareholders are not going to be happy with you because you invested all their capital without additional profit to show for them."

Difference in attitude towards funding is also something that Barbara Kahn recognizes as one of the advantages that Amazon currently possesses. She explains that even though Amazon is a listed company its investors has for a long time accepted the fact that they continue to re-invest the revenue in R&D capabilities for long-term success. Also Neil Stern point towards this difference as he explain why he think that Walmart has not invested more heavily in their smaller store size formats in order to make them successful. He says: "At the end of the day the company has a certain amount of capital and they spend it where they get the best returns."

4.2.13 Labor

According to Keith Anderson the fact that labor unions America has gotten weaker than they used to be has enabled retailers to grow faster by open un-unionized stores with lower wages than historically. Neil Stern brings up the same argument and states:

"I would start by saying the union environment or the lack of union environment has enabled somebody like Walmart to open un-unionized stores to grow faster with a lower wage than historical grocery stores."

Neil Stern continues to speak about the even more favorable environment, in terms of labor regulations, which Amazon operates. He says that today it is Amazon that pulls the biggest advantage from these differences and not Walmart. Jeffrey Neville also brings up this unbalanced playing field and think that this is one of the things that push retail CFO:s to accept research into atomization, even though they generally do not like those kind of ventures.

Keith Anderson also adds to the labor discussion by bringing up the increased use of the 1099 tax form. The form enables people to work as independent contractors and it has been widely adopted as the employment form used of many of the newer start-ups in the U.S. Keith tells that for example Instacart's and parts of Amazon Prime's delivery model, both of which impact the grocery retail sector, builds upon the 1099 form and it offers the companies certain advantages. He explains that they avoid a lot of the responsibilities of traditional employers, which enables flexibility and faster growth as well as keeps costs down.

4.3 Annual Reports

4.3.1 Walmart

Expansion

Walmart's expansion in terms of new supercenter stores was strong in the first years that this study looks at. In the annual reports for year 2005 to 2008 Walmart reports that the number of supercenters grew with an average of 10% on an annual basis. This growth slowed dramatically in 2008 and have been relatively slow since then with an growth around 4%

annually and slowing down to 2 % annually since 2015 (Walmart, 2008; Walmart 2009; Walmart, 2010; Walmart, 2011; Walmart, 2012; Walmart, 2013; Walmart, 2014; Walmart, 2015; Walmart, 2016; Walmart, 2017). In their 2011 annual report, Walmart reports that Supercenters still remains their main growth engine even though from 2011 and until 2016 the percentage growth is bigger in the small formats.

As stated in the annual reports between 2006 and 2017 Walmart's international expansion has been strong throughout most of the time period. In 2011 Walmart launched its Walmart Express concept, which they expanded throughout the following years. In 2013 they expanded it into more rural areas to reach new customer segments (Walmart, 2014). However, in 2016 Walmart decided to close a big number of stores and discontinue the project (Walmart, 2017).

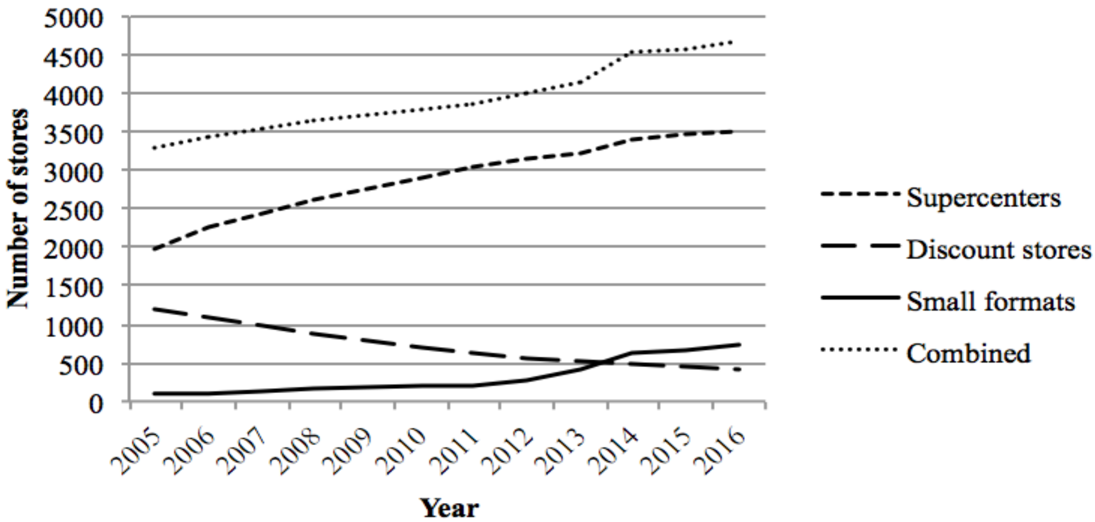

Figure 5: *Development of Walmart's different store formats*

Online

In 2007 Walmart launches its first Site-to-Store service for merchandise, which makes it possible for consumers to purchases online and pick up the merchandise in store (Walmart, 2008). This boosts Walmart's online sales and in 2009 the traffic on Walmart.com exceeds 1 billion visit, which is a 15% growth from the previous year (Walmart, 2009; Walmart, 2010). The efforts and innovation in online continues in 2010 and concepts such as Pickup Today and FedEx Site-to-Store are developed to further grow Walmart.com (Walmart 2011). During 2010 Walmart also tries to take a big step forward by creating a "Global ecommerce

Division" responsible for developing and executing a global ecommerce strategy to further accelerate the online segment (Walmart, 2011).

In 2011 @WalmartLabs is launched as a project to boost innovation with talent that is acquired by acquisitions of specialty internet companies within social and mobile media. New expertise is also gathered in the board, which creates a technology and ecommerce committee to help put focus on the online business (Walmart, 2012). In 2012 Walmart.com got an update with a new search engine along with the ability to get same day delivery. Furthermore, the same year Walmart launched a multi-year process to build "...the next generation global technical platform." With which they have high ambitions described as "By having the ability to connect every product in the world with every customer in the world, we'll be able to accelerate our expansion of e-commerce operations" (Walmart 2013). They also becomes majority owner, an ultimately in 2015 even complete owner of the Chinese ecommerce company Yihaodian to leverage knowledge and technology and get access to new markets (Walmart 2013, Walmart, 2016).

In 2013 Walmart start to test online grocery delivery as well as easy pickup for the first time, using the Walmart.com platform as they have previously done with the merchandise (Walmart, 2014). In 2014 Walmart officially launch the online grocery alternative in selected markets and invest over $1 billion in ecommerce integration for all segments but especially for improving the grocery ecommerce (Walmart, 2015). The improvements in channels continue also in 2015 and 2016 with investments in fulfillment centers as well as arranging for better in-store pickup and making the multi-channel experience more seamless (Walmart, 2016; Walmart, 2017). In 2016 Walmart acquires a number of ecommerce companies such as Jet.com and enters into an alliance with JD.com to further expand its internet reach and gain resources and capabilities within ecommerce (Walmart, 2017).

Customer Data

In 2012 Walmart puts big effort into improve how they work with data. Big data in order to adjust assortment and price as well as data from social media to predict and adapt to customer trends (Walmart, 2013). In 2013 they bring up data analytics as an essential part of improving both efficiency and customer experience (Walmart, 2014). On the same topic, in their 2017 annual report Walmart states that:

“We’re also leveraging tremendous data from the more than 140 million weekly customers that shop in U.S. stores to bring increased personalization and convenience for e-commerce shopping. We’re using data and analytics to tailor our assortment for customers — both what’s on their shopping list and what they didn’t know they needed. We’ve seen strength in key traffic-driving categories like grocery and health and wellness.”

In 2016 they are also further pointing out their focus on becoming a more digital enterprise by improving their work with analytics to be able to provide the whole organization with better tools (Walmart, 2017).

Products, Assortment and Price

In 2005 Walmart doubles its organic food offerings at selected locations and explains it with that “customers want healthier and more responsible food choices” (Walmart, 2006). In the following year Walmart decides that all fish and seafood sold in Walmart locations need to be MSC-certified to make it easier for consumers to know that they are buying products that are produced in a sustainable way (Walmart, 2007).

In 2010 Walmart acknowledge that they have lost some focus in their everyday low price (EDLP) philosophy, which has caused weaker sales performance in the U.S. Mike Duke, the CEO at the time comments on this in the 2011 annual report:

“The team is implementing an aggressive plan to reinforce our commitment to EDLP and to offer a broad merchandise assortment and presentation that’s even more relevant to customers. My top priority this year is to work with Bill Simon, CEO of Walmart U.S., and his team to achieve positive comparable store sales.”

This is followed up in 2011 by an announced $2 Billion investment to reduce prices in order to drive sales (Walmart, 2012). The effort continues into 2012 where Walmart emphasize on that their recent price cuts on many products now have resulted in a very competitively priced overall basket (Walmart, 2013).

People

In 2005 and 2006 Walmart launched several of initiatives for improving the lives and working condition of its associates. They launched a new “Value Plan” in 2005, which made the health coverage for its associates more affordable, and in 2006 they also increased the wages for their full time associates (Walmart, 2006; Walmart, 2007). Furthermore in 2006 Walmart also initiated a program for better relationship between management and store staff. The program entailed an improved support structure for store workers, an improvement and alignment of compensation plans, leadership development for managers as well as created a store-manager council to increase the visibility of feedback from the associates (Walmart, 2007). In 2014 and 2005 the focus on developing and improving the jobs for associates was also strong as Walmart in 2014 announced a $1 billion investment in higher wages, more training and also better opportunities to build careers within the company. That was followed up with a $2,7 billion investment over two years in 2015 with the same focus.

Customer In-Store Experience

Connected to improving the jobs for it associates, in 2005 Walmart decentralized some if its decision-making regarding the stores. This was also done in order to be able to get closer relationships and contact with the customers and to enable for faster adaptation to feedback (Walmart, 2006). The efforts to get closer to customers opinions continued the following year as Walmart launched its "Store of the Community" format. The idea behind it was to be more adaptive to the local communities' specific needs by listening to individual customers opinions (Walmart, 2007). The learnings from this along with deeper research on customer demands resulted in the implementation of "The Remodelling Program" in 2006 and 2007, which was a big effort to update and make stores more relevant to customers' demands (Walmart 2007; Walmart, 2008).

In 2011 Walmart increased the width of its grocery assortment and worked together with its suppliers to find new and more innovative product in order to become leading in some categories. This was done to be able to offer customers more choice and complete shopping experience (Walmart, 2012). The following year Walmart improved its customer loyalty program to provide better benefits to loyal customers. This was done to improve loyalty and increase the number of members (Walmart, 2012). In 2014 the smaller stores got upgraded to better fulfill the customer expectations (Walmart, 2015). In 2015 the cooperation with suppliers were also further improved in order to be able to provide the best fresh goods, and the same year investments in technology and processes within the stores was done in order to better handle the goods as well as update the in-store experience for customers (Walmart 2016).

To further improve the in-store experience for customers Walmart expands their self checkout solution with a mobile app called “Scan and Go” which allows customers to scan their products through a mobile app and then enable for quick cashierless checkout (Walmart, 2013). Also in 2014 Walmart invested in improving the customer experience connected to checkout by increasing the number of lanes especially during peak hours (2014). In 2015 Walmart launched their mobile payment solution “Walmart Pay” to further improve the checkout process but also to improve loyalty by raising switching costs (2016).

4.3.2 Kroger

Expansion

In 2013 Kroger expanded their operations heavily by acquiring Harris Teeter and the 230 stores that they operated. Harris Teeter has been focusing on customer service, selection, meal-time solutions and freshness (Kroger 2014). Furthermore in 2015 the acquisition of Roundy’s was announced, which made Kroger enter the state of Wisconsin. The acquisition included Pick ‘n Save, Copps, Metro Market and Mariano’s and added 151 retail grocery stores to the Kroger portfolio (Kroger, 2016).

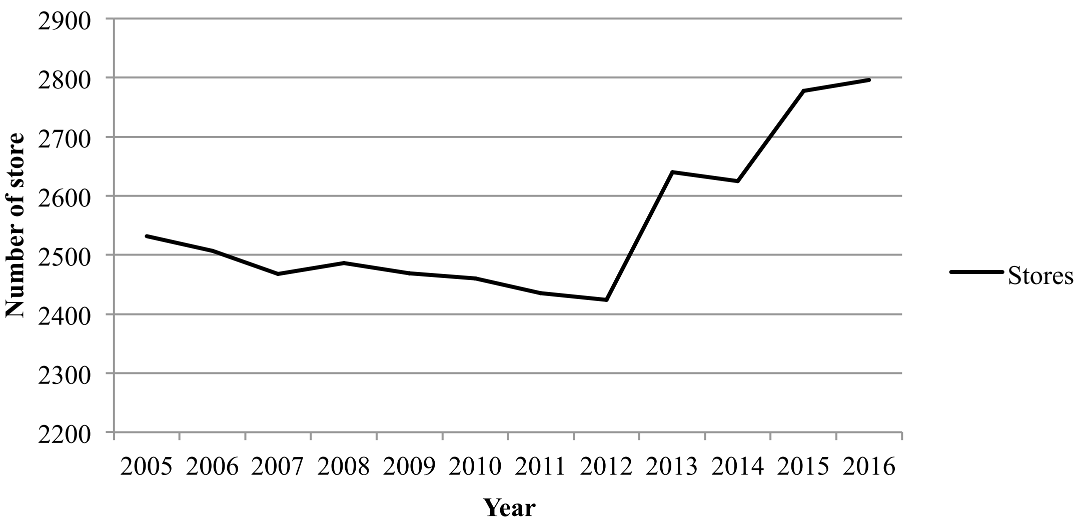

Figure 6: *Development of Krogers stores 2005-2017*

Online

In 2009 Kroger launched their first own solution for digital coupons (Kroger, 2010). Furthermore in 2011 the Kroger Mobile Application was launched, which enabled customers a cloud-based shopping list as well as digital coupons (Kroger, 2012). Furthermore in 2014 Kroger increased their effort related to ecommerce by the merger with Vitacost.com, and in the annual report for 2014 they state: “Our merger with Vitacost.com accelerated our entry into the eCommerce space by several years”. Furthermore in 2014 they started testing the concept of having customers ordering online and pickup at the store by implementing Harris Teeter’s ExpressLane concept in Cincinnati. In regards to the buy online pickup at store concept they further state in the annual report for 2015 that: “Customer feedback has been remarkable – they love it and tell us pickup is just as convenient, if not more convenient, than home delivery.” In the end of 2015 ClickList and Harris Teeter’s ExpressLane service for click-and-collect were operating in 221 stores (Kroger, 2016) and in 2016 Kroger added 420 new locations (Kroger, 2017). Furthermore Kroger stated in the annual report for 2016 that: “We’re making meaningful, targeted investments in digital initiatives.” Furthermore in 2016 they partnered up with Uber and Shipt delivery to provide home delivery of food groceries in several locations in the U.S. Moreover, in the annual report for 2016 they state:

> *“Anything, Anytime, Anywhere - We are building digital experiences so our customers can engage and shop for anything, anytime, anywhere. The excellent service they experience in the store will carry over seamlessly to our digital platforms. Whether shopping online, finding personalized and relevant promotions and recipes or downloading one of the more than one billion digital offers loaded to shopper cards each year, more and more customers are connecting digitally with Kroger.”*

Customer Insights

Kroger partnered up with Dunnhumby 2004 and has made significant efforts to collect data about customers, in the annual report for 2005 they state that: “Kroger has one of the most robust retail customer databases in America.” In addition to the partnership with Dunnhumby they use their store loyalty cards: “The data from these cards provides us with valuable insights into our Customers’ shopping behaviors.” In 2005 they had 20 million households using their store loyalty cards (Kroger, 2006). In 2008 Kroger improved their loyalty program with a food safety service that enable them to reach out to specific customers about recalls for products that they have bought (Kroger, 2009). Until 2009 Kroger’s loyalty cards were connected to eSaver, which was Procter and Gamble's product for digital coupons, but in 2009 launched their own solution for digital coupons (Kroger, 2010). Furthermore in 2011 they launched their first mobile application, which also included digital coupons amongst other functions (Kroger, 2012).

In 2014 Kroger made a strategic decision to change the partnership with Dunnhumby to a wholly owned subsidiary that they named 84.51°. The new company consists of 500 former employees from Dunnhumby and the motive was to continue develop the loyalty program but also be able to partner up with others to speed up innovation within the area. Furthermore also in 2014, Kroger acquired the Silicon Valley-based company You Technology, which was a leading company within coupons and promotions (Kroger, 2015).

People

Partly as a way to gain necessary capabilities Kroger have made acquisitions of other companies, as an example Kroger state in the annual report for 2014 that: "Vitacost connects us to an amazingly talented team of associates who have created a substantial platform that includes advanced technology and ship-to-home fulfillment centers." They further state in the annual report for 2014 that: "Together, the learnings from our Vitacost and Harris Teeter mergers are helping us give our customers the ability to interact with us when, where and how they want."

Product Assortment and Price

Kroger consider their private label products to be one of their key competitive strengths (Kroger, 2006; Kroger, 2017). In 2007 Kroger expanded their private label selection with more organic products due to increased demand (Kroger, 2008). Moreover in 2008 their private label groceries represented 34 % of their grocery units sold, which was all time high for Kroger (Kroger, 2009). In 2011 natural foods is the fastest growing store department for Kroger. Furthermore in 2011 Kroger initiated their "largest product launch in Kroger's history" when they introduced Simple Truth, which is their natural and organic product brand (Kroger, 2012). In 2016 natural and organic foods reached $16 billion in annual sales and in the the annual report from 2016 they state, "Today, natural and organic foods are integral to our success." Moreover, according to the annual report of 2016 Kroger did not focus on natural and organic products in stores because of the reason that it was not the focus for their customers. The same report state that it was in 2011 they started to concentrate their efforts in this area. In the annual report for the same year they also stated: “We are also keenly aware of growing customer megatrends, like health and wellness and the desire for restaurant-quality fresh and prepared foods that are also very convenient.”

Customer in-store experience

In 2011 Kroger put extra efforts into shorten checkout time for customers in their stores, and as one of multiple attempts to achieve this they invested in technology that helped them staff the registers with the right amount of people at the right time. According to Kroger they managed to reduce the average waiting time from several minutes to less than one minute (Kroger, 2012).

Furthermore in 2015 Kroger launched their first Digital Shelf Edge pilot that enabled them to show high-resolution shelf tags and media content to the customers from the shelf. The digital shelf tags also save time pricing different products, which can eventually lower the workforce or enable employees to focus on giving customers better service (Kroger, 2016). Furthermore Kroger state in the annual report for 2015 that this technology still needs to improve in order to be scalable and that they believe it can be integrated to connect with customers’ smartphones and display tailored content.

In 2015 Kroger invested in Lucky’s, which is a specialty grocery store that focus on natural, organic and locally grown products and at the time of the investments Lucky’s operated 17 stores. In the annual report for 2015 Kroger states:

> *“Our interest and investment in Lucky’s is fueled by the company’s great people and unique go-to-market strategy – with a 30,000 square foot store format that resembles an indoor farmers market and a culinary department that showcases amazing, restaurant-quality prepared foods.”*

Furthermore in the beginning of 2016 Kroger tried a new concept with their launch of Main and Vine. This new concept has a focus on increased experience for the customers with an event center including cooking demonstrations, food tasting, recipe ideas and an increased amount of locally produced, fresh and organic products (Kroger, 2016).

4.3.3 Costco

Expansion

In the annual report for the fiscal year of 2006 Costco stated:

"This past year we began to implement more aggressive expansion plans, targeting both new and existing markets in the United States and internationally…. We have found that our stronger markets can support increasing numbers of our warehouses in closer proximity to each other."

Furthermore they explain that the lower number of openings in 2009 compared to previous years was due to the economic conditions and difficulties to complete real estate deals (Costco, 2009).

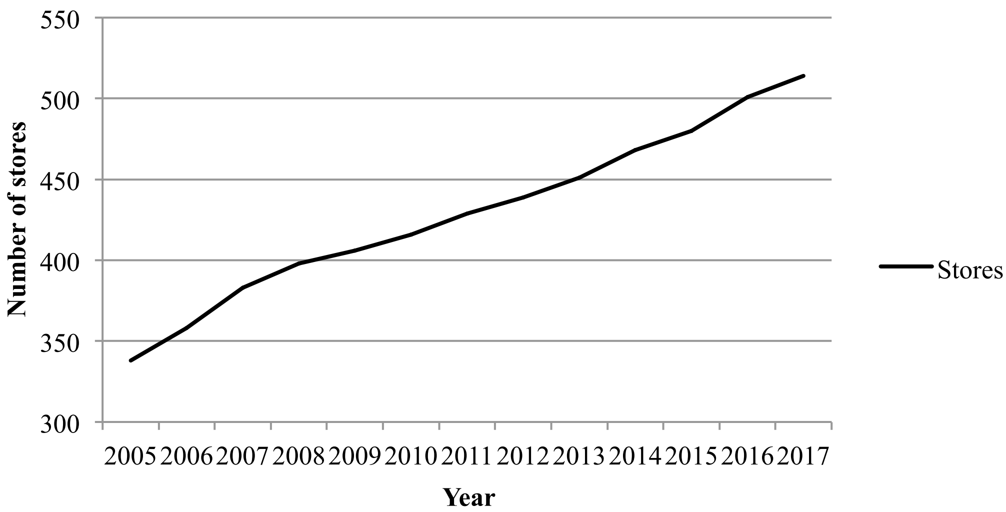

Figure 7**: Development of Costco stores 2005-2017**

Online

In 2012 Costco launched their first mobile application (Costco, 2012). Furthermore in 2013 Costco made investments in a new platform for their ecommerce website in order to improve the user experience and to have a platform that is more scalable for further integrations.

In 2014 Costco partnered up with Google in order to start test offering home delivery with Google Express (Costco, 2014). Furthermore in 2015 Costco expanded their partnerships related to home delivery by adding partnerships with Instacart, Boxed and Jet.com. Moreover in 2016 they invested in more distribution centers for their online orders in order to be closer to the consumers and thus lower the delivery time. The brick and mortar is still important for Costco but they also acknowledge that the retail landscape is changing in their annual report for 2017:

"Improving sales, comps, and member shopping frequency reaffirm that brick and mortars continues to be strong. Yet we recognize that technology has changed the retail landscape, now enabling us to connect with our members through multiple channels. We strive to create an easy, efficient and engaging way for members to shop with us in our warehouses and online."

Moreover in 2017 Costco announced that they would start offering grocery delivery using their partnership with Instacart and they further state in the annual report for 2017:

"Two exciting online offerings were recently introduced with the launch of Costco Grocery, a two-day delivery on dry grocery items, and a same-day delivery offering both fresh and dry grocery items through partnering with Instacart."

Product Assortment and Price

Costco offerings consist partly of their private label brand Kirkland Signature and the strategy for their private label is to offer a minimum of 20 percent lower price compared to the leading national brands that they sell (Costco, 2005; Costco, 2017). The sales generated from their private label have increased relative to other brands and accounted for 25 percent of the sales for the fiscal year of 2017 compared to 15 percent for the fiscal year of 2005 (Costco,2005; Costco 2017).

To be able to shop at Costco you need a membership, which is an important strategic aspect for Costco: "Our membership format is an integral part of our business model and has a significant effect on our profitability."(Costco, 2017). In May 2006 Costco made a strategic move to increase the membership fee needed to shop at Costco. This was followed by several years of constant prices until 2011 when they raised the fee again (Costco, 2012). Furthermore the prices remained on the same level until 2017 when they next time raised the fee (Costco, 2017). Furthermore the amount of members has almost doubled from August 2006 (47 000) to August 2017 (90 000) (Costco, 2006; Costco 2017).

In 2006 Costco declared a new emphasis on organic products. Furthermore in 2007 they argued that organic products were one of the fastest-growing categories and that: "We see many opportunities to increase our organic product offerings." In the annual report for 2012 Costco stated: "Demand for organic foods is up, and Costco is responding with organics in produce, poultry and ground beef." Furthermore in 2013 they made further investments to expand their private label with more organic products and in 2014 they stated:

> *"We expanded our offerings of organic products, keeping pace with the movement toward healthier lifestyles, which generated sales of nearly $3 billion. Natural and gluten-free foods are also selectively being added to our merchandise mix."*

People

Costco has a strategy to recruit people from within the organization for the senior executive positions and state in the annual report for fiscal 2011 that: "Most of our senior executives have been with the Company for more than 25 years and are well-versed in all areas of our operations." When the founder of Costco, James Sinegal retired and left his position as CEO in 2011 the board decided to elect Craig Jelinek for the position. Craig Jelinek has worked at Costco since 1984 (Costco, 2011). Moreover, Forbes named Costco the best larger employer in 2017 and according to themselves this was much due to their focus to provide an environment for the employees that encourage opportunities for growth and advancement within the company (Costco, 2017).

Customer in-store experience

Costco argues, "Our employees are Costco's most important asset; and their attention to "member service" is one of our greatest strengths" (Costco, 2011). Their stores have most of their goods stored on racks above the sales floor and products are displayed on pallets packed in large quantities, this to reduce labor cost. In terms of experience enhancing initiatives they offer customers an in-store-restaurant, which has been the case for the entire period for the study (Costco, 2005; Costco, 2017).

5 ANALYSIS AND DISCUSSION

In the following section different trends from in the empirical findings have been categorized into one out of four categories; (1) social factors, (2) Political and legal factors, (3) economical factors and (4) technological factors, according the characteristics of the specific trend. Furthermore, also based on the empirical findings, these are then discussed as antecedents of performed business model changes. The business model changes has also been identified and classified into what area of the business model that they affect.

5.1 Analysis

5.1.1 Business Model Innovation In Relation to Sociocultural Factors

The empirical findings in this study show that the way consumers in the U.S. have changed their lifestyle and way of living during the studied time period have influenced their needs and requirements for grocery shopping. Coming from mainly a few big stock-up trips per week to the store in the beginning of the period, many consumers now make several number of visits with smaller purchases in the later part of the time period. This has increased the demand for smaller and more centrally located stores. Furthermore the on-demand trend also includes an increased demand for more prepared food and the ability to have quick visits to the store. In summary consumers now want smaller stores than in the beginning of the time period. This has been identified as one of the reasons for Walmart to slow down their extreme expansion of superstores in favor of growing more in the smaller formats, which is in line with that Sorescu et al. (2011) and McGrath (2010) bring up sociocultural factors as drivers of business model innovation. In the beginning of the studied time period and also before that Walmart increased their number of stores immensely each year and since Walmart's business model rests a lot on their economies of scale to offer low prices it can be considered as a key activity at the time, according to Osterwalder and Pigneur's (2010) definition. However, when they in 2014 slowed down the speed of expansion it marked a change in their key activities. Part of this was another change in their business model by launching the Walmart Express concept in 2011. Walmart Express was an attempt to reach the new segment of people with need for a new distinct offer of smaller stores in closer locations and thereby a different distribution channel than the existing, which categorizes the change as a change in the business model building blocks customer segment and also channels (Osterwalder and Pigneur, 2010). Furthermore for these segments, the new format offered a more convenient way of shopping, which is also a change in the value proposition (Osterwalder and Pigneur, 2010). The reason for why this trend has taken off to the extent that it has is hard to fully prove but our findings indicate that the competition from new smaller formats has been a catalyst for it. This is aligned with the weight that Teece (2010) put in the importance of understanding competitors' ability to fulfill customers needs.

Another interesting trend that has been acknowledged is that experience in terms of the physical store has been a factor that has been varying in importance for consumers over the studied time period. It is clear that the consumers back in the beginning of the millenium did not regard experience as important as today but it had a positive trend that kept growing for the following years. The trend was broken by the recession where people got back to be more price focused and discarded experience in the pursuit for the best price. However, a few years after the turbulent time, experience once again got increased attention. Competition from the online space as well as specialty stores focused on experience pushed traditional retailers to enhance the experience and with it came higher expectations from consumers, which is aligned with how De Reuver et al. (2009) explain the importance of competition as an amplifier of trends. Today we see a larger segment of consumers expecting higher experience from retailers than they did 15 years ago, which have affected their preference in terms of choosing store. This has been explained as one of the main factors to why traditional retailers have invested heavily in improved in-store experience such as when Kroger in 2011 and Walmart in 2014 significantly improved the speed of their checkouts and by that changed their value propositions. This since it made it more convenient and pleasant for customers to visit their stores, which is according to Osterwalder and Pigneur's (2010) definition. Another example we found was when Walmart in 2016 invested significantly in employee training and development. By this they improved the personal assistance for customers, and thereby they changed their business model within the customer relationship building block (Osterwalder and Pigneur, 2010). The experience trend has also been explained as one of the reasons for Kroger's strong focus on in-store experience and their "Customer 1st" strategy. In 2015 Kroger also invested in Lucky's and launched their Main and Vine concept in 2016. By doing this they reached out to a segment willing to pay for different aspects than earlier segments, namely increased experience, and thereby changing the Customer Segments building block (Osterwalder and Pigneur, 2010).

The organic trend has been growing among consumers throughout the studied time period motivated by sustainability and traceability concerns as well as health concerns. Along the same concerns, the interest in locally produced products has also been growing. Consumers have been increasingly willing to pay a premium for these categories and expect retailers to have an assortment that fulfills these needs. This has given space to a growing market that focus on the changing consumer segments. However, there seem to be some regional differences in the extent that these trends has developed and even though it has seen a strong growth throughout the period our findings suggest that the economic situation for consumers affect the impact that the trend has on their buying behavior. It is interesting to see the business model changes happening that has been explained by this trend since the connection between economy and interest can bee seen and furthermore also the fact that it has grown a lot since 2011. Early indications of the trend explain when Walmart in 2005 doubled its organic food offering in selected locations. By doing this they expanded their business model to cover the new and growing customer segment since the big increase in organic food signaled to consumers with this specific need that they could shop at Walmart (Osterwalder and Pigneur, 2010). However, following this there was not much activity in the field other than small assortment improvements until 2011 when Kroger started offering organic products on a significant level and also launched their organic private label Simple Truth. This is explained by the fact that the demand and expectation from consumers was growing in a rapid pace. Why customers' expectation grew cannot be fully strengthened but from our findings we can see that competition seem to have been an intensifying force, which is in line with Teece (2010) explanation to the role of competition in business model innovation. By doing these changes Kroger reached out to a new group of customers that require distinct offers and are willing to pay for different aspects of the offer compared to earlier segments. Furthermore by doing this they also improved the performance of their service and the Simple Truth products offered customers organic products to a lower price than before. Thereby the customer segments as well as the value proposition building block changed (Osterwalder and Pigneur, 2010). The same trend can be connected to when Walmart in 2015 improved their cooperation with its suppliers of fresh goods and invested in technology and processes in-store to better handled these goods. By doing this they changed their value proposition as well as key partners building block. This since it improved the performance of their service in terms of providing high quality fresh goods as and it also built a stronger relationship with their suppliers (Osterwalder and Pigneur, 2010).

5.1.2 Business Model Innovation in Relation to Political and Legal Factors

Our empirical findings indicate that the grocery retailing industry within the United States have not changed significantly due to governmental regulations and policies. With that said we acknowledge the fact that governmental actions have occurred during the studied period but we have not found any evidence suggesting direct linkages to business model changes. Furthermore we can conclude that few major events have occurred in regards of unions and labor regulations during the studied time period. However, we have found that the absence of strong unions have allowed big players such as Walmart big flexibility in terms of labor. Since this cannot be related to any specific event or change from Walmart, we do not propose that any direct business model changes has occurred as a consequence. However, this is something that also Casadesus-Masanell and Ricart (2011) bring up as they point out deregulation as a driver for business model innovation. Also uneven regulations for non traditional retailers like Amazon has affected the competition by enabling them to grow with less costs and it has been suggested that this drives traditional retailers towards more automation but we do not find the evidence strong enough in order to conclude that this has affected their business models. Nevertheless, the ability to work as a private contractor through the 1099 form have enabled some of the companies that today fuel the online development to grow, which in turn has had effect on some retailers key partnership building blocks as they have partnered with for example Instacart or Uber. Although, the 1099 form might be a key component in making these distribution partners operate we do not consider it a factor that has caused these changes since the chain of causality is too vague.

5.1.3 Business Model Innovation in Relation to Economic Factors

As stated earlier, the economy has in some cases interrupted or overruled social trends including for example the health and environmental trend which makes it an important factor. The most evident example of this is the recession and the impact that it had in the ongoing trends. But apart from this it also initiated a strengthening the importance of price for consumers' buying behavior. Many people traded down, both in terms of brands of products, to for example private label brands but also in terms of retailer. Interestingly this focus on price and value seems to have remained in consumers' minds even as the economic environment turned around. Our empirical evidence suggests that this caused Walmart's strong efforts and investment in 2010, 2011 and 2012 into lowering their prices and building their EDLP offer even stronger. By doing this they changed their value proposition to promise lower prices and thereby improving the value of their service (Osterwalder and Pigneur, 2010). Although, the recession has been stated as the biggest factors for the focus on price and value, the increasing income gap in the U.S. has also been referred to as a driver of this.

On a different note, an interesting finding in regards of the economic environment is the fact that the attitude of investors seems to have affected the competitive conditions in the industry during the studied period. Recent shifts in acceptance for less solid business cases has enabled competitors to pop up and compete with non profitable business models against incumbents that are limited by demands for generating profit. However, we have not been able to link any strong evidence to any specific business model changes as a consequence of this and it seems like it is more of a catalyst for increased competition than an initiating factor for trends. It is though an interesting aspect considering what has been brought up earlier on that Teece (2010) bring up competition and comparison between competitors is an amplifying force. This would mean that high risk appetite and stamina from investors is a driver for business model innovation as result from the competition.

5.1.4 Business Model Innovation in Relation to Technological Factors

In the empirical findings it becomes evident that technological developments have had important implications on the grocery retail industry during the studied period, which is aligned with Khanagha et al.'s (2014), Osterwalder and Pigneur (2010) and Casadesus-Masanell and Ricart's (2011) research. With a growing digitalization during the studied time period, several technological factors changed in relation to that. One of the most significant changes for the retail industry during the studied period is related to the appearance of the smartphone. Due to this technical device, customers now have access to internet everywhere, which have increased the availability of information and changed the way they customers communicate. This further adds on Teece's (2010) finding that the internet has increased customer power and driven business model innovation. Affected by how customers communicate in other sectors than food as well as with each other, customers got used to the digital experience and started to expect retailers to provide them with the information they needed in a digital channel. One of multiple ways Walmart responded to this trend was to acquire multiple specialty internet companies in 2010, which changed their key resources building block by adding important human resources (Osterwalder and Pigneur, 2010), resources that are important for building competitive advantage according to Barney (1991). These new resources was also the foundation of @WalmartLabs that changed their key activities in relation to social and mobile media. Also Kroger in 2011 and Costco in 2012 reacted to the trend and launched their first mobile applications where they offered customers access to all coupons and promotions digitally in their phones. This changed the way they raise awareness of their offerings and thereby the channels building block of the business model (Osterwalder and Pigneur, 2010). The Kroger application later on developed into offering detailed information about all their products, this improved the self-service by providing a tool for customer to help themselves, which changed the customer relationship building block (Osterwalder and Pigneur, 2010). Furthermore Walmart launched a Scan and Go function in their mobile application in 2012, enabling customers to skip the part of repackaging the goods at the checkout, which improved the convenience for the customer and through that, the value proposition building block (Osterwalder and Pigneur, 2010). Related to the digital coupons and promotions, Kroger invested in important intellectual and human resources by acquiring You Technology in 2014, which changed the key resources building block. Moreover, when Walmart in 2015 launched their mobile payment solution, Walmart Pay, they improved their value proposition by making it more convenient for consumers to shop in their stores (Osterwalder and Pigneur, 2010).

Furthermore and also related to the digitalization trend our empirical findings show that the development of ecommerce has been one of the most impactful factors to grocery retailing during the studied period. Aligned with the fact that new entrants has been suggested by Reuver et al. (2009) to be an important aspect of driving business model innovation, the growing presence of Amazon in the retail space and now also in the grocery areas has in our findings been identified as one of the main engines for the ecommerce growth. However, our research indicates that ecommerce for grocery retailing is a particular difficult category because of several reasons; (1) different types of products that require different handling, (2) variability of sales impacting inventory management and (3) multiple issues related to selection of groceries. In addition to this solving the last mile delivery seems to be difficult to do in a profitable way. Companies have dealt with these challenges in different ways, one solution to the last mile problem was to offer an “order online and pickup at store” solution and when Walmart in 2013 and Kroger in 2014 started offering customers this this they changed the building block value proposition since they made their offerings more convenient to consume and the channels build block since the delivering of the service changed (Osterwalder and Pigneur, 2010). Furthermore when Walmart in 2013, Kroger in 2016 and Costco in 2017 started offering home delivery of groceries, this was a change in the building block customer segments since customers are reached through different distribution channels and is willing to pay for different aspects of the offer (Osterwalder and Pigneur, 2010). This was also a change in the building block value proposition since they made their offerings more convenient to consume and in addition it also changed the channels building block in their business model since they changed the way they allowed customers to make purchases as well as how the service was delivered (Osterwalder and Pigneur, 2010). Costco and Kroger enabled this service through a new strategic partnerships with the third party intermediary Instacart for the delivery, which changed the key partnership building blocks but also the cost structure and revenue stream. This since it is a new way to handle the costs related to delivery by making them variable and also a new way of earning revenue selling through a third party (Osterwalder and Pigneur, 2010). Walmart has since 2013 used their own delivery service but in addition to this they added third party intermediaries as well in 2016, which then changed the key partnership building block (Osterwalder and Pigneur, 2010). When Kroger in 2014 and Walmart in 2016 acquired companies with strong ecommerce presence they added new human resources as well as intellectual capital to their business model. Since these resources are important assets to make the business model work the key resources building block changed (Osterwalder and Pigneur, 2010).

Another important technological development related to the digitalization trend that emerged during the studied period is to use voice in order to navigate different digital devices. This is relatively new to the market but because of the rate of adoption and potential to further grow and change the retail landscape it has already affected different retailers and the competitive landscape, which according to Teece (2010) can have impact on business model innovation. The actors providing the technology are not traditional retailers but rather digital companies offering a platform. Furthermore established players seem to adapt to this new technology buy forming strategic partnerships with platform providers rather than building their own voice platform. Walmart entered a strategic partnership with Google in 2017 to let customers buy their products through Google Assistant for shopping. This changed the key partnership building block because of the partnership, the value proposition because of the increased convenience and channels building block since it allows the customer to purchase products in a new way (Osterwalder and Pigneur, 2010).

An additional factor related to digitalization trend is the importance of data and customer insight. Since digitalization change the way companies communicate with customers it has also enabled companies to reach out to customers with personalized coupons and other offerings based on consumer insights. The work to use data in order to understand customer behavior has significantly changed during the studied period. The study reveals example of companies that had a lot of information but not the ability to analyze and understand it. Many grocery retailers earlier relied on information from suppliers to large extent, but during the studied period they made efforts in order to understand customer insights themselves. In 2009 Kroger made a strategic move and launched their own platform for digital coupons and ended their partnership with Procter and Gamble related to digital coupons. This changed the key partnership building block since coupons and the related personalized offerings and data insight it includes are essential parts to make their business model work (Osterwalder and Pigneur, 2010). When analyzing the business model changes in regards to this technical aspect it was found that Kroger entered an important partnership with the data insight company Dunnhumby in 2004 in order to leverage their data into customer insights. This changed the business model building block key partnership for Kroger. Furthermore when they ended the partnership for a wholly-owned subsidiary company they hired 500 employees from Dunnhumby and thereby made change in their human resources related to one of the most important assets, this caused a change in the key resources building block (Osterwalder and Pigneur, 2010).

5.2 Discussion

Coming back to our definition of business model innovation founded in Kanagah et al. (2014), Frankenberg et al. (2013) and Sorescus et al.'s (2011) definitions. We can conclude that the changes in business model building blocks described in the previous section are examples of business model innovation since they are changes in one or multiple building blocks in the retailers' business models. The changes that we have found are mainly incremental, which is reasonable to assume giving the maturity of the industry. However, some changes like the online purchase and home delivery of food groceries are more transformational as they are taking the retailer into unexplored ways of creating and delivering value for customers. In order to fully establish and understanding for which of the changes that are more transformational we would have to look into how the changes from the initial event can cause subsequent changes in other parts of the business model.

To begin with, our study indicates that technological factors seems to be the most important antecedent for business model innovation, which is in line with what De Reuver, Bouwman and MacInnes (2009) found in their research, as well as the more recent study from Kanagha et al. (2014). Adding on to their findings is the fact that we have been able to find indications of that technological factors tend to frequently give rise to changes in the key partnership and key resources building block to a larger extent than other factors in our study. Furthermore our analysis suggest that the rapid technological development and the fact that traditional retailers do not possess the necessary capabilities in their business model in order to offer what they want to offer can be an explanatory aspect to this. The lack of capabilities is aligned with Chesbrough's (2007, 2010) and Lindgardt et al.'s (2009) argumentation that the success of a business model is not a permanent fact due to the dynamics in the environment. Furthermore as the need for firms to innovate and renew themselves in order to stay competitive, which is strongly proposed by numerous scholars (Grant, 1996; Teece and Pisano, 1994; Dierickx and Cool, 1989; Schreyögg and Kliesch-Eberl, 2007), the traditional retailers try to innovate their business model in the ways that they can. This causes them to partner up with companies that possess the needed resources and by changing their key partnership structure, the retailers are able to renew themselves. On the same notion this seems to be true related to changes in their key resources as the traditional retailers tries to speed up their access to valuable resources and capabilities, related to a new technological trend, by acquiring companies that posses these. These resources are often rare and hard to build up internally so by acquiring a company the firm is able to more quickly innovate their business model. By this, these business model innovations within technology are well described as a way to gain competitive advantage through valuable, and to some extent also rare and imitable resources, and thereby in accordance to Barney's (1991) argumentation and the resource based view.

In our analysis we have found examples of companies not being able to commercialize a new technological invention by a sustainable business model and therefore waited to adopt the technology, this is aligined with Berglund and Sandström 2013 and Casadesus-Masanell and Zhu (2013) that suggest that competetiveness lays in the firm's ability to commercialize new inventions. Furthermore when they were able to capture big enough value from an invention they changed their business model, which is aligned with previous research (Chesbrough, 2010; Chesbrough, 2007; Chesbrough and Rosenbloom, 2002). In addition to this we have found indications that other changes in a firm's value proposition can to some degree substitute the underlying value driver of the non-implemented invention in order to stay competitive.

Even though technological factors seems to be the most important factors our study indicates that sociocultural factors also have important impact as drivers of business model change. We have been able to identify multiple linkages between sociocultural factors and changes in the companies' business models. This is aligned with previous research that suggest that sociocultural factors are important drivers of business model innovation (Sorescu et al., 2011; McGrath, 2010), and in addition to this our study indicates that the Channels building block seems to be more frequently changed in relation to sociocultural factors than technological factors. But to further strengthen this more research is needed, which is why we leave it as an indication.

On a different note, our study indicates that there needs to be a big enough customer demand related to a new trend before most companies make significant strategic moves and change their value proposition. This fit between value proposition and customer demand is aligned with previous research (Zott, Amit and Massa, 2011; George and Bock, 2011; Teece, 2010; Chesbrough, 2007; Chesbrough and Rosenbloom, 2002). But in addition to this we have found indications that point toward that some companies are able to jump onto a trend earlier than competitors due to different expectations from investors in terms of short-term return on invested capital. With that said we acknowledge the fact that more research within this area is needed to strengthen this argument. When analyzing the value proposition further we have seen indications that there might be a difference in how technological and sociocultural factors lead to changes in the value proposition. In our study technological factors tend to mostly affect the way the company's value proposition by improving the convenience for the customers. In contrast to this when we analyze the sociocultural factors in relation to value proposition, our study does not indicate improved convenience as a particular strong mean to create more value. Related to improving the value proposition our study does not indicate any particular approach linked to sociocultural factors.

The political factors can been concluded to not have any direct effect on business model innovation. However, as our analysis shows there seems to be indication that the political and legislative environment creates a setting for other factors to affect. Casadesus-Masanell and Ricart (2011) suggest that deregulation can be a driver of business model innovation and our analysis can to some extent confirm this. Although, we see it as a part of the puzzle that affects business models, we do not want to suggest whether it is driver of business model innovation or not. More research related to the linkages in the external environment is needed in order to further be able to answer this question. In relation this it is also worth considering the setting of our study. Since we are studying the U.S. grocery retail market, where the market environment have been described in our findings to be less regulated than many other market, it is reasonable to connect the absence of political factors that have effect to the specific market. Therefore we do not argue that political factors cannot have an impact on business model innovation.

Also the economic environment is an area where our findings is some respect point towards conclusions but where we cannot seem to find strong enough evidence to the direct effect in business model building blocks. Especially where the economic environment seems to have affected other trends is a field that is thrilling but we can not theoretically conclude on these chains of events. However, the fact that the recession and increasing income gaps has pushed retailers to increased price focus and changed Value Propositions is albeit a clear effect directly linked to the economic factors and further relates to the connection between customer demand and changes in value proposition found in earlier research (Zott, Amit and Massa, 2011; George and Bock, 2011; Teece, 2010; Chesbrough, 2007; Chesbrough and Rosenbloom, 2002). In terms of generalizability however, the impact of the recession was more severe in the U.S. than in most other countries which might give this factor an enhanced power, yet, the impact shown are according to us enough to indicate that the general state of economy has an impact.

6 CONCLUSION

In this section we will first discuss our findings in relation to our research purpose, subsequently we go through the theoretical contribution followed by the practical contribution. We end the paper by giving suggestions on future research based on topics that we found interesting to further investigate.

6.1 Research Purpose

Our aim of this research project was to increase the understanding of antecedents in relation to business model innovation in specific business model building blocks. Since we have been able to identify and categorize different external factors as well as related business model innovations and the changes in specific building blocks, we have been able draw conclusions about how different external factors can act as antecedents for business model innovation in specific business model building blocks. We have been able to achieve this by our method of triangulating three separate data sources and to have them partly overlap, but more importantly, strengthening the chain of causality between different events.

6.2 Contribution

6.2.1 Theoretical Contribution

This study has been conducted as an attempt to increase the understanding in of the dynamic part of business model research and the field of business model innovation. The research area of business model innovation has been described to be at an early stage, lacking a theoretical base, and that much remains to be discovered in terms of the drivers related to it (Wirtz et al., 2016, O'Connor and Yamin, 2011; Morris et al., 2005; Zott et al., 2011). In order to increase the understanding regarding drivers of business model innovation we followed research from scholars including, Sorescu et al. (2011), Demil and Lecocq, (2010), McGrath (2010) and De

Reuver, Bouwman and MacInnes (2009), suggesting that external factors are important in this regard. Using triangulation we gathered data to try to clarify the role of different drivers and to try to categorize different factors, in order to be able to draw conclusions on how these different factors can be antecedents of business model innovation. Our findings made us strengthen the research mentioned above suggesting that external factors have an important impact on business model innovation. Furthermore it also lead us to the conclusion that technological factors, as suggested by De Reuver, et al. (2009) and Casadesus-Masanell and Ricart (2011), are a key driver of business model innovation. However, we also found that sociocultural factors can be a driver of business model innovation, which is a less common conclusion in the existing literature with exception of the research conducted by Sorescu et al. (2011) and McGrath, (2010).

In addition to strengthening existing research, our ability to find indications for how the different factors influence business model innovation within the different building blocks of a business model adds contribution to this field of research. From our review of the literature on business models and business model innovation we concluded that there was not much literature describing how different factors affect different parts of a business model but our findings represent an initial step into this domain. This is interesting, especially considering that Teece (2010) propose that evaluating each element in a business model in relation to the environment is important for succeeding with business model innovation. Our conclusions make this approach more applicable since it explains the connection between different types of external factors and a business model's different building blocks. Furthermore it has been concluded that previous research on business models mainly have been studying companies with internet based business models (Zott, Amit and Massa, 2011), which is why our very tangible and traditional industry is a good contrasting contribution to widen the understanding of the concept. In connection to this, our research further led us to find evidence in our findings for the suggestions proposed by RBV literature by applying concepts in terms of the need for renewal (Grant, 1996; Teece and Pisano, 1994; Dierickx and Cool, 1989), and the need for valuable resources to build competitive advantage (Barney 1991). By this we add to the literature a valuable contribution to the complexity explained by Morris et al. (2005), regarding where to position business model innovation in terms of theoretical foundation. This have to some extent also become a response to Sorescu et al.'s (2011) call for more research regarding retail that elaborates on antecedents and links it to theory such as Barney's (1991) RBV and others.

6.2.2 Practical Contribution

Our research proved managers with an increased understanding for which external factors that give rise to different kinds business model innovation within the grocery retail industry. Given this, in order to quickly respond to external changes that are impactful for industries managers should closely monitor the technological development in particular. This allows for a head start in finding ways to access valuable resources such as human and intellectual capital within the field. However, managers of established firm must also recognize that the investor environment of today allows for new entrants to pursue competitive ideas for a rather long period of time without generating profit. This means that they need to monitor the development in order to know when a technology or strategy has developed to the point that it is worth pursuing and still being able to generate profit.

Social trends has also been found to have impact on business model innovation, which is why we can suggest managers to have a close connection to their customers in order to understand the shifts that occur. Furthermore as many of the retailers of today already to using data to assess these kind of issues seem to be a successful way of doing it. In terms of specific trends we have seen that trends such as health and environmental concern tend to grow when the economy is good while as price and value focus tends to be increased in economic downturns. By quickly adapting their Value Proposition to this, managers of grocery retailers can gain an advantage over competition and steal market share also when the economy turns around.

6.3 Future Research

When conducting our research, we identified opportunities for future research. In order to further understand how generalizable our results of business model innovation are, more studies need to be conducted, to begin with it would be interesting to do the same study with minor grocery retailers, another aspect would be to study other retail sectors than grocery retailing. A further approach that would be interesting to pursue would be to do a similar study in a different context to see if there are differences and by that increase understanding of the generalizability. Especially the impact of the political factors would be interesting to examine in a for example a European context since our data indicated that there might be differences there. Moreover, as discussed in previous section we have not been able to study the process of how external drivers are affected by other sources in the scope of this study and we believe that further understanding of these processes could contribute to increased understanding of how business model innovation occurs. For researcher attempting to pursue this we can suggest to try to apply both theories of Competitive Dynamics as well as Institutional Theory since we have seen cases that potentially could be explained by these. Therefore we would like to encourage to further research in this area. Furthermore we also recognize the need to further in depth study also the interdependencies between different building blocks in the business model. An in depth case study on a single company could be beneficial to try to find these linkages and increase our knowledge of how business model innovation happens as a result of a previous change in the business model.

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