Retailers in the Era of Digital Darwinism

A study fundament for adaptation-performance relationship research with focus on Danish retailers

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Executive summary

“It is not necessary to change. Survival is not mandatory.” - W. Edwards Deming

Purpose: The purpose of this thesis is to look at the literature on Organizational adaptation in order to investigate how adaptation has been conceptualized by researchers and to examine the relationship between adaptation and performance of a sample of 185 retailers in Denmark.

Methodology: Adopting positivist philosophy and a descriptive correlational research design, this thesis is using both primary and secondary data in order to capture the impact of retail in Denmark and whether there are certain adaptation types that drive to positive performance outcomes.

Findings: The association between adaptation strategies and performance cannot be generalized for all retailers and the thesis provides empirical insight into different types of retailers, but takes a closer look also at the implications of e-commerce on retailing industry in Denmark.

Limitations: The limitations of the thesis are presented also in a separate and more detailed chapter, but the main limitation is that the sample was a convenience sample and may not be therefore representative for the entire population of retailers. A deductive approach is used in this thesis, so besides testing hypotheses, information and recommendations for further studies on how to take into consideration the concept of fit as a mediator of the adaptation-performance relationship is provided.

Practical implications: The aim of the thesis was twofold, providing an analysis at the macro-economic level in terms of the implications of e-commerce on retailing industry in the Northern Jutland region of Denmark, but also an analysis at the firm micro level by investigating how retailers responded the changes in their environment. The results of the data analysis and the theoretical considerations will be used in a future AAU research project about the retail industry in Northern Jutland region of Denmark.
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This research project has been a great opportunity for me and I think I have succeeded in achieving my goals.

It was an interesting process and it needed continuous adjustments and changes. Therefore, I think my supervisor Jonas Strømfeldt Eduardsen deserves my appreciation for his persistent guidance and timely feedback. Also, I would like to thank Reimer Ivang and Keld Arenholt Christensen for giving me the chance to participate in this research project and I wish them luck in continuing what I started with this thesis. Last but not least, I would like to express my gratitude to all the teachers and administrative staff in the Business and Management Department.
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1. Introduction

“It is not the strongest or the most intelligent who will survive but those who can best manage change.” - Leon C. Megginson
1.1. Statement of the problem
A central point in management is how to cope with change (Chakravarthy, 1982) and a lot of studies focus on how firms can be responsive to changes in their environment, particularly when the environment is dynamic (Miller, 1982). Explaining how and why organizations change has been a highly discussed topic within management and organizational research, and although evolution and change are sometimes used interchangeably, generally evolution explains change as “a recurrent, cumulative, and probabilistic progression of variation, selection, and retention of organizational entities”(Van De Ven & Poole, 1995).

A world that changes poses both challenges and opportunities for an organism (Tebbich, Griffin, Peschl, & Sterelny, 2016), and the way organisms react to those changes can have an impact on how they perform, and consequently, on their evolution. Evolutionary theory deals with explaining how life on earth got to be the way it is now, and there are two main theorists that studied and fostered a debate in this area: Jean-Baptiste Lamarck (1744-1829) and Charles Darwin (1809-1882). They both argued that life had changed gradually over time and that living things change to be better suited and adapted to their environments. Lamarck's theory held that species suffered changes in response to changes in their environment. Later, Darwin's theory was grounded on natural selection and highlighted that the ones that fit the environment will survive, whereas the ones not so well adapted, die off.

The scholars following Lamarck’s theory of evolution argue that there are characteristics that could be acquired through learning and imitation; on the other hand, scholars who adopt Darwinian evolution believe that these characteristics could be inherited through intergenerational processes (Van De Ven & Poole, 1995).

Although one cannot predict which organizations will survive or not, in a review of the evolutionary theory applications within organization and management, Van De Ven and Poole (1995) found that this theory was, entirely or partially, used to highlight changes in organizational populations, to explain strategy making within organizations, or to understand the social-psychological processes of organizing. Organizational scholars that applied Darwin’s theory of organism evolution to the evolution of organizations seem to agree that organizations have to adapt to changes in their environment if they want to survive.
Humans have evolved from primitive hunters to civilized inhabitants, in a continuously changing environment that nowadays is exploding of scientific and technological knowledge. It has been argued that globalization, the introduction and development of digital technologies has changed and continues to change business organizations and networks. Therefore, organizations must understand how digitalization impacts their environment in order to adapt, align their strategies and ultimately survive.

**A new technological revolution**

*Technological revolutions* are defined as the clusters of interrelated technology systems that transform eventually the economy, the productivity levels and open new innovation trajectories (Perez, 2010). Schumpeter fostered a debate on how technical change and entrepreneurship can be the root of economic growth, by focusing on the role of innovation in economic growth and on the cyclically of the system (Schumpeter, 1911).

Under the neo-Schumpeterian view, innovation illustrated through the introduction of technical change is connected with other innovations in a revolution, *which seen as enabling and changing technology, the economy and the socio-institutional context*. Each revolution is characterized by a number of new and interrelated products and technologies, which enable also the creation of new industries. The research within the area of techno-economic paradigms seems to agree that a revolution has two main features: interconnected and interdependent systems within technology and markets, and the capacity of profoundly transforming the rest of the economy (Perez, 2010).

Technological revolutions have the capacity to profoundly transform and alter every part of the world and the development of technologies transforms work and consumption patterns, but also way businesses are done and organized (Perez, 2009, 2010). Throughout history, the arrival of revolutionary technologies such as the railroad, the automobile, and the telephone, has influenced work and employment, but mostly have changed the way companies organize their business. The advent of the internet in 1971 has caused a lot of changes in all spheres of life including business activities. Before the internet, earlier technological changes also led to changes that reshaped the global economic power. For instance, in the 3rd technological revolution, General Electric became a superpower by distributing power for Industrial use and taking advantage of the other opportunities available in the electricity era through the leadership of Welch (Abetti, 2006). The advances in information and communication technology (ICT)
drove and are driving changes in the economy, which consequently requests for new business models to be developed and implemented. Corrado and Hulten (2010) argue that the innovation that has shaped recent economic growth was definitely not an independent event or just a result of investments in R&D and ICT, but more “a process of investments in technological expertise, product design, market development, and organizational capability”.

What the internet has brought to businesses is unprecedented, as more and more companies face intense competition from new entrants who are using the internet to erode incumbent competitiveness. One of the revolutionary powers of the current internet age is digitalization, and as a technological revolution, digitalization has created new business winners and losers in the market place. Access to information from the internet has made customers more demanding and powerful, provoking a shift in the balance of power from businesses to consumers. For instance, the market leader in book publishing and distribution- Barnes and Noble- is fiercely combating with Amazon.com because it was slow at taking advantage of the potentials of the internet, and this is just an example that well established companies can lose their market positions across a range of industries because of radical technologies and innovations enabled by technology.

There could be no doubt that Internet and digitalization gave birth to a new era of technological revolution. Compared with the time period before 1971, when Intel introduced their microprocessor, the 5th technological revolution also known as the Age of Information and Telecommunication several innovations appeared in terms of technologies, industries and infrastructures. Among these innovations, the biggest change came in the form of new technologies and new or redefined industries such as computers, software, microelectronics, telecommunications, computer-aided biotechnology and innovative materials. In addition to that, it has been claimed that the 5th technological revolution has the potential to not only change the business environment but to completely disrupt and radically change the way businesses are done. For instance, this revolution brought economies of scope and specialization combined with economies of scale. It also created instant global communication, made possible the interaction between global and local and transformed knowledge into capital (Perez, 2010).
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The Era of “digital Darwinism” for the business environment

A world where the Internet and digitalization would not exist anymore is almost impossible to imagine. A situation where the Internet would disappear from Earth would have a tremendous impact on the economy, companies and people. Some businesses would totally be disrupted (i.e. financial institutions), and millions of jobs in sectors dependent on technologies associated with information and Internet would disappear, which of course would change people’s life.

Darwin in its work on evolutionary theory highlights that it is not necessarily the strongest or most intelligent species that survives, but rather those that come to respond and adapt to changes in their environment. Today, we live in an era of the so-called “digital Darwinism”, a time where society and technology are evolving faster than firms’ ability to adapt to the changes in the environment. It is important to mention that it took 30 years for electricity to reach 10% adoption within the third technological revolution, but in less than five years tablet devices using the internet have achieved 10% rate, causing a wake of business innovations as businesses explore and engage new technologies in their activities (DeGusta, 2012).

It has been argued that businesses who are able to make use of the opportunities offered by the revolution will become winners while incumbents who refuse to innovate will become losers because technological revolutions change the dynamics of competition. Since the onset of the digital age, many brick and mortar businesses have lost market share significantly to pure digital players because they were slow in using digital tools and technologies. Thus, it seems that those missing the window of opportunity are risking becoming casualties of digital Darwinism.

As in any technological revolution, we are again talking about a fight for survival (Kreutzer & Land, 2013). Nowadays, the digital environment changes at an accelerating rate, so businesses and entire countries are struggling to understand the latest technological developments and to exploit them. Inability of being aware and exploiting these developments is one of the main factors that led to the demise of businesses like Blockbuster, Polaroid or Borders. Blockbuster was a provider of home movie and video game rental services, who failed to adapt and innovate in changing times by losing customers to its online competitors — namely Netflix. Borders Group was an international book and music retailer based in the US, who mishandled its big-box strategy and did not pay attention to the product digitalization (i.e. e-books). Polaroid Failed to
adapt to changing technology trends and it was unable to make the transition from instant photography to digital photography.

Businesses are “becoming digital” through simple activities such as creating a website, but also through more complex activities (e.g. adding mobile apps, online selling, customer service chats online, Facebook Ads, etc.). As Turban et al. (book 2008) suggests, from a more general and value-added point of view, there are three main impacts of the online marketplaces on organizations: improving direct marketing, transforming organizations and redefining organizations. The first suggests that by using online platforms, companies can improve marketing through a change from mass segmented marketing to a more one-to-one and customized marketing; that can provide companies with competitive advantage over the companies that use traditional marketing techniques (e.g. direct-sales methods), which consequently may lead to the replacement of certain marketing channels. The second impact takes a more pessimistic view that progress in e-commerce will bring a Darwinian struggle for traditional organizations which will be forced to learn and adapt to new technologies; that may require changes in the organizational structures, approaches and processes. Thirdly, a redefined organization could mean that e-marketplace could allow the integration of innovative ways of product development and customization; that may require redefining the organizations’ missions, business models and each department’s activities.

**Retailing industry in the context of digitalization**

In 1979, Michael Aldrich, working for Tesco at that time, piloted a system that enabled transaction processing between consumers and businesses. This was the first demonstrated concept of what came to be called and known as e-commerce, and in general terms, e-commerce can be defined as the electronic business that includes sales via Internet of physical or intangible goods (Timmers, 2000). Almost two decades later, two of the most dominant online players emerged in the retail industry: Amazon and E-bay. Since those early days, e-commerce has slowly but consistently taken a larger proportion of the customers once loyal to the brick-and-mortar stores.

In recent years, e-commerce has been growing steadily because of the changes that appeared in terms of shopping habits and game-changing retail technology. Increasingly, more and more customers of the physical stores are shifting to web shops because of product range, lower prices
Chapter 1. Introduction

or convenience (Neslin et al., 2006). The world of retailing industry is becoming increasingly competitive, forcing companies to take an innovative approach to attract consumers and encourage long-term loyalty. Department stores, for example, are increasing consumer footfalls by replacing more expensive brand-name products with less expensive private-label products. Traditional retailers are therefore forced to turn to a multichannel method by establishing their own online stores, which is also called as online channel extension. As the main way of traditional retailers to compete with online retailers, online channel extension has grown tremendously, and it is expected to grow even further (Nelson & Leon, 2012).

Because of the digitalization and technology development, retailers experience a shift in purchasing behavior caused by the appearance of a more informed and demanding type of consumer. Compared with the era of mass production and mass consumption when consumers’ needs were uniform, nowadays retailers need to redefine their roles and focus both on satisfying continuously changing needs of the consumers, but also creating both-way relationships. The adoption of the Internet from the individuals’ side consequently determined the retailers to develop new strategies (e.g. omni-channel or multi-channel approach) and adapt their business models (Geyskens et al., 2002).

Retailers are reacting differently to the changes in the industry

“It is a big, big force and it has already disrupted plenty of people and it will disrupt more [...] many companies have not figured the way to either participate in it, or to counter it.”

Warren Buffet

Warren Buffet was referring to how the Amazon-led e-commerce industry is disrupting the traditional retail business. Consequently, one of the top 3 richest people in the world dumped 90% of his shares in Walmart at the beginning of 2017, mainly because the company’s shares decreased in the recent years as opposed to Amazon's growth. On the other hand, recently the e-commerce titan Amazon.com decided to open brick-and-mortar locations. Integrating the offline channel into the online channel is not that common strategy in retailing, because for so long, we have witnessed how traditional brick-and-mortar retailers try to take a piece of the online retails whose pioneer is Amazon. Now, it appears that the online shopping pioneer tries to march into
an arena where companies like Walmart or Kroger have expertise in. This is the evidence that retailers perceive differently the opportunities in the environment and that there might be certain conditions under which specific type of companies react in a certain way.

Strategic management is generally seen as the area of research preoccupied with studying the environment and the decision-makers or firms who “discover, evaluate, and exploit the opportunities in the environment” (Tan & Tan, 2005). In a dynamic and complex environment - such as retail industry nowadays - the solutions for business problems can be difficult and risky; that can boost performance or it can take companies to bankruptcy. Planning and guidance is desirable and unavoidable, but companies are also forced to rely on tested knowledge (Grandori, 2013). The capacity to respond to the opportunities and challenges in the environment is commonly referred to as strategic agility which is a concept strongly related to knowledge management theory. The strategic agility of a company refers to the capability of innovating and competing in a marketplace by seizing the changes and efficiently evaluating strategies in a manner that can give competitive advantage (Chaffey, 2009).

Porter (1991) explains that over time, managers can create and sustain competitive advantage by the continuously innovating and upgrading the firm resources. That could mean that no matter the impact of the environment, management will always have some influence on strategy. Moreover, (Bamberger, 1983) states that business strategies are products of managers’ visions which in turn originate from their personalities.

*Firms create and are created by opportunities. Similarly, firms do not exist separately from their institutional environment, and attempts to understand them outside of the environmental context, will also fail to capture their nature. Such a reciprocal and co-evolutionary perspective assumes that change is not an outcome of managerial adaptation or environmental selection alone but rather the joint outcome of environmental effects and “intentional strategic adaptation”* (Lewin & Volberda, 1999)

Generally, it has been acknowledged that there are three main factors that influence the choice of strategy in a firm: *management, environmental variables, and the firm's internal resources*(Thompson & Strickland III, 1993). Because companies are different in how they perform and react in a certain environment, it might be possible that they perceive differently the
threats and the opportunities in a certain environment. The way they perceive and understand these opportunities/threats influences their strategic decisions, the way they respond to the environment variables and the way they manage their internal resources. Therefore, studying the management, the environmental variables and the internal resources should bring insight into how traditional retailers should react and adapt to the changes in their environment.

There is an agreement on the fact that digitalization of products/services (Pérez-Esteve and Schuknecht, 1999), processes (Huizingh, 2002) and even business relationships (Mata et al., 1995) require changes in firms’ business models (Keen & Williams, 2013). When discussing about e-commerce, Chaffey (2009, p. 88) distinguished between three main types of organizations that appeared because of digitalization and the online environment: “bricks-and-mortar”, “clicks-and-mortar” and “clicks-only” or “pure play”. Bricks-and-mortar are the traditional organizations with limited online presence, clicks-and-mortar are the businesses which combine online and offline presence, and the clicks-only are represented by the organizations choosing to have mainly an online presence.

1.2. Purpose of the study
As a conclusion, there is evidence that specific strategic typologies influence positively or negatively performance outcomes within the retail industry (e.g. (Kim, Dae-il, & Stimpert, 2004)(Lewis & Thomas, 1990)), but there are still a relatively small number of studies that:

- investigate the strategic choice-performance relationship from an empirical point of view (Megicks, 2007),
- explore the performance implications of fit and misfit for strategic combinations of business strategy, retail format and multi-channel setup (Johansson & Kask, 2016),
- investigate whether a new form of retail institution (i.e. e-tailer) is a source of competitive advantage, and what are the strategic choices for traditional retailers as emerging online retailers case to sustain their competitive advantages (Anitsal & Anitsal, 2011), or testing the performance outcomes generated by the strategic choices in the retail context that is changing due to the advent of e-commerce and e-tailers (Moore, 2005b)
- focus also on the consequences of change at the micro and macro level, instead of looking solely on how the choice typologies of organizational templates change, and which are the responses of organizations to them (Greenwood in Clegg (2006)).
This thesis aims at addressing this gap by taking a closer look and empirically investigating the adaptation strategy - performance relationship in retailing industry in the Northern Region of Denmark. The empirical part will take a closer look at the **macro-economic impact** of e-commerce within the retail industry and the changes produced by the advent of e-commerce, but also on the types of adaptation and types of strategies that positively or negatively influence certain performance indicators of small retailers in Northern Region of Denmark, thus at impact from the firm **micro-level**.

Because companies are different in how they perform and react in a certain environment, it might be possible that they perceive differently the threats and the opportunities in a certain environment. The way they perceive and understand these opportunities/threats influences their strategic decisions, the way they respond to the environment variables and the way they manage their internal resources. Therefore, studying the management, the environmental variables and the internal resources should bring insight into how traditional retailers should react and adapt to the changes in their environment.

E-commerce has been chosen for this study because it is a technological innovation that may have a differential strategic impact on firms within an industry (Cash & Konsynski, 1985). Some firms may see adoption of Electronic Commerce as a potentially strategic advantage because it has the capability to improve customer service, reduce costs or enhance some other complementary resource (Clemons & Row, 1991). Some firms may see an advantage in being early implementers (first mover advantage) of Electronic Commerce (McFarlan, 1984; Porter & Miller, 1985; Oster, 1990). Other firms in the same industry may see Electronic Commerce as a strategic necessity because others have already adopted the technology. The laggard firm may be unable to forge a leading position from which to make Electronic Commerce a true competitive advantage and must adopt the technology to keep from falling behind (Clemons & Row, 1988; Benjamin, de Long & Morton, 1990).

During the digitalization process, the whole organization has to adapt in order to be able to cope with such changes. It seems that also managers are likely to play a major role in the level of adoption of digital technologies in organizations (Benner & Tripsas, 2012), therefore it is
important to understand the factors driving firm performance in the context of adaptation, but also the contingencies of the relationship between strategy and overall firm performance, both from theoretical and practical point of view.

1.3. Research questions and structure of the study

**Research questions**

*How has digitalization changed the environment for traditional retailers and how retailers adapted to these changes?*

- What are the implications of e-commerce on retailing?
- How retailers respond and adapt to these changes?

**Structure of the study**

1. Introduction and problem formulation
2. Theoretical background
3. Methodology
4. Literature review
5. Data analysis and results
   4.1. Implications of e-commerce on retailing (Impact of e-commerce on different socio-economic factors and on firm performance) – secondary data
   4.2. How should retailers respond and adapt to the changes? – primary data
6. Theoretical reflections and recommendations
7. Limitations of the study
8. Conclusion

1.4. Delimitations of the study

In this part it is important to state the boundaries of the study in terms of the proposed research questions, adopted theoretical perspective and used methods of investigation. Altogether, this thesis aims to investigate what is the impact of e-commerce on traditional retailers, what are their answers to this disruptive innovation (i.e. e-commerce) and how they should respond to this innovation. In addition, the thesis will be a cross-sectional study using observational data analysis methods as a way of investigating retailing strategies and responses to e-commerce. The delimitations of the thesis are explained below.
Chapter 1. Introduction

The first delimitation is that this thesis looks at a population of retailers at a single point in time, thus it examines the impact of e-commerce on retail industry in a defined population without regard to changes over time. In order to snapshot the changes over time, quantitative (e.g. questionnaires) or qualitative (e.g. interviews) data collection methods could have been used. However, due to the lack of time and resources, observational data analysis methods (i.e. participant observation) were found to be the most appropriate ones for investigating the research questions mainly for two reasons. First, observational data can be used and has been used by various researchers to help answer descriptive research questions, to build theory, or to generate or test hypotheses (Dewalt & Dewalt, 2002). Secondly, the aim of the thesis is to develop a holistic understanding of the issue of retailing responses to e-commerce as objectively and accurately as possible. Thus, by conducting an observational study, validity is increased through a better understanding of the context and phenomenon under study, therefore the results of this thesis can be used as a basis for additional research methods such as questionnaires or interviews.

1.5. Definitions of terms and abbreviations

ROA = Return on Assets

NACE = Nomenclature of Economic Activities

Types of NACE:

471 - Retail sale in non-specialized stores: 471100 Retail sale in non-specialised stores with food, beverages or tobacco predominating, 471110 Grocers and kiosks, 471120 Supermarkets, 471130 Discount stores, 471900 Other retail sale in non-specialised stores

472 - Retail of sale of food, beverages and tobacco in specialized stores: 472100 Retail sale of fruit and vegetables in specialised stores, 472200 Retail sale of meat and meat products in specialised stores, 472300 Retail sale of fish, crustaceans and molluscs in specialised stores, 472400 Retail sale of bread, cakes, flour confectionery and sugar confectionery in specialised stores, 472500 Retail sale of beverages in specialised stores, 472600 Retail sale of tobacco products in specialised stores, 472900 Other retail sale of food in specialised stores;

473 - Retail sale of automotive fuel in specialized stores;

474 - Retail sale of information and communication equipment in specialized stores: 474100 Retail sale of computers, peripheral units and software in specialized stores, 474200 Retail sale of telecommunications equipment in specialized stores, 474300 Retail sale of audio and video equipment in specialized stores;
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475 - Retail sale of other household equipment in specialized stores: 475100 Retail sale of textiles in specialised stores: 475200 Retail sale of hardware, paints and glass in specialised stores, 475300 Retail sale of carpets, rugs, wall and floor coverings in specialised stores, 475400 Retail sale of electrical household appliances in specialised stores, 475900 Retail sale of furniture, lighting equipment and other house

476 - Retail sale of cultural and recreation goods in specialized stores: 476100 Retail sale of books in specialised stores, 476200 Retail sale of newspapers and stationery in specialised stores, 476300 Retail sale of music and video recordings in specialised stores, 476400 Retail sale of sporting equipment in specialised stores, 476500 Retail sale of games and toys in specialised stores;

477 - Retail sale of other goods in specialized stores: 477100 Retail sale of clothing in specialised stores, 477200 Retail sale of footwear and leather goods in specialised stores, 477300 Dispensing chemist in specialised stores, 477400 Retail sale of medical and orthopaedic goods in specialised stores, 477500 Retail sale of cosmetic and toilet articles in specialised stores, 477600 Retail sale of flowers, plants, seeds, fertilisers, pet animals and pet food in specialised stores, 477700 Retail sale of watches and jewellery in specialised stores, 477800 Other retail sale of new goods in specialised stores, 477900 Retail sale of second-hand goods in stores;

478 - Retail sale via stalls and markets: 478100 Retail sale via stalls and markets of food, beverages and tobacco products, 478200 Retail sale via stalls and markets of textiles, clothing and footwear, 478900 Retail sale via stalls and markets of other goods;

479 - Retail trade not in stores, stalls or markets: 479100 Retail sale via mail order houses or via Internet, 479110 Retail sale via mail order houses, 479111 Retail sale of groceries via Internet, 479112 Retail sale of electronic or electrical devices and photonic devices via Internet, 479113 Retail sale of household or home furnishings, excluding electrical appliances, via the Internet, 479114 Retail sale of books, stationery, music or movies via Internet, 479115 Retail sale of hobby articles, musical instruments, sports equipment, toys, bikes via Internet, 479116 Retail sale of clothing, shoes, leather goods, watches or baby items via Internet, 479117 Retail sale of medicines and personal care products via the Internet, 479119 Retail sale of other goods not of other channels but via Internet, 479120 Retail sale of digital products via Internet, 479900 Other retail sale not in stores, stalls or markets;
2. Theoretical background

Merging the concepts of environment, strategy and performance has produced a number of empirical studies seeking to better understand the contingencies of this relationship (Luoma, 2015).

This chapter examines the relevant literature and constructs the logic from which the research hypotheses are drawn. The relevant conclusions are integrated to form a model of the interrelationship among the constructs of adaptation and performance, focusing solely on the second part of the environment-adaptation-performance paradigm.
2.1. Environment-Adaptation-Performance paradigm

The environment has been conceptualized in many ways by researchers within strategic management area, but the two most utilized perspectives refer to competitive rivalry or descriptors of uncertainty and turbulence (Heiens & Pleshko, 2010). (Hwang & Norton, 2010), inspired by the work of Lawrence and Lorsch (1967), argued that the perceived competitive intensity (not so much the actual level of competition) influences managerial decisions. In line with that, (Davis, Morris, & Allen, 1991) concentrated on measuring changing technology, competition between firms in the industry, and industry growth rate by assessing the level of perceived turbulence. The underlying argument for perceived rather than actual level came with the note that there would not be a reaction if there is not a perceived turbulence.

Strategic management is generally seen as the area of research preoccupied with studying the environment and the adaptation of firms who “discover, evaluate, and exploit the opportunities in the environment” (Tan & Tan, 2005). In strategic management research, the concept of business strategy is found as describing how firms compete in an industry or market (Olson et al. (2005), Varadarajan and Clark 1994) and the relationship between adaptation and performance is a highly debated area of research. The most used typologies to illustrate business strategies are the Miles and Snow (1978)’s and the Porter (1980)’s typology.

2.2. Organizational Adaptation

The concept of adaptation broadly refers a process through which an organism changes or adjusts in order to fit to its environment. This view of adaptation was borrowed by many researchers over the years from the work on evolutionary theory of Darwin in 1936. A common view in organizational settings is that adaptation is a general term used to explain the process of change and accommodation between an organization and its environment. The work of Selznick (1957) was among the first to approach the concept of adaptation to organizational settings. In his view, organizational adaptation is seen as a set of reactions of the organizations to the internal and external factors from the environment; moreover, the term static adaptation is used
to explain the changes made in a manner of routine, while the term *dynamic adaptation* refers to more complex changes undertaken by the organization (Selznick, 1957). However, the concept of organizational adaptation introduced by Selznick became a popular concept and a key issue studied by various researchers during the time; Since 1957 and the work written by Selznick, several views and theoretical perspectives on organizational adaptation have been proposed (See Table below).

**Table 1. Theoretical perspectives on Organizational Adaptation**

<table>
<thead>
<tr>
<th>Theories and perspectives</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contingency theory (CT) and Strategic Choice Perspective (SCP)</strong></td>
<td>Both CT and SCP agree that adaptation is a function of changes undertaken by managers, but differ in regards to the role of the managers;</td>
</tr>
<tr>
<td><strong>Configurational Theory</strong></td>
<td>These theorists suggest that organizations can change many of their elements in order to be adaptive to the changes in their environments, that there has to be a fit between the organization and environment when adapting, that there are various but equally effective configuration alternatives, and that the ideal organization alternative is the one with the best adaptive capabilities and fit with their environments.</td>
</tr>
<tr>
<td><strong>Organizational Ecology Theory (OET), Evolutionary Theory</strong></td>
<td>OET conceptualizes adaptation as the sum of the changes undertaken by the organization generated through a three stage evolutionary process: variation, selection, and (Aldrich, 1979, 1999).</td>
</tr>
<tr>
<td><strong>Institutional theory (INT)</strong></td>
<td>This theory offers a view of organizational adaptation as a phenomenon not fully within the control of organizations and managers and suggests that social institutions restrict the adaptability of organizations (e.g. government policies)</td>
</tr>
<tr>
<td><strong>Resource Dependency Perspective (RDP)</strong></td>
<td>According to RDP, organizations are dependent on their environments (e.g. customers, suppliers, etc.) for resource; thus, organizational adaptation is undertaken with the aim of having access to, and lessening organizational dependency on, the external environment.</td>
</tr>
<tr>
<td><strong>Resource Based View (RBV)</strong></td>
<td>RBV suggests the importance of internal organizational factors in organizational adaptation. According to the RBV, the firm-specific factors enable firms to adapt better to the changing conditions in the environment.</td>
</tr>
<tr>
<td><strong>Strategic Renewal Perspective (SRP)</strong></td>
<td>The researchers in the early 1990s pointed out that the ability to continuously change and adapt is the crucial element for organizational survival. According to this perspective, adaptation is an iterative process and organizations must prevent their core capabilities from becoming obsolete through: becoming agile and continuously renewing their strategies or resources, developing stable patterns of action and organizational learning, and through developing dynamic capabilities.</td>
</tr>
<tr>
<td><strong>Complexity Theory</strong></td>
<td>Through this theory it is argued that organizations are complex and dynamic systems, and that organizational adaptation is something generated by complex interactions influenced by internal forces (voluntarism or choice), external forces(determinism) and by chance.</td>
</tr>
</tbody>
</table>
Followers of the CT approach suggest that adaptation occurs when the structure and processes of an organization are changed and fit to their environment (Venkatraman, 1990). The concept of fit has been extensively debated and used also under the notions of “co-alignment”, “congruence”, “compatibility” or “correspondence” (Pertusa-Ortega, Molina-Azorín, & Claver-Cortés, 2010). The CT has been criticized mainly by Child (1972) who from a Strategic choice perspective, argues that that managers do have considerable power of action on the changes that would determine organizational adaptation and would create fit. For example, the managers can consciously make decisions and choices related to how they want to adapt to changes in the environment (e.g. changes in supply and demand or changes in the technology).

Both CT and SCP agree that adaptation is a function of changes undertaken by managers, but differ in regards to the role of the managers; thus, the CT sees managers as reacting to the environment, SCP suggests that managers undertake a more proactive adaptation which leads also to a change in the environment (e.g. managers that decide to adopt innovative technologies (i.e. Big Data) respond to the change in their environment (i.e. consumers became more informed and more demanding), but consequently they also change the competition and the market).

Ansoff (1979) extended the view that organizational adaptation can be seen as a rational change made by managers, and argued that the changes in the environment or industry limit the choices available to managers, which inhibit organizational adaptation. This view generated other new perspectives and schools of thought in terms of strategy formulation (Mintzberg, 1990): the design school, the planning school, and the positioning school. The design school adopted among others by Learned et al. (1965), suggests that a firm fits its environment if it achieves co-alignment between its internal strengths and weaknesses and the threats and opportunities in its environment. In order to respond to the changes in the environment, the planning school theorists argue for firm-specific and detailed plans (Ansoff, 1965;1979), while the positioning school favors for the adoption of so-called “generic strategies” (Porter, 1980, 1985; Mintzberg, 1990).

Configurational theory is concerned with searching for contingencies among organizational context, structure, and performance (Hrebeniak& Joyce, 1985; Miller & Friesen, 1977, 1978; Miles & Snow,1978). In an attempt to classify organizations based on the paths of adaptation
they used, the Organizational Theory focused on explaining the modes of adaptation, the rate of adaptation, the level and the process of adaptation (See below).

In the early 1980s, views from SCP, schools of strategy, and configurational theory were borrowed in order to build a new field of study: strategic management (SM) as the study of organizational adaptation by arguing that adaptation is a key determinant of organizational performance. Researchers such as Chakravarthy (1982) or Bourgeois (1980) fostered a debate in this field by assuming that adaptation leading to superior performance is highly dependent on creating the notion of “fit” between the organizations’ resources and capabilities and the environment. The extensively used concepts in organizational theory and strategic management are organizational adaptation and organizational change, which are used interchangeably in order to study the adjustments undertaken by organizations in order to respond to the changes in the environment (Heppard, 1998). However, the underlying assumptions of these two concepts are mainly related to the fact that: (i) organizational adaptations accordingly to the changes in the

<table>
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<tr>
<th>Dimensions of adaptation</th>
<th>Typologies</th>
<th>Authors</th>
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<tbody>
<tr>
<td>Modes of adaptation</td>
<td>unstable, neutral, and stable adaptation</td>
<td>(Chakravarthy, 1982)</td>
</tr>
<tr>
<td></td>
<td>first-order and second-order adaptation</td>
<td>(Meyer, Goes, &amp; Brooks, 1993)</td>
</tr>
<tr>
<td></td>
<td>low and high level adaptation</td>
<td>(Jennings &amp; Seamna, 1994)</td>
</tr>
<tr>
<td></td>
<td>passive and opportunistic adaptation</td>
<td>(Miller et. al., 1996),</td>
</tr>
<tr>
<td></td>
<td>punctuated equilibrium mode of adaptation</td>
<td>(Gersick, 1991;)</td>
</tr>
<tr>
<td>Rate of adaptation</td>
<td>continuous or discontinuous adaptation</td>
<td>(Meyer, Goes, &amp; Brooks, 1993)</td>
</tr>
<tr>
<td></td>
<td>incremental and radical adaptation</td>
<td>(Tushman &amp; Romanelli, 1985),</td>
</tr>
<tr>
<td>Level of adaptation</td>
<td>adaptation at the organization and industry level</td>
<td>(Meyer et. al., 1990)</td>
</tr>
<tr>
<td>The process of adaptation</td>
<td>adaptive specialization and adaptive generalization</td>
<td>(Chakravarthy, 1982)</td>
</tr>
<tr>
<td></td>
<td>anticipatory phase, response phase, and readjustment phase</td>
<td>(Meyer, 1982)</td>
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</tbody>
</table>
environment drive performance, and (ii) managers are responsible for making necessary organizational changes and adjustments.

Current research continues to develop theory and test contingency models that emphasize fits between an organization’s business strategy and various organizational and environmental constructs (Parnell; Barth 2003; Paige and Littrell 2002). The central concept is that no single organizational structure is effective in all circumstances, and that instead there is an optimal organizational structure that best fits a given contingency, such as size, strategy, task uncertainty or technology (Donaldson, 1996). A common view of the theorists within contingency theory is that in order to reach optimal output (e.g. financial performance) an organization should have a so-called match or a fit among the elements of its environment, its strategy, and its structure (Luoma, 2015). Therefore, the better the fit between organization and contingency, the higher will be the organizational performance (Donaldson 1999; Drazin and Van de Ven 1985).

In terms of scope, changes can be classified into two main categories, found under various terms in the literature, namely radical changes known as second-order, revolutionary, transformational, strategic, episodic, discontinuous, and total system or high-magnitude changes or incremental changes, called also first-order, evolutionary, transactional, operational, continuous flow, continuous, and local option or low-magnitude changes (Fuentes-Henríquez & Sol, 2012). When the so-called radical or discontinuous changes occur in the environment (e.g. deregulation, technological change, change in demand, etc.), the organizations are challenged to adjust and adapt (Suarez & Oliva, 2005). Thus, it is opportune to investigate the theories of organizational change and the dimensions of change in the organizational context, in order to be able to understand how different types of responses to an environmental change (i.e. digitalization and appearance of e-commerce in the retail industry) influence performance outcomes of firms.

2.3. The concept of change and adaptation in strategic management
Management scholars have extensively been concerned about organizational adaptation that appears due to the changes in the environment, mainly because it is commonly agreed in the literature that the lack of an appropriate response to different forces from the environment endangers the organization (Suarez & Oliva, 2005). The extensively used concepts in organizational theory and strategic management are organizational adaptation and organizational change, which are used interchangeably in order to study the adjustments undertaken by
organizations in order to respond to the changes in the environment (Heppard, 1998). Even though the definitions for this concept are presented under different forms (See below), there are several constant themes common for all these definitions that change is the response to some force or stimuli, that the response is a desire for improvement, that a systematic approach to change enhances success, and that change is inevitable (Williams, 2005).

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Definitions</th>
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<tbody>
<tr>
<td>organizational</td>
<td>= a reaction to either an internal or external force that requires the organization to modify its way of doing business (Beer, 1980)</td>
</tr>
<tr>
<td>change</td>
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<tr>
<td>organizational</td>
<td>= process by which behavioral science knowledge and practices are used to help organizations achieve greater effectiveness, including improved quality of life, increased productivity, and improved product and service quality (Cummings &amp; Worley, 1993)</td>
</tr>
<tr>
<td>development</td>
<td></td>
</tr>
<tr>
<td>organizational</td>
<td>= an effort to plan, organization wide and managed from the top to increase organization effectiveness and health through planned interventions in the organization's processes, using behavioral-science knowledge (Beckhard, 1969)</td>
</tr>
<tr>
<td>development</td>
<td></td>
</tr>
<tr>
<td>organizational</td>
<td>= a top-management-supported, long-range effort to improve an organization's problem-solving and renewal process, particularly through a more effective and collaborative diagnosis and management of organization culture-with special emphasis on formal work team, temporary team, and inter-group culture- with the assistance of a consultant-facilitator and the use of theory and technology of applied behavioral science(French &amp; Bell, 1990)</td>
</tr>
<tr>
<td>development</td>
<td></td>
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<tr>
<td>organizational</td>
<td>= the modification of forces that keep a system's behavior stable-those that maintain the status quo and those that are pushing for change. Whichever force has the higher level of dissatisfaction will dictate if change occurs (Lewin's Classical Change model, 1951)</td>
</tr>
<tr>
<td>change</td>
<td></td>
</tr>
<tr>
<td>organizational</td>
<td>= a response to change, a complex educational strategy intended to change beliefs, attitudes, values, and structure of organizations so that they can better adapt to new technologies, markets, and challenges, and the dizzying rate of change itself (Bennis, 1969)</td>
</tr>
<tr>
<td>development</td>
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</table>

There are various and different frameworks that can be used to conceptualize change (Block, 2001). For instance, By adopting the strategic choice perspective, organizational change can be viewed as planned, assuming that individuals (i.e. managers) play a significant role; on the other hand, a systemic view sees organizational change as emergent assuming that organizations are interdependent and individuals do not play such a significant role in determining organizational processes (Williams, 2005). (Van De Ven & Poole, 1995) examine the theories of change and groups them into four schools of thought accounting of change processes in organizational entities, namely life-cycle, teleology, dialectics, and evolution theories. The two dimensions introduced in their study in order to classify the theories, are: (i) mode of change as a way to
describe whether the sequence of change events occurring in the environment is prescribed a priori or constructed, and (ii) unit of change, to illustrate whether the change is about the development of a single organizational entity or on the interactions between two or more entities. A prescribed (first-order) mode of change is developed by entities by incrementally adapting their forms in a stable, predictable way, whereas a constructive (second-order) mode of change is generated in retrospect, discontinuously (Watzlawick, Weakland, and Fisch, 1974).

The scope of this thesis falls into the evolutionary theory school of thought, because the evolutionary cycle of change consists of a repetitive sequence of variation, selection, and retention events among multiple entities in a prescribed a priori mode of change. The variation stage is referring to the creations of novel forms of organizations, the selection may occur through competition (i.e. the best fitted organization-environment entity survives), and the retention stage maintains previous forms and practices. Variation, selection, and retention are the stages of change in which it is assumed that environment selects those forms which are best adjusted to the existing environmental conditions. The model of environmental selection and Darwinian theory can, therefore, be applied to the interpretation of change, assuming that lack of adaptation or inappropriate mode of adaptation, or not following the three stages, endangers evolution (Home, 1993).

Different types of changes will likely require different organizational responses (Suarez & Oliva, 2005). However, organizational adaptation research area has not yet found a generally accepted typology of change, and sometimes appears also the issue related to consistency of findings. For example, Tushman and Romanelli (1985) suggested that during profound changes, organizations experience short periods of discontinuous change, but Haveman (1993) proved that in times of abrupt discontinuity, savings and loan firms experienced stability and inertia. This is the reason why (Suarez & Oliva, 2005) decided to fill the gap in the literature by proposing a typology of change which took into consideration the frequency of change, its amplitude its speed and its scope. Variations from low to high within these dimensions provide five types of environmental changes: regular, hyperturbulence, specific shock, disruptive, and avalanche.
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2.22 Figure 1. A classification of environmental changes

E-commerce became a disruptive force for traditional retailers by bringing in a lot of modifications in the existing business models (Bhattacharya & Bibhuti, 2015); thus, as it can be seen in the figure above, the change produced by digitalization and e-commerce in the retailing environment can be catalogued as disruptive change. The main reasons for that, as explained also in the introduction part, are related to the fact that digitalization has changed the consumer preferences, that the new technologies (e.g. Big Data) have brought both opportunities and challenges for retailers, and that new business models are disrupting the traditional ones (e.g. Polaroid and Netflix).

2.4. The adaptation – performance relationship in strategic management

Several studies found that firms that are able to achieve adaptation enjoy a greater likelihood of survival and perform better than those that are unable to do so. More recent studies too, point to the performance enhancing function of adaptation (e.g., by demonstrating that making adjustments in organizational domains in accordance with the requirements of the environment increases organizational performance (e.g., Eunni, 2003). Recently, studies on the strategy-performance linkage have been criticized because of their tendency to overlook more dynamic and less categorical approaches to strategy. For instance, Pertusa-Ortega et al. (2010) addressed the neglected role of the resource-based view in studies on the strategy-performance linkage. On the other hand, Guérard et al. (2013) point out the often oversimplified approaches to the concept
of performance in such studies and recommend that more emphasis be placed on the performance perspective.

The strategic management research area rests on the assumption that firms match their strategies to the changes of their environments, and that the better the match level, the better will be the levels of performance (Reger, Duhaime, & Stimpert, 1992). When the environment is changed by certain forces (e.g. technological change) regardless the industry, firms and managers must choose how to adapt their firm to these changes. Environmental and organizational adaptation theories generally propose that specific forms of institutions emerge in response to changing environmental circumstances which can include economic, political, and legal systems, demographic conditions, social structure, value systems, technology or competition (Anitsal & Anitsal, 2011). The primary assumption that strategic planning overall is positively related to organizations’ performance has been criticized, most famously by Mintzberg (1987, 1990), who particularly questions the value of explicit strategies in the context of environmental turbulence. Generally, has been acknowledged that the better the fit between organization and contingency, the higher the organizational performance (Donaldson 1999; Drazin and Van de Ven 1985). Therefore, adaptation could positively influence performance when there is a high level of fit/alignment between organization and environment. Many researchers have discussed how the fit or match between strategy and environment can influence organizational performance in order to investigate if the same generic strategy can be equally useful in a variety of environments (Lee & Miller, 1996), Miles and Snow 1978).
2.5. Adaptation in retail industry

2.5.1. Format and strategy: Pure play, click-and-bricks or just brick-and-mortar?

“To have or not to have e-commerce as part of the retail strategy”, this is the question many retailers face nowadays because of the changes brought by the Internet and digitalization. The decision upon having a virtual or a physical store is considered to be strategically of high importance for the retailer’s performance and competitive advantage (Chang et al., 2003).

Retailer formats classification can vary across studies. For instance, McGoldrick (2002) suggests that the lines defining retail formats should be drawn in terms of the following dimensions: single store/groups of stores, in town/out of town, proximity/destination, small/large, mature/innovative, mainly food/non-food, specialized/generalized, niche/commodity, high added value/discounter, experiential/functional and store based/home based (McCormick et al., 2014). Another perspective is provided by (A Van Vliet & Pota, 2000) who classify retailers based on their previous experience on the market, as: internet start-up, store-based retailer, catalog retailer, store and catalog retailer, and manufacturer and wholesaler. However, a more simplistic classification of retail formats that appeared as a response to e-commerce, can be made based on the retail channels used by retailers to sell their products: brick format (offline) or click format (online).

Adopting an online or an offline sale channel requires quite different resources for retailers, especially in terms of knowledge and skills. Furthermore, various studies suggest a combination of both channels in order to reach a wider audience and different types of consumers (Rosenbloom, 2007; Venkatesan et al., 2007; Wilson et al., 2008). Established traditional retailers can leverage on their existing position or image on the market, but also on their customer base when deciding to sell online in addition to a physical store. On the other hand, this kind of combination, called click-and-brick format, requires additional resources, competences and expertise (Johansson & Kask, 2016), which means that is not easily accessible for all retailers and for all product types (Doolin, Mcleod, Mcqueen, Watton, & Mark, 2003);
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thus, the responses of traditional retailers to the advent of e-commerce can fall into one of the following categories (King, Sen, & Xia, 2004), (King et al., 2004):

- continuing to sell via traditional offline channels, but using Internet as a way of improving existing channels,
- switching to a completely online channel, and
- selling coordinated or not, meaning that the retailer can create either a separate Internet-based channel or an integrated one, via both online and offline channels.

Apart from deciding upon the brick versus click retail format, another essential choice for the retailers is to decide how to position on the market in order to attract and retain customers. Various studies focused on investigating the strategic configurations available to retailers from different perspectives. Grouping firms into schemes based on their environmental adaptation is referred to as strategic configurations, and their link with performance is extensively studied in strategic management literature (Moore, 2005a). Strategic configurations can be derived either deductively or inductively. Common deductive approaches use the typologies of Miles and Snow (1978), Mintzberg (1973) or Porter (1980), while inductive approaches to strategic choice focus on functional/tactical level variables of behavior. However, a review of the retail strategy literature shows that within the retailing industry, the prevailing method for investigating the relationship between strategies and performance is actually an adaptation drawn from a strategic positioning theory applied at the business level in another sector.

Due to the lack of studies that investigate the application on offline retailers to guide online retailing (Grewal et al. (2004), it can be argued that there are still few studies made after the breakthrough of e-commerce that explore the performance implications of matching (or mismatching) the multi-channel setup to retailers’ strategy and retail format. The most popular studies focusing on classifying the retailers based on the retail strategies are the ones proposed by Mayer et al. (1971) and Hawes and Crittenden (1984). The categorization provided by Mayer et al. (1971) identified three major groups of retail stores: convenience stores, shopping stores, and specialty stores. Hawes and Crittenden (1984), from a marketing perspective, identified three distinct strategic behavior patterns for retailers that mainly differed in terms of promotional aggressiveness and brand introduction tactics classification (Tokman, Richey, & Deitz, 2016). No worth to mention, these studies have become outdated due to the changing environment and
the advent of Internet and e-commerce, therefore other studies have focused on investigating the applicability of the strategic configurations proposed for the traditional retail in the more recent developments of retail strategic choices. For example, Moore (2005) applied the Miles and Snow (1978) theoretical typology to the retail sector and found some evidence to support the presence of three of the four strategic business level archetypes in the retail industry and a link with retail performance. (Megicks, 2007) Investigates which strategic alternatives are available at the functional and business level, and what is the relationship between retail strategies at the different levels and performance, and identifies two well performing strategies - customer service focus and channel expansion strategy and one strategy which is not associated with performance, namely consolidation business.

By taking a competitive perspective, (Mcdowell Mudambi, 1994)’s typology of strategies builds on three directions of competition and argues that consequently, there are three types of strategies that can be applied as a response to the competition: horizontal (e.g. number of outlets), vertical (e.g. product differentiation), and migrational (e.g. change of size or outlet location type). In line with (Porter, 1980, 1985), a firm is said to have three main choices to position itself on the market: compete by offering lower prices than competitors, differentiate its offerings so that they can earn premium income that exceeds the cost of the differentiation, or focus on targeting specific groups of consumers or niches.

2.5.2. Identifying research gaps
Change is one of the major themes in the social sciences and today is a central theme in organization theory (Greenwood, edited by Clegg). However, Greenwood () agrees with Pettigrew's call for more historical and multi-levelled analysis, due to the fact that there is a need to investigate the ways that institutional and market structures interact with each other, shaping organizational responses and, in turn, being shaped by them. In addition, it seems that the recent studies within organization do not focus on the consequences of change at the micro and macro level, but rather the studies focus solely on how the choice typologies of organizational templates change, and which are the responses of organizations to them.

By looking at the success gained during the years by companies like Amazon, some may argue that pure online retailers are the ones which adapted their strategies to the environmental changes and gained superior performance in this industry; however (Agarwal, Leung, & Konana, 2011)
show that dual firms have a competitive advantage through physical presence, which is driving to performance. The natural selection concept from environmental theory could be discussed also in retailing by extrapolating from Charles Darwin’s theory of “survival of the fittest” and other theories of biological evolution (Anitsal & Anitsal, 2011); thus, the forms of retailing perfectly adapting to environmental changes will survive and prosper (Brown, 1988). Among the successful examples adaptation, Amazon is clearly the leader, and among the examples of natural selection and failures due to lack of adaptation or inappropriate adaptation, it is worth mentioning retailers like Blockbuster, Borders Group or Polaroid. Blockbuster was a provider of home movie and video game rental services, who failed to adapt and innovate in changing times by losing customers to its online competitors — namely Netflix. Borders Group was an international book and music retailer based in the US, who mishandled its big-box strategy and did not pay attention to the product digitalization (i.e. e-books). Polaroid Failed to adapt to changing technology trends and it was unable to make the transition from instant photography to digital photography.

Due to the advent of Internet and e-commerce, retailers and especially traditional retailers have been challenged in the past few years to find new ways to adapt to the changes in their environment. Retailers operate and exist in a competitive environment in which they face changing circumstances; among these, fluctuating demand in the market, changing customer preferences, changing strategies of competitors or entry of new competitors into the market, etc. Effective performance of the retailers depends therefore on adaptation of organizational elements according to the requirements of the changes in the environment. If a retailer does not adapt to changes accordingly, then it will likely become victim of environmental changes, and therefore it will risk its presence on the market.

It has been acknowledged that competition generated by a revolutionary new type of retail institution (e.g. e-tailers) affects performance of existing retail institutions and it could destroy the traditional institutions; therefore, it is crucial to understand the change produced by revolutionary formats in order to be able to adapt and gain sustainable competitive advantage. (Johansson & Kask, 2016) stresses that the present literature on the link between retailers’ strategy, retail format and marketing channels, have not been particularly well captured.
Moreover, due to the lack of studies that investigate the application on offline retailers to guide online retailing (Grewal et al. (2004), it can be argued that there are still few studies made after the breakthrough of e-commerce that explore the performance implications of matching (or mis-matching) the multi-channel setup to retailers’ strategy and retail format.

After reviewing the literature in the area of organizational retail adaptation, (Anitsal & Anitsal, 2011) conclude that there is a need for both theoretical and empirical studies that investigate whether a new form of retail institution (i.e. e-tailer) is a source of competitive advantage, and what are the strategic choices for traditional retailers as emerging online retailers case to sustain their competitive advantages. In line with that, (Moore, 2005b) argues that there are only few examples of empirical studies that have examined the strategic behavior of firms within the retail industry from a structural contingency perspective; thus there is a need for more empirical studies testing the performance outcomes generated by the strategic choices in the retail context that is changing due to the advent of e-commerce and e-tailers. Moreover, (Nandakumar, Ghobadian, & O’Regan, 2010) argues that the nature of influence of organizational structure in the relationship between strategy and performance has not received enough empirical attention; which might be true also by taking a closer look at the retail related research. For instance, (Majukwa & Haddud, 2016) highlights that there is a lack of studies on how operations management can help achieve strategic fit in the retail business sector. Therefore, there is a need for a paper attempting to devise best possible strategies to achieve competitive advantage, in order to be able to recommend specific paths of action for traditional retailers on how to refine business strategies and achieve strategic fit. Thus, the study aims to enlighten retail industry strategists on possible strategies that can be considered to achieve competitive advantage by looking at differences between the strategic configurations in terms of performance outcomes.

As a conclusion, there is evidence that specific strategic typologies influence positively or negatively performance outcomes within the retail industry (e.g. (Kim et al., 2004)(Lewis & Thomas, 1990)), but there are still a relatively small number of studies that:

- investigate the strategic choice-performance relationship from an empirical point of view (Megicks, 2007),
• explore the performance implications of fit and misfit for strategic combinations of business strategy, retail format and multi-channel setup (Johansson & Kask, 2016),
• investigate whether a new form of retail institution (i.e. e-tailer) is a source of competitive advantage, and what are the strategic choices for traditional retailers as emerging online retailers case to sustain their competitive advantages (Anitsal & Anitsal, 2011), or testing the performance outcomes generated by the strategic choices in the retail context that is changing due to the advent of e-commerce and e-tailers (Moore, 2005b)
• focus also on the consequences of change at the micro and macro level, instead of looking solely on how the choice typologies of organizational templates change, and which are the responses of organizations to them (Greenwood in Clegg (2006)).

This thesis aims at addressing this gap by taking a closer look and empirically investigating the adaptation strategy - performance relationship in retailing industry in the Northern Region of Denmark. The empirical part will take a closer look at the macro-economic impact of e-commerce within the retail industry and the changes produced by the advent of e-commerce, but also on the types of adaptation and types of strategies that positively or negatively influence certain performance indicators of small retailers in Northern Region of Denmark, thus at impact from the firm micro-level.

2.5.3. Developmental, transitional and transformational retailer adaptation
Ackerman (1986) argues that organizational adaptation can be seen as developmental (enhancement or correction of what already exists in order to ensure the continuing growth and strength of the organization), transitional (implementation of an innovation) and transformational (emergence and adjustment of the organizational state). In line with that, the thesis conceptualizes three groups of retailing configurations which can emerge as a response to the advent of e-commerce based on the classification proposed by Ackerman (1986), the retail formats and the strategies adopted by the retailers. Therefore, a continuance in selling via traditional offline channels, but using Internet as a way of improving existing channels and marketing themselves will describe a developmental response of traditional retailers to the environment and e-commerce, whereas switching to a completely online channel will illustrate a transformational response. Selling, coordinated or not -meaning that the retailer can create either a separate Internet-based channel or an integrated one- via both online and offline channels will
be characterized by a transitional response. These adaptations take into consideration the responses proposed by (King et al., 2004), namely that traditional retailers can choose one of three responses to the breakthrough of Internet and e-commerce:

- continuing to sell via traditional offline channels, but using Internet as a way of improving existing channels,
- switching to a completely online channel, and
- selling coordinated or not, meaning that the retailer can create either a separate Internet-based channel or an integrated one, via both online and offline channels.

In order to capture the strategies falling into these three categories, it is necessary to build or adapt from previous work, a continuum of Internet strategies that retailers can adopt. In the previous and recent studies within retailing strategies, various classifications of strategies have been proposed (See figure below), but the classification provided by (J W J Weltevreden, Atzema, & Boschma, 2005) proposed concrete and measurable features for a new classification comprising nine criteria as explained in the figure in Appendix IV.

![Figure 2. Retail strategy classifications (Source: (J W J Weltevreden et al., 2005))](image)
2.5.6. Conceptual framework and research hypothesis

In order to bring new insight and provide new empirical evidence, this thesis aims at investigating whether the three types of adaptation in the retail environment influence performance outcomes within a sample of retailers in Denmark and whether there are certain strategies within each type of adaptation outperforming other strategies. Thus, the proposed framework for investigating these relationships is illustrated in the figure below.

![Conceptual framework for the adaptation-performance in retailing](image)

As highlighted recently by (Johansson & Kask, 2016), the performance implications of retailing online versus offline, namely the performing implications of various retail formats and strategies, have been examined thoroughly in the recently changed context of retailing due to the breakthrough of e-commerce and e-tailing. There are studies investigating the optimal mix of
online and offline channels (Rosenbloom, 2007), the impact of web-based e-commerce on channel strategy (King et al., 2004), how the addition of online channels influences firm performance (Cheng et al., 2007; Webb and Lambe, 2007), the impact of the multi-channel retail mix on online store choice (Johansson & Kask, 2016), or investigating profits of physical retail stores, online stores, and hybrid retailers (Levary & Mathieu, 2000).

**H1: The more sophisticated the Internet strategy, the higher the probability that retailers have positive financial performance outcomes.**

Most of the studies focusing on retailers’ performance and strategies conclude and predict that click-and-bricks would have the maximum optimal profits (Parnell, 2011). However, there is evidence that firms keeping their strategy constant and making only structural changes can outperform the ones not changing at all (neither strategy nor structure), and that the latter –not changing at all - outperforms firms that change their strategy but keep their structure constant (Pertusa-Ortega, Molina-Azorín, & Claver-Cortés, 2010). Therefore, the thesis will investigate whether the level of adaptation (developmental, transitional, transformational) influences performance and in which types of companies.

**H2: The more transitional the type of adaptation, the higher the probability that retailers have positive financial performance outcomes.**
3. Methodology

“The different methodological views make certain ultimate presumptions beforehand about what we study as business researchers. These presumptions differ between views, and the different views, therefore, present different ways to understand, explain and improve.” (Arbnor and Bjerke, 2009)

Methodology is important from the point of view of the researcher because it helps to arrive to valid and logical conclusions. Without a well specified methodology it is impossible to make valid observations and findings (Kuada, 2011). In this chapter it is described the methodological approach used for answering the research questions.
3.1. Research philosophy in organization studies

In organization studies, and more specifically within organizational change and adaptation related studies, there are significant theoretical differences between the adopted philosophical approaches, mainly related to the form or to the degree of environmental determinism in which they engage (Clegg, 2006); however, the common view is that the combination between internal factors and external market conditions through an evolutionary logic imperatives largely beyond human influence (Swedberg 2003). For instance, Transaction cost theory argues that there are various adjustments that organizations need to make in response to external changes in order to improve efficiency in their internal and external transactions. On the other hand, Population ecology argues that the competitive pressures have a significant role in selecting certain organizational forms over others. From Darwinian ideologies to more recent doctrines emphasizing the ‘survival of the fittest’ (Hodgson, 1999), such ideologies and theories advocate for things such as market expansion. Globalization and digitalization have produced huge changes for organizations and consequently for the aim of organizational studies; thus, the focus of organization studies has shifted more towards how organizations adapt to these new market demands and which of the organizations survive the power technological revolutions have (Du Gay 1993 in Clegg (2006)).

Change is one of the major themes in the social sciences and today is a central theme in organization theory (Greenwood, in Clegg). However, Greenwood () agrees with Pettigrew’s call for more historical and multi-levelled analysis, due to the fact that there is a need to investigate the ways that institutional and market structures interact with each other, shaping organizational responses and, in turn, being shaped by them. In addition, it seems that the recent studies within organization do not focus on the consequences of change at the micro and macro level, but rather the studies focus solely on how the choice typologies of organizational templates change, and which are the responses of organizations to them. In this paper, the view upon the investigated adaptation-performance phenomena will be narrowed through the lenses of Contingency and Configurational theories, thus arguing that organizations can change many of their elements in order to be adaptive to the changes in their environments, that there has to be a fit between the organization and environment when adapting, that there are various but equally effective configuration alternatives, and that the ideal organization alternative is the one with the best adaptive capabilities and fit with their environments. The reason for narrowing the goals of this
thesis around Contingency theories is because of the belief that contingencies determine structure and that organizations change their structures to fit the contingencies like size or diversification, in order to perform well and avoid loss due to misfit (Donaldson 2001). Configuration Theory is a development of Contingency theory, highlighting that “strategies, structures and processes should be considered holistically, rather than variable-by-variable” (Greenwood, in Clegg); thus, the thesis assumes that there are specific configurations formed by organizations with closely aligned structures and processes, and that these configurations gain advantages that are difficult to imitate. All these being said, it is essential to discuss the philosophy of science applied in this thesis in order to better understand the way research was conducted and why it is relevant to take into consideration the suggested perspective.

The conceptualization of the relation between the ultimate presumptions and the methodological views is called paradigm by the theorists of science. Paradigms are used to explain the philosophical assumptions in the practical research. Therefore, according to some theorists and researchers, the paradigm concept may contain the conception of reality (vision of the world), a conception of science, a scientific ideal and ethical/aesthetical view (Arbnor and Bjerke, 2009). The conception of reality raises the debate about reality being an objective matter or if it is constructed by individuals from the society. The conception of science tries to figure out what is the actual knowledge that we acquire from education that creates our beliefs about the course of our study areas. The scientific ideal tells about the researcher as an individual what is the purpose of his/her research, chosen to be objective or more subjective. Ethical and aesthetical aspects are questioning moral means used in the process of conducting the research and observations made by suitable methods.

By applying a certain philosophy of science, the researchers cannot make ultimate statements and develop theories and models by only collecting a set of data because they might be biased by their own assumptions, views and experiences about a certain topic. Methodological views therefore help by taking different concepts and assumptions about reality under consideration to be able to search, understand, explain and create new knowledge. It also means that the chosen view will determine the observations, collections of data and their results. Although the best view cannot be logically chosen, it is always particular and reflective, which means it depends on
Chapter 3. Methodology

the evaluation of the area that has been studied and the author’s own opinion of reality (Arnbor and Bjerke, 2009).

3.1.1. Research paradigms
Research methods are often divided into two main categories: quantitative and qualitative methods. The difference between the two is often seen fundamental leading further to discussions in terms of paradigms, namely the quantitative view is described as being “realist” or “positivist” sometimes, whereas the qualitative view is considered to be mainly “subjectivist”.

A paradigm represents the way reality is viewed and how individuals and the relationships between them are perceived (Guba & Lincoln, n.d.). It can be stated that paradigm has a huge influence on the results of the research. The notion of paradigm has its origins in the history of philosophical thinking and more specifically in the works of Aristotel or Platon. Thomas Kuhn (1962) brought the notion of paradigm also in the attention of philosophers and sociologists of science. A paradigm was and it is therefore a theoretical perspective that inspires and directs a science, accepted by the community of scientists in a given discipline, directing research through: the specification and choice of what is to be studied, formulation of hypotheses to explain the studied phenomenon, and through the identification of the most suitable empirical research techniques (Corbetta, 2003).

As recently defined by (Bryman & Bell, 2007), a paradigm is “a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how research should be done, how results should be interpreted”. One of the most widely debated areas in terms of paradigms is related to the distinction between the objective and subjective paradigm and according to Kuada (2011), most scholars define paradigms in terms of four sets of assumptions: ontological assumptions, epistemological assumption, methodological assumptions and assumptions about human nature.

**Ontology** is the dimension describing “the nature of what the researcher seeks to know something about” (Kuada, 2011), namely the essence of the phenomenon under investigation. Most scholars see the social world from two broad perspectives. The social world is either real or external to an individual, or internal in the sense that the individual creates his/her own social world. Therefore, ontology also describes how the researcher sees the relationship between human beings and the environment. **Epistemology** describes the nature of knowledge and the
means of knowing. In other words this term describes “how we know what we know”. Some scholars believe that the “truth” about a social world can be known even if the researcher is just an external observer while others maintain that the social world can only be understood if the researcher is an active part of it (Bryman, 2008). **Human nature** refers to the researcher’s view of human behavior, if it is voluntary or deterministic, i.e. if human beings have a free will or their behaviour is determined by the environment (Burell and Morgan, 1979). In terms of **methodology**, Kuada (2011) describes it as “the reasons underlying the choice and use of specific methods in the research process”. In other words this describes the way of gaining the desired knowledge. Methodology is therefore the strategy guiding the entire research. However, a methodology is only one of the dimensions of a paradigm that researchers either explicitly or implicitly work within – a paradigm includes the other elements (Guba & Lincoln, n.d.)

In brief, a paradigm is an overall conceptual framework within which a researcher may work, that is, a paradigm can be regarded as the “basic belief system or worldview that guides the investigator” (Guba and Lincoln, 1994). Based on these assumptions related to the dimensions of a paradigm as explained earlier, two broad research approaches have been accepted in social science. These are the objective and subjective research approaches, differentiated by Burrell & Morgan (1979) as it can be seen below:

**Table 4. Objectivist-subjectivist approaches**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Objectivist</th>
<th>Subjectivist</th>
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</thead>
<tbody>
<tr>
<td><strong>Ontology</strong></td>
<td>Realism</td>
<td>Nominalism</td>
</tr>
<tr>
<td><strong>Epistemology</strong></td>
<td>Positivism</td>
<td>Anti-positivism</td>
</tr>
<tr>
<td><strong>Human nature</strong></td>
<td>Determinism</td>
<td>Voluntarism</td>
</tr>
<tr>
<td><strong>Methodology</strong></td>
<td>Nomothetic</td>
<td>Idiographic</td>
</tr>
</tbody>
</table>

In the following, the reasons for positioning the thesis within the objectivist-subjectivist continuum are discussed.
3.1.2. The paradigmatic position of the research

In order to determine the position within the objectivist-subjectivist approaches, there is a need for further explaining the underlying assumptions related to the researched phenomena (i.e. organizational change and adaptation) in order to be easier for the reader to understand the choices made in thesis.

First, it is mandatory to state that there is a difference between the various usages of the term paradigm in this thesis. By paradigm in the Methodology chapter, it is referred to the philosophical assumptions underlying the way of conducting this research and literature review, whereas by environment-adaptation-performance paradigm it is referred to the assumptions underlying the focus of the research area of the thesis (i.e. organizational change).

Second, the aim of this thesis is to look at the adaptation-performance relationship and to investigate the impact of e-commerce on retail industry by exploring what types of strategies are being used by retailers and whether there is a relation between certain strategies and their financial performance outcomes. Thus, quantitative research methods will be considered in order to generate knowledge through statistical analysis of observations about an easily accessible reality (Sobh and Perry, 2005). Therefore it has been decided to position this thesis within the objectivist approach and namely, within the positivist tradition. Further, there are stated the answers to the paradigm dimensions, in order to clarify better the positioning of the thesis within positivism.

Positivism paradigm is the most widely used paradigm within business research area and assumes that reality can be measured by viewing it through a one way (Saunders, Lewis, & Thornhill, 2009). Positivism tradition argues for reason, logic and that the knowledge gained through observation and measurement, is trustworthy. In line with these assumption, also this thesis aims to explain, predict and verify if there are any strategies adopted by Danish retailers, which positively or negatively influence financial performance outcomes, thus it will not qualitatively investigate for instance, managers’ perception on the impact of e-commerce on their company strategy. Moreover, as in any positivism study, the role of the researcher will be limited to data collection and interpretation through an objective approach, causalities and fundamental laws will be searched, concepts have to be operationalized, samples have to be large, and findings will usually be observable and quantifiable (Easterby-Smith et al., 2008).
3.2. Research strategy and design

There are three different types of research purposes: exploratory, explanatory and descriptive. Exploratory research investigates an area where little is known. It explains a problem which was not clearly defined yet. Explanatory research, as the name suggests, tries to explain the nature of the relationships between two or more aspects of a situation or phenomenon. Descriptive research is aiming to describe a problem. Characteristics about the population or phenomenon being studied are described with this research method (Kothari, 1985). The purpose of descriptive research is to illustrate a description of different characteristics of one observable fact or population.

As descriptive type of research, this thesis will be also deductive, because it will use deduction to test hypotheses and theories. As research methods, these are often divided into two main categories: quantitative and qualitative methods. The difference between the two is often seen fundamental leading further to discussions in terms of paradigms. For the purpose of this thesis, quantitative methods were considered. Quantitative research is “explaining phenomena by collecting numerical data that are analyzed using mathematically based methods” (Aliaga and Gunderson, 2000). This thesis will investigate the adaptation-performance relationship for a sample of companies in the Northern region of Denmark by implying quantitative research methods.

A research design can be seen as the underlying framework for the collection and analysis of data in a study (Bryman & Bell, 2007), and should be concretized in a plan of the research conducted. The chosen research design for the purpose of this thesis, is the quantitative research design – namely, the descriptive correlational research design. This type of research design is used by researchers to describe and measure the degree of relationship between two or more variables Creswell (2003). Thus, as in the study of Bailey et al. (2010), this thesis will follow a process as illustrated in the figure below in order to describe the sample, the strategies adopted and the relationships between type of strategies/ type of adaptation and some financial performance indicators.
3.2.1. Identification of variables
This thesis will test the hypothesis proposed in the previous chapter by looking mainly at the type of adaptation (three types called also format in the Analysis part), type of strategy (12 strategies) and various performance indicators. The types of strategies are quantitatively assessed based on the decision map (Figure in Appendix III) and the adaptation types are basically constructed based on a grouping of strategies. Performance is assessed through objective measures such as Net profits, Gross profits, Return on Assets (ROA) or Return on Equity (ROE). The quantitative financial information was collected from a national database containing all registered firms in Denmark. Further, other indicators were created such as Average of Net profits per employee or indicators of positive/negative financial results.

3.2.2. Sample selection
The retail industry is responsible for the distribution of finished products to the public through different types of stores, shops and shopping centers. According to Global Industry Classification Standard industry taxonomy developed in 1999, retail industry group is comprised of four main industries: distributors, internet and direct marketing retailing, multiline retail and specialty retail. Other classifications distinguish between different types of retail in terms of the type of goods sold, shopping trip purpose, size and type of store (Guy, 1998).
Chapter 3. Methodology

Positioned at the crossroads of demographics, fashion, commerce, and economics, retail has always been the most dynamic of the property sectors (Nelson & Leon, 2012). The retail industry is characterized by a high degree of casual, part time and seasonal employment. A dramatic change in the retailing industry, namely the disappearance of many brick and mortar stores could lead to a high level of unemployment, which consequently affects also the economy and the society. For each economy therefore, retail industry plays a significant role. Globally, retailers have had to adapt to the changes ongoing in the market in order to survive. Therefore, it can be argued that digitalization has brought new technologies that have made it easier for retailers to link sales channels and deliver a combined experience, thus many opportunities.

Because of the digitalization and technology development, retailers experience a shift in purchasing behavior caused by the appearance of a more informed and demanding type of consumer. Compared with the era of mass production and mass consumption when consumers’ needs were uniform, nowadays retailers need to redefine their roles and focus both on satisfying continuously changing needs of the consumers, but also creating both-way relationships. The adoption of the Internet from the individuals’ side consequently determined the retailers to develop new strategies and adapt their business models (Geyskens et al., 2002). Therefore, it makes sense to take a closer look at an industry (i.e. retail) which struggles to adapt to the recent technological revolution, the changes in the global market and the changes in consumer preferences. For that, a convenience sample of small retailers was analyzed, by selecting only the small retailers having available economic ratios for the last few years in a national database. The lack of other more complex sources for collecting reliable data about financial performance indicators is of course a limitation for this thesis, but the extracted sample contained 185 companies representing each NACE category as the total population of retailers in Northern Denmark. Another thing worth mentioning is that the shop/outlet will be considered as an unit of analysis and not the retail organization (Jesse W.J. Weltevreden & Boschma, 2008).

3.2.3. Method of measurement, validity and reliability

This section contains discussions of the measurement, validity and reliability of each of the study variables. Methods to be used for assessment of the validity and reliability of the study variables are presented next, followed by discussion of the approaches for testing hypotheses and research questions.
**Validity.** Kerlinger (1986) states that validity investigation is about the question: “Are we measuring what we think we are measuring?”, and the validity of the indicators is assured by stating that the measure of the constructs are logically and reasonably related to the construct. Moreover, the content validity - “the representativeness or sampling adequacy of the content of a measuring instrument” (Kerlinger, 1986) – is assured by selecting a complete set of data for the sample. Lastly, construct validity and criterion-related validity is by the fact that the logical relationships among variables can be examined and the measures are able to predict some other variable(s) (Babbie, 1992).

**Reliability.** Reliability refers to the ability of a particular instrument of measurement, which applied repeatedly to the same sample, would have the same result each time (Babbie, 1992). The internet strategy classification is taken from the study of (J W J Weltevreden et al., 2005), which is an instrument developed, validated and checked for reliability by various researchers (Boschma & Weltevreden, 2008).

### 3.2.4. Data collection

The aim of this thesis is twofold and therefore, there will be collected two types of data, namely:

- for the first part of the analysis – macro level, secondary data will mainly be collected from the national database of statistics (Statistics Denmark) about the economic outlook, consumers and consumption, sales within retail industry, employment or bankruptcies.
- for the second part of the analysis – firm level, data about companies’ performance indicators will be collected from the national database NNmarkeddata.dk, whereas the details about the strategies adopted by retailers in the sample will be collected by the researcher by self-surveying the websites of the companies. This approach was recommended by previous research mainly from two reasons: first, it has been suggested that retailers find it hard to self-assess their strategy, and second, problems of interpretation are avoided (Weltevreden et al., 2005).

### 3.2.5. Data analysis and interpretation

The collected data is analyzed through various descriptive tables and figures but also through Excel functions (e.g. Correlation Analysis), as suggested by the descriptive correlational research design (Lodico et al., 2006; Creswell, 2008;). More detailed information will be found in the Analysis part.
Chapter 4. Data analysis and results

4. Data analysis and results

4.1. The impact of e-commerce on retail industry in Denmark

4.1.1. Danish economy and digitalization
In March 2017, the DESI ranking positioned Denmark as the most advanced digital economy and society (See figure in Appendix I)\(^1\). The Digital Economy and Society Index (DESI) is a composite index released by the European Commission, which measures progress of EU countries in terms of five principal policy areas: connectivity, human capital, use of internet, integration of digital technology, and digital public services. In terms of internet usage, Danes are the most advanced users with more than 80% of them shopping online and using online banking.

Danish economy recorded levels of growth during 2016, with a real GDP growing by around 1.2% in 2016, real wages increasing due to a fall in consumer prices and increased employment. All these combined, boosted the confidence of the consumers and helped the retailing market to grow in 2016\(^2\). Because of that, Danish e-commerce was booming in the recent years in terms of annual growth, but retailers suffer from the rise of the foreign giants, which each year absorbs a larger slice of the Danish customers. According to FDIH (Foreningen for Dansk Internethandel), foreign web shops stole more than one in four Danish online purchases from the Danish e-commerce companies. A recent MarketLine report highlights that the online retail sector in Denmark is heavily fragmented, with a number of large companies operating alongside much smaller, specialized incumbents. The existence of large competitors, as well as the absence of consumer switching costs, ease of using search facilities and price comparison websites, and low cost of sales capacity, increases rivalry and sometimes makes consumers to purchase products on the basis of the price.

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4.1.2. Consumers and consumption
According to Statistics Denmark and FDIH, on average 10.3% of the total household expenditure was attributed to online shopping in 2015. Among the reasons for shopping online, there are: the ease of shopping and the fact that it is time saving, no closing time/hours, larger selection and ease of comparing products, lower prices or unique product availability. On the other hand, there are sometimes reasons to cancel or not make online purchases, such as: unclear conditions and insufficient information, technical problems and payment process, confidence or unavailability to picking up the goods. Most Danish consumers expect to have their product delivered in up to 3 business day and in terms of preferred delivery location, most of the them opt for home-delivery, but there are also consumers favoring to pick-up the products from the store, parcel machine, workplace or at the post-office.

Danish consumers spend more and more money on online shopping instead of buying from physical retailers; for instance, according to various reports by FDIH, there is an increase of at least 3-4% in expenditure via Internet each year, which has a negative impact on the traditional and physical retail. In terms of product or service category bought online, it seems that Danish consumers prefer to buy online clothing, footwear and jewelries (19%), travel and cultural related (14%), and movies, books, games, music and toys (14%) (See Figure below). As region for the online retailer, in 2016, 68% of the products or services were ordered from Danish web-shops, while the rest (32%) was purchased from online stores outside Denmark.

![Share of goods and services purchased online (2016)](image)

Figure 5. Share of goods and services purchased online (2016)
Customers tend also to opt for a so-called “showrooming” through which they try out a product in store before purchasing it online for a cheaper price, which consequently affects traditional retailers’ sales. According to a recent study by PostNord\(^3\), 6 out of 10 digital buyers in the Nordic countries said that in-store visits were an important source of information when planning their digital purchases. Even if that is a threat, there are ways in which traditional stores can avoid losing custom to online retailers (e.g. by offering price-matching); however, this is likely to affect their profitability, as they cut their margins to retain custom, therefore many traditional retailers are sometimes adopting multichannel strategies.

4.1.3. Retail sales in Danish retail industry
E-commerce sales value in Denmark grew from 32 billion DKK in 2009 to 100.7 billion DKK in 2016, which means an increase of 214.68% in the value of products sold online. When looking at the growth of Danish online retailers’ sales between 2013 and 2016, there is an increase in online sales from one year to another; however, the growth rate was 19.08% in 2015 and dropped to 13.7% in 2016, which together with a decreasing growth rate of change from one year to another in the number of online purchases could indicate a potential decrease in the speed of e-commerce retail sale growth. When analyzing the sales amount within each NACE category, it can be observed (see Figure 6 below) that the percentage of retail sales via internet from the total retail sales has continuously been increasing from 2009; however, by comparing each category to the amount sold in 2009, it can be seen that mainly two categories have suffered drastic changes in sales, namely: category “4= Retail sale of information and communication equipment” sell year less than in 2009, whereas the category “8=Retail sale via Internet, mail order, etc.” changed the most compared to other NACE categories and it sells much more than in 2009 (See Figure 7 below).

\(^3\) [https://www.emarketer.com/Article/How-Common-Showrooming-Nordic-Countries/1013022](https://www.emarketer.com/Article/How-Common-Showrooming-Nordic-Countries/1013022)
Chapter 4. Data analysis and results

Figure 6. Share of NACE sales in total retail sales

Figure 7. Change in sales by NACE categories

1 = Supermarkets and department stores, etc.
2 = Retail sale of food in specialized stores
3 = Retail sale of automotive fuel;
4 = Retail sale of information and communication equipment
5 = Retail sale of textiles and household equipment, etc.
6 = Retail sale of cultural and recreation goods, etc.
7 = Retail sale of wearing apparel
8 = Retail sale via Internet, mail order, etc.
4.1.4. Employment in the Danish retail industry

In terms of employment, the retail trade sector seems to be generally special in that it provides opportunities for the not highly educated workforce, and has a large over representation of young workers and a low average seniority. At the national level, the youth employment in the Danish retail trade sector has an important role, the wholesale and retail trade sector hires most of the basic level employees between 15 and 30 years old (See figures in Appendix I for more detailed information).

A potential shift in the retail industry from traditional retailers to more online retailers will definitely have an impact on the levels of the employment, and mostly among youth. Even if the impact of e-commerce on traditional retailing will mean a workforce shifting from traditional type of jobs (e.g. cashier) to another type of job in the online retailing (e.g. Customer care specialist), it is essential for local and national governments to be prepared for such a change and maybe able to make more investments in specialized educational programs for the area of online retail. In 2015, the number of employees in companies operating within the NACE category 479 - “Retail trade not in stores, stalls or markets”, basically online retailers, accounted for 3% from the total number of employees in retail; even though the number seems small, in figure below it can be seen that this category has witnessed increasing and accelerating growth rates from one year to another, starting with 2012.

![Growth in number of employees by NACE category](image)

Figure 8. Number of employees by NACE categories
4.1.5. Bankruptcies in retail industry

With a growing number of online retail sales, traditional retailers are struggling to survive and not be substituted, but in some situations, customers prefer the experience of traditional shopping, to enjoy the benefits of trying the product, such as clothes. Thus, it may depend on the type of product whether consumers change shopping channels. However, it seems that in Denmark, retailers struggle more and more with adapting leading to an increasing level of bankruptcies from one year to another (See Figure 9). Moreover, the number of small retailers was 17.5% (firms with 0-9 employees) and 31.3% (for firms with 10-19 employees) lower in 2015 compared with 2009. The decrease in number of firms led also to a decrease in the level of turnover and number of persons employed in the NACE category “47 Retail trade, except of motor vehicles etc.” (See Figure 10 for more detailed numbers).

![Figure 9. Wholesale and retail trade bankruptcy levels](image)

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<tbody>
<tr>
<td>Enterprises (number)</td>
<td>20062</td>
<td>19946</td>
<td>19434</td>
<td>19045</td>
<td>18141</td>
<td>17605</td>
<td>17069</td>
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<tr>
<td>Turnover (million)</td>
<td>78260</td>
<td>77665</td>
<td>77083</td>
<td>77470</td>
<td>73914</td>
<td>71977</td>
<td>67816</td>
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<tr>
<td>Number of persons employed</td>
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<td>46295</td>
<td>44931</td>
<td>43761</td>
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<td>Retail trade</td>
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<td>Wholesale and retail trade</td>
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![Linear (Retail trade)](image) | ![Linear (Wholesale and retail trade)](image)

Figure 9. Wholesale and retail trade bankruptcy levels

![Figure 10. Accounts statistics for NACE category 47 by size and time](image)

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| Linear (Retail trade) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) | ![Linear (Retail trade) graph](image) |
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Figure 10. Accounts statistics for NACE category 47 by size and time
4.1.6. Observational data on bankrupted retailers in Denmark

Data about bankrupted retailers in Northern Region of Denmark was collected from a national database, by choosing solely a list with several recent data about performance indicators (i.e. ROA, net and gross profit) of small retailers with the status “The company is in bankruptcy”. The list of bankrupted retailers represents only three out of the 9 NACE retail categories, the categories 472 - Retail of sale of food, beverages and tobacco in specialized stores, the category, 473 - Retail sale of automotive fuel in specialized stores and 478- Retail sale via stalls and markets being therefore not represented. From a general descriptive perspective (See also table below), it can be seen that 38% of the bankrupted companies belong to the category 471- Retail sale in non-specialized stores, have on average 14 years of experience. Even though the companies in this category have registered on average positive gross profits during 2012-2015, in terms of net profits the losses are huge (on average a negative result of 221000 DKK per year).

Table 5. Descriptives about bankrupted retailers in Northern Jutland region of Denmark

<table>
<thead>
<tr>
<th>NACE</th>
<th>Years of experience average</th>
<th>Gross profit average 2012-2015 (1.000 kr)</th>
<th>Net profit average 2012-2015 (1.000 kr)</th>
<th>% of companies in total by NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>471</td>
<td>14</td>
<td>2624</td>
<td>-221</td>
<td>38%</td>
</tr>
<tr>
<td>474</td>
<td>11</td>
<td>1081</td>
<td>-178</td>
<td>6%</td>
</tr>
<tr>
<td>475</td>
<td>7</td>
<td>-234</td>
<td>-476</td>
<td>6%</td>
</tr>
<tr>
<td>476</td>
<td>21</td>
<td>9542</td>
<td>-771</td>
<td>19%</td>
</tr>
<tr>
<td>477</td>
<td>9</td>
<td>355</td>
<td>-96</td>
<td>19%</td>
</tr>
<tr>
<td>479</td>
<td>5</td>
<td>630</td>
<td>126</td>
<td>13%</td>
</tr>
<tr>
<td>Total</td>
<td>12,5</td>
<td>2971,29</td>
<td>-270,44</td>
<td>100,00%</td>
</tr>
</tbody>
</table>

By looking at the ROA and net profits in each NACE category and the development of these indicators from one year to another, it can be noticed (see also the figures on the next page) that category 474- Retail sale of information and communication equipment in specialized stores has suffered dramatically changes from 2012. This is consistent with the analysis of the secondary data about retail sales in the first section of this chapter, where it was highlighted that the sales for this NACE category dropped drastically in the last few years, suspecting that a part of this drop could be explained by assuming that some stores started selling online, adapted, and therefore might have succeeded, whereas many of them were not surviving.
Chapter 4. Data analysis and results

Figure 11. Change in average of Net profits of the bankrupted retailers by NACE (2012-2016)

Figure 12. Change in average of ROA of the bankrupted retailers by NACE (2012-2016)
4.2. Descriptive analysis

From the total of analyzed companies, 62.7% have a developmental or traditional internet strategy, 29.73% have a transitional or online-offline combined internet strategy and 7.57% have a transformational or pure online strategy. On average, it seems that the companies employing a transitional adaptation type, namely selling both online and offline, have the best positive financial results in terms of Net profits, ROA and ROE in 2016.

From the 185 companies, it seems that the most adopted strategies are: 1- Passive strategy, 5- Brochure strategy, 10- Anti-mirror strategy and 11- Synergy strategy. However, it seems that not the most popular ones perform on average the best when looking at the net profits for 2016, but 6- Service strategy, 11- Synergy strategy and 4- Billboard strategy. Moreover, companies adopting a 6- Service strategy or 11- Synergy strategy have had on average, the highest ROA and ROE in 2016.

<table>
<thead>
<tr>
<th>Format and strategy</th>
<th>Average of Net profits 2016 (1,000 kr)</th>
<th>Average of Return on assets 2016 (%)</th>
<th>Average of Return on equity 2016 (%)</th>
<th>Count of Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>232</td>
<td>-9</td>
<td>0</td>
<td>62.70%</td>
</tr>
<tr>
<td>2</td>
<td>80</td>
<td>-10</td>
<td>-46</td>
<td>22.16%</td>
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<tr>
<td>3</td>
<td>22</td>
<td>-1</td>
<td>-38</td>
<td>6.49%</td>
</tr>
<tr>
<td>4</td>
<td>147</td>
<td>-92</td>
<td>21</td>
<td>5.95%</td>
</tr>
<tr>
<td>5</td>
<td>449</td>
<td>3</td>
<td>-1</td>
<td>4.32%</td>
</tr>
<tr>
<td>6</td>
<td>114</td>
<td>7</td>
<td>18</td>
<td>10.27%</td>
</tr>
<tr>
<td>7</td>
<td>875</td>
<td>13</td>
<td>100</td>
<td>8.11%</td>
</tr>
<tr>
<td>8</td>
<td>205</td>
<td>3</td>
<td>-12</td>
<td>5.41%</td>
</tr>
<tr>
<td>9</td>
<td>322</td>
<td>4</td>
<td>23</td>
<td>29.73%</td>
</tr>
<tr>
<td>10</td>
<td>-108</td>
<td>-13</td>
<td>-8</td>
<td>2.70%</td>
</tr>
<tr>
<td>11</td>
<td>290</td>
<td>6</td>
<td>18</td>
<td>8.11%</td>
</tr>
<tr>
<td>12</td>
<td>83</td>
<td>1</td>
<td>12</td>
<td>10.27%</td>
</tr>
<tr>
<td>13</td>
<td>798</td>
<td>10</td>
<td>51</td>
<td>8.65%</td>
</tr>
<tr>
<td>14</td>
<td>73</td>
<td>-1</td>
<td>-34</td>
<td>7.57%</td>
</tr>
<tr>
<td>15</td>
<td>73</td>
<td>-1</td>
<td>-34</td>
<td>7.57%</td>
</tr>
</tbody>
</table>

Figure 53. Descriptive about the sample and the average financial results in 2016
4.2.1. Developmental adaptation
In the developmental category of strategies, the most represented strategies are 1 (passive strategy - 35.34%), 5 (brochure strategy - 10.34%) and 6 (service strategy - 12.93%). However, when looking at the performance indicators in this category of developmental strategies, the strategy 6 - Service strategy has the highest average of net profits in 2016, followed by 4 - Billboard strategy. In terms of return on assets in 2016, it seems that the companies adopting a Service strategy have the highest average of return on assets and return on equity.

Figure 64. Descriptive of Average net profits in companies having a developmental adaptation type (by strategy, 2012-2016)

Figure 15. Descriptive of Average of ROA in companies having a developmental adaptation type (by strategy, 2012-2016)
4.2.2. Transitional adaptation
In the transitional category, the top three most frequent strategies are quite equally represented, meaning that between the three (mirror, anti-mirror and synergy) strategies there is no dominant one; but, there is a strategy, namely Export strategy, used by 9% of the companies in the transitional category, which shows on average negative performance outcomes: on average, the net profit is negative in 2016 and these companies have a negative ROA and ROE. The most profitable companies within the transitional category seem to be the ones adopting a 11-Synergy strategy, on average with 798000 DKK in 2016 and 51% return on equity.

![Figure 16. Descriptive of Average Net profits in companies having a developmental adaptation type (by strategy, 2012-2016)](image)

![Figure 17. Descriptive of Average of ROA in companies having a transitional adaptation type (by strategy, 2012-2016)](image)
4.2.3. Transformational adaptation

In the transformational category are the companies without physical outlets, selling their products solely online. These account for 8% of the total 185 companies investigated, and in terms of net profits it seems that on average in 2016, these companies were doing well having positive results; however, these companies are not performing very well in terms of ROA and ROE, which could be caused for example by how a companies' management teams are managing the capital.

Figure 78. Descriptive of Average of Net Profits in companies having a transformational adaptation type (by strategy, 2012-2016)

Figure 19. Descriptive of Average of ROA in companies having a transformational adaptation type (by strategy, 2012-2016)
4.3. Correlational analysis of the adaptation-performance and strategy-performance relationship by NACE category

There is not a strong relationship between the type of adaptation or the type of strategy and performance indicators, therefore both hypothesis are rejected, meaning that it cannot be argued that the more sophisticated the Internet strategy, the higher the probability that retailers have positive financial performance outcomes, nor that the more transitional the type of adaptation, the higher the probability that retailers have positive financial performance outcomes. However, the hypotheses proposed by this thesis are supported when looking at the differences between the companies in each category. Therefore, the NACE categories for which correlational analysis can be conducted are further investigated further.

4.3.1. NACE category 471: Retail sale in non-specialized stores

All the investigated companies in the NACE category 471 have responded to the advent of e-commerce by developmentally developing their existing business. All the companies have had a positive result in terms of gross profits.

ROA is positively correlated with the years of experience (0.65), but it is negatively correlated (-0.44) with the type of strategy, meaning that the more experience has the company the more likely it is to have positive ROA rate, and the more complicated is the internet strategy, the lower will be the ROA. A negative correlation (-0.63) is found between the type of strategy and the net profits, meaning that in this NACE category a positive financial result (i.e. net profit) will likely be earned by the companies with less complicated internet strategies. There is also a negative correlation between number of employees and years of experience, meaning that the higher is the number of years of experience, the lower will be the number of employees (-0.52). However, A positive financial result in terms of net profits will be likely associated with a high number of employees (0.58) and a positive financial result will likely be associated with lower number of employees (-0.70).
4.3.2. NACE category 472: Retail of sale of food, beverages and tobacco in specialized stores

All the investigated companies within the NACE category 472 have positive gross profits.

In terms of correlation, a positive but not so strong correlation (0.47) was found between the type of strategy and number of employees, which can be translated by saying that the more complicated the internet strategy the higher will be the number of employees. Moreover, it seems that in this category the higher the number of years of experience, the higher is the number of employees (0.52); in addition, the average gross profit in the last two years was found to be associated with number of employees, meaning that the higher the company the more likely will be that it will have positive results in terms of gross profits.

When looking at the format, namely at the type of adaptation to e-commerce adopted by the retailers in this category, there is a positive relationship between the type of format and years of experience; thus, the more experienced the company, the more likely it is to adopt a transformational format (e.g. to sell online).

4.3.3. NACE category 474: Retail sale of information and communication equipment in specialized stores

All investigated companies in this category presented positive gross profits, but there was not found a correlation between format and having positive or negative net profits or ROA. However, there is a negative correlation between average ROA in the past two years and the type of adaptation or format, thus it can be argued that for this category, the companies that are trying to adapt by transforming are likely to have had a lower ROA rate in the past two years. In addition, the type of strategy adopted by the companies in this category is positively correlated with average gross profits in the last two years (0.56) and number of employees (0.57), meaning that the more advanced the internet strategy, the more likely it is that the company has more people employed and had a positive or higher average of gross profit in the last two years.
4.3.4. NACE category 475: Retail sale of other household equipment in specialized stores

No strong relationship between format or strategy and performance indicators was found for this category. However, a weak but positive relationship can be noticed between number of employees and whether the company has registered a positive or negative result, thus the higher the company in terms of employees, the more likely will be that the result of net profit will be positive.

4.3.5. NACE category 476: Retail sale of cultural and recreation goods in specialized stores

All investigated companies in this category have registered positive gross profits in the last two years. In terms of correlations, a relatively weak but positive relationship can be noticed between the format type of adaptation and whether the company has registered a positive or negative ROA rate in the past two years (0.47); thus, the more transformational the retailer aimed to be, the more likely that it had a positive ROA rate. In addition, the higher the size of the company in terms of employees number, the less likely it is that the company will not engage in transforming itself due to the advent of e-commerce, opting for more developmental adaptation strategies. The same rule seems to be available for the type of internet strategy and its relationship with the size of the company and the ROA rate, meaning that the more complicated the internet strategy is, the more likely it is that the company registered a positive ROA rate in the past two years and the more likely it is that the company has a lower number of employees. The relationship between the size of the company in this NACE category and other financial performance indicators seems to be strong and negative; thus, the more employees, the more likely it is that the company has negative net profits and negative rate of ROA in the past two years. However, the relationship is strong and positive between the size of the company and the gross profits, meaning that the higher the company, the more likely that the gross profits will be satisfactory.
4.3.6. NACE category 477: Retail sale of other goods in specialized stores

No strong relationship has been found in this NACE category between format of adaptation or strategy and financial performance indicators, but there seems to be a positive relationship (0.73) between the size of the company and the average of gross profits earned by the company in the last two years, meaning that the bigger the size of the company the more likely it is that it will produce satisfactory gross profit results.

4.3.7. NACE category 479: Retail trade not in stores, stalls or markets

When looking at the performance indicators, the companies within this NACE category seem to share some common characteristics. First, there is a positive correlation between format type of adaptation (0.52)/ type of internet strategy (0.56) and gross profits, meaning that the more transformational and more complex is the internet strategy, the more likely it is that it will deliver positive gross profits. Moreover, the complex the internet strategy, the more likely it will be that also the ROA rate will be positive. In terms of size, the higher it is the number of employees, the higher it is the average of net profits (0.58) and the average of gross profits in the last two years (0.94); moreover, a bigger company will be likely to have also a positive ROA rate.
5. Theoretical reflections and recommendations for the AAU project about retailing in Northern Denmark

5.1. Data interpretation, hypotheses and recommendations

As discussed in the previous sections of the Data Analysis part, there is not a strong relationship between the type of adaptation or the type of strategy and performance indicators, therefore both hypothesis are rejected, meaning that it cannot be argued that the more sophisticated the Internet strategy, the higher the probability that retailers have positive financial performance outcomes, nor that the more transitional the type of adaptation, the higher the probability that retailers have positive financial performance outcomes. However, the hypotheses proposed by this thesis are supported when looking at the differences between the companies in each category, namely:

1) For the category 471: Retail sale in non-specialized stores, the hypothesis H1 was not supported, but H2 is partially supported through negative relationships between the type of strategy and ROA, and between type of strategy and Net profits. What that means is that the companies in this category should not engage in very complicated internet strategies in order to perform well. Also, another factor correlated with ROA is the experience of the retailer, namely, the more experienced is the retailer the more likely it is that it will manage accordingly its assets, thus having positive ROA rate at the end of the year. However, for the companies in this category, the higher is the number of years of experience, the lower will be the number of employees; in addition, a positive financial result in terms of net profits will be likely associated with a high number of employees.

2) For the NACE category 472: Retail of sale of food, beverages and tobacco in specialized stores, the hypothesis H1 was not supported, and neither the hypothesis H2. However, a correlation between type of adaptation and number of employees is found to be significant, thus, the more experienced the company, the more likely it is to adopt a transformational format (e.g. to sell online). In addition, a positive but not so strong correlation between the type of strategy and number of employees, can be translated by saying that the more complicated the internet strategy the higher will be the number of employees. In addition, the average gross profit in the last two years was found to be
associated with the number of employees, therefore it can be argued that the higher and the more experienced the company is, the likely it is that the gross profits will be positive.

3) For the NACE category 474: Retail sale of information and communication equipment in specialized stores, hypothesis H1 was partially supported through a negative correlation between average ROA in the past two years and the type of adaptation or format, thus it can be argued that for this category, the companies that are trying to adapt by transforming are likely to have had a lower ROA rate in the past two years. In addition, the type of strategy adopted by the companies in this category is positively correlated with average gross profits in the last two years meaning that the more advanced the internet strategy, the more likely it is to have also a positive average of gross profits.

4) For the NACE category 475: Retail sale of other household equipment in specialized stores, no significant relationship between format or strategy and performance indicators was found for this category, therefore both hypothesis H1 and H2 are not supported. However, it seems that the higher the size in terms of employees of the company in this category, the more likely will be that the result of net profit will be positive.

5) For the NACE category 476: Retail sale of cultural and recreation goods in specialized stores, hypothesis H1 is supported, meaning that for the companies in this category, the more complicated the internet strategy is, the more likely it is that the company will register a positive ROA. A weak but positive relationship was found also between the type of adaptation and whether the company has registered a positive or negative ROA, thus, the more transformational the retailer aims to be, the more likely that it is that it will have a positive ROA rate. In addition, the higher the size of the company in terms of employees number, the likely it is that the company will not engage in transforming itself due to the advent of e-commerce, opting for more developmental adaptation strategies. Also, the bigger these retailers are, the more likely it is that the company has negative net profits and negative rate of ROA, but on the other hand, these retailers tend to have a significant and positive correlation between the size of the company and the gross profits, meaning that the higher the company, the more likely that the gross profits will be satisfactory.
6) For the NACE category 477: *Retail sale of other goods in specialized stores*, no significant relationship exists between format of adaptation or strategy and financial performance indicators, therefore neither H1 nor H2 hypotheses are supported.

7) For the NACE category 479: *Retail trade not in stores, stalls or markets but via Internet*, both H1 and H2 hypotheses are supported. First, there is a positive correlation between format type of adaptation and gross profits. Second, the type of internet strategy is correlated also with gross profits. For these two reasons, the companies in this category show a significant relationship between adaptation and performance as it was found that the more transformational and more complex is the internet strategy, the more likely it is that it will deliver positive gross profits, but also that the more complex the internet strategy, the more likely it will be that also the ROA rate will be positive.

### 5.2. Internal and external fit

One reason finding or not finding a significant relationship between type of adaptation or type of strategy and performance could be to a so-called notion of fit. Generally, it has been acknowledged that the better the fit between organization and environment, the higher the organizational performance (Donaldson 1999; Drazin and Van de Ven 1985). Therefore, adaptation could positively influence performance when there is a high level of fit/alignment between organization and environment. Many researchers have discussed how the fit or match between strategy and environment can influence organizational performance in order to investigate if the same generic strategy can be equally useful in a variety of environments (Lee & Miller, 1996; Miles and Snow 1978), but it seems that there is not enough information on how strategic fit can be achieved in the retail business sector, especially nowadays with such a changing environment, informed and demanding consumers, and competition of the online retail giants like Amazon.

The concept of fit appears to be relevant in strategic management from a variety of perspectives and it is usually found in the literature as the concept defined by Venkatraman (1990) and among other words found to be related to - and used in the literature for - the concept of fit, several examples are essential to clarify: alignment and co-alignment/misalignment, match/mismatch, congruence/lack of congruence, and consistency/inconsistency (Ensign, 2001). Confusion can
appear when the terms congruence and contingency are used interchangeably or mistakenly. The main difference between congruence and contingency concepts is that congruence must be tested or established before testing for contingency; thus congruence is “a requirement for contingency, but it is not a sufficient condition for contingency” (Ensign, 2001). In terms of classifications, a remarkable input into the integrated strategy formulation and implementation school is the work of (Siggelkow, 2001), who proposes four directions for change by evaluating the effects of environmental changes on internal and external fit: 1) no change - both the external and internal fit are not affected, the environmental change are not relevant to the firms, 2) detrimental fit destroying change - both the external and internal fit are affected, 3) benign fit-destroying change - internal fit is compromised by the environmental change, and 4) fit conserving change - the environmental change decreases external fit. Taking a slightly different perspective, (Zajac et al., 2000) introduce the notion of dynamic fit, and proposes four possible scenarios in the pursuit of dynamic strategic fit. In their scenarios, it is highlighted that different strategic changes may have different outcomes for different organizations, mainly due to the fact that the scenarios are conceptualized by answering two questions: “Does strategic change occur?” and “Is strategic change needed to establish dynamic strategic fit?”, resulting in four scenarios: (i) beneficial strategic change and (ii) beneficial inertia, both leading to dynamic fit, and (iii) insufficient strategic change and (iv) excessive change, both leading to dynamic misfit.

From a theoretical perspective, Venkatraman (1989) develops a conceptual framework and an analytical scheme for testing, and measuring of fit. Therefore, fit was mapped as being: moderation, mediation, matching, gestalts, profile deviation, and co-variation. In situations where the concept of fit looks only at two variables (e.g. strategy and performance), only moderation, mediation, and matching could be considered the most appropriate perspective for a given research question (Venkatraman, 1989). The mediation perspective specifies the existence of a significant intervening mechanism (e.g., organizational structure) between an antecedent variable (e.g., strategy) and the consequent variable (e.g., performance). The mediation perspective decomposes the effects that market-structure characteristics have on firm performance into direct effects and indirect effects. On the other hand, the moderation perspective is considered by Venkatraman (1989) as being the one useful to evaluate the differences in the relationships between strategy and performance across various environments (Prescott, 1986). According to the moderation perspective, the impact that a predictor variable
has on a criterion variable is dependent on the level of a third variable, termed here as the moderator. Consistent with other studies investigating the concept of fit, this thesis will use fit as moderation perspective since it is widely used by strategic management researchers (Nandakumar, Ghobadian, & O’Regan, 2010).

5.3. A basis for a future study of the environment-adaptation-performance in retailing

5.3.1 Theoretical considerations: environment, organizational configurations, competitive strategies and fit

Organizational adaptation consists of diverse but interrelated elements, and it has been studied under various contexts, which means that there are potentially different combinations of these elements. One way of viewing these potential combinations is through the notion of strategic configurations or archetypes (Busn, Manu, & Sriram, 1996). Organizational configurations can be defined as “commonly occurring clusters of attributes of organizational strategies, structures, and processes” (Ketchen, Thomas, & Snow, 1993), and within retail, the retail configurations can be used for the market as whole entity, as well as the smaller segments of the market (Kumar, Anand, & Song, 2017). Moreover, there is evidence that specific strategic typologies influence positively or negatively performance outcomes within the retail industry (e.g. (Kim et al., 2004)(Lewis & Thomas, 1990), and numerous studies have linked each of Porter’s generic strategy approaches –differentiation, cost leadership, and focus – to performance (Parnell, 2011).

In addition, even though various studies found a significant relationship between the generic strategies and performance, in a study where Porter’s generic strategies were applied solely to the e-business context, differentiation strategy was the only strategy found to positively influence firm performance (Koo, Song, Kim, & Nam, 2007). Thus, it will be assumed that there is a positive and significant association between each of Porter’s strategic emphases cost leadership, differentiation, and focus – and organizational performance, but there are significant differences in terms of retail format. These differences will be investigated for each of the three retail formats in order to provide recommendations for which competitive strategies drive positive
performance outcomes. Moreover, in order to observe when certain strategic options drive performance, a contingency perspective should be applied. In this way, it can be investigated also whether the strategy-performance relationship is mediated by fit, namely whether a certain strategy enables positive performance outcomes when there is a match between the firm structure and strategy. In line with the recommendations provided by (Johansson & Kask, 2016), this thesis aims to explore the performance implications of fit and misfit for strategic combinations of business strategy, retail format and multi-channel setup.

In terms of the generic strategies proposed by Porter (1980), three strategies are widely accepted as possible responses to industry structure and sustainable competitive advantage: cost leadership, differentiation, and focus. Cost leadership focuses on low cost, relative to that of competitors, without overlooking other areas, including quality and service, differentiation strategies require companies to provide customers with unique and valuable products and services to increase loyalty, and market focus strategy refers to initiatives where companies focus on a specific market segment such as a particular group of customers, geographic markets or product line segments (Porter, 1980). The thesis proposes to further investigate the strategic configurations seen as the combinations of retail formats determined by the type of sales channel (pure play, click-and-brick, and brick-and-mortar) and business strategy (cost leadership, differentiation, and focus) and the influence of these configurations on performance outcomes, in order to recommend the ideal and the best driving to positive performance configurations for traditional retailers. From a contingency perspective, adaptation occurs when the structure and processes of an organization are changed and fit to their environment (Venkatraman, 1990). In the literature on organizational adaptation fit is used in order to describe either match of the relationship among activities (internal fit), or as the term describing the strategy-performance relationship (external fit). Thus, the thesis also recommends investigating the effect of types of fit on the strategic configuration-performance relationship, and whether some strategic configurations perform better than others when there is a fit between the structure of the firm and its strategy.
The environment has been conceptualized in many ways by researchers within strategic management area, but the two most utilized perspectives refer to competitive rivalry or descriptors of uncertainty and turbulence (Heiens & Pleshko, 2010). (Hwang & Norton, 2010), inspired by the work of Lawrence and Lorsch (1967), argued that the perceived competitive intensity (not so much the actual level of competition) influences managerial decisions. In line with that, (Davis, Morris, & Allen, 1991) concentrated on measuring changing technology, competition between firms in the industry, and industry growth rate by assessing the level of perceived turbulence. Therefore, it is recommended to take a closer look also at the environmental factors and their impact on the type of adaptation, mainly by measuring the perceived turbulence. The underlying argument for perceived rather than actual level is caused by the fact that it makes sense to have a perspective like this, because there would not be a reaction if there is not a perceived turbulence. In line with that, an interesting perspective would be to investigate also managers’ perspective on how they see e-commerce, as an opportunity or as a threat.

5.3.2. Other recommendations
There is a need for studies investigating to what extent fit mediates this relationship (Miller, 1992); Thus, it is recommended to be developed and empirically tested, various combinations of business strategy, retail format and sales channel, within the retail industry and how they impact the financial performance of retailers. However, in order to do that, it is recommended to collect more data about a representative sample of the total population of retailers in Northern Jutland and also to use a survey as an instrument for data collection in addition to observational data on strategies through the framework for analysis proposed in this thesis (Appendix III).
6. Limitations of the study

As any study, this thesis also has some potential weaknesses, mainly in terms of research approach, design and methods.

First, the sample of 185 small retailers might not be representative for the total population of retailers in Northern Jutland region of Denmark. However, in order to collect reliable data about performance indicators in due time, it was mandatory to collect data from the only national database providing this kind of information to the public.

Second, limitation is that some variables may not have been controlled accordingly, thus certain limitations in terms of reliability and validity in research instruments may be found. For example, it is possible that the location of the shop/outlet influences the strategy adopted by the retailer. Also, for instance, the experience of the retailer was measured in terms of years since the company was founded, but maybe a more appropriate way would be to measure also the experience with selling online or the experience of the last chain of managers.

Third, the concept of adaptation is caught in this thesis at a single point in time and by not taking into account how change and adaptation produced for retailers. For instance, it is possible that some of the investigated companies were having various strategies in the past few years.

Lastly, the philosophical position of the study is within positivism which assumes that all types of processes can be perceived as a certain variation of actions of individuals or relationships between individuals. Sometimes, adoption of positivism in business studies and other studies can be criticized for reliance to status quo, being only descriptive, and lacking insight into in-depth issues. However, that was not the aim of the study, but the thesis can be seen more as a pilot study for the future AAU project, thus it can serve as a basis for developing a survey, because it provides a comprehensive picture of the adaptation-performance relationship.
Chapter 7. Conclusion

7. Conclusion

It has been argued that businesses who are able to make use of the opportunities offered by the revolution will become winners while incumbents who refuse to innovate will become losers because technological revolutions change the dynamics of competition. Since the onset of the digital age, many brick and mortar businesses have lost market share significantly to pure digital players because they were slow in using digital tools and technologies. Thus, it seems that those missing the window of opportunity are risking becoming casualties of digital Darwinism.

After reviewing the literature in the area of Organizational adaptation, the thesis concluded that there is a need for studies that investigate the strategic choice-performance relationship from an empirical point of view, that explore the performance implications of strategic combinations of business strategy, retail format and multi-channel setup, studies that investigate whether a new form of retail institution (i.e. e-tailer) is a source of competitive advantage, and what are the strategic choices for traditional retailers as emerging online retailers case to sustain their competitive advantages, studies testing the performance outcomes generated by the strategic choices in the retail context that is changing due to the advent of e-commerce, but also studies focusing on the consequences of change at the micro and macro level, instead of looking solely on how the choice typologies of organizational templates change, and which are the responses of organizations to them.

This thesis investigated how digitalization has changed the environment for traditional retailers and how retailers adapted to these changes. The aim of the thesis was twofold, providing an analysis at the macro-economic level in terms of the implications of e-commerce on retailing industry in the Northern Jutland region of Denmark, but also an analysis at the firm micro level by investigating how retailers responded the changes in their environment. The overall conclusion of the analysis was that the relationship between adaptation and performance should be investigated by controlling, for instance, for type of company or type of sold products, and that the association between adaptation strategies and performance cannot be generalized for all retailers. In addition, this thesis is a basis for a future AAU project and in the part with recommendations and theoretical considerations, the thesis provides insight into how to integrate the concept of fit as a mediator of the adaptation-performance relationship.
List of references


better strategic planning: Managing change and planning for the future require both vision and strategy. (2012). Strategic Direction, 29(1), 30–32. https://doi.org/10.1108/02580541311285410

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http://search.proquest.com/docview/214906004/fulltextPDF/F6812184870D4657PQ/1?accountid=8


List of Appendices

Appendix I – Macroeconomic figures about retail industry in Denmark

![Graph showing Digital Economy and Society Index (DESI) 2017 ranking]

![Pie chart showing retail industry expenditure by category]
Employees (basic level) in category G (Wholesale and retail trade) in 2015

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Number of employees by retail NACE category in 2015

- 471 Retail sale in non-specialized stores
- 473 Retail sale of automotive fuel in specialized stores
- 475 Retail sale of other household equipment in specialized stores
- 477 Retail sale of other goods in specialized stores
- 479 Retail trade not in stores, stalls or markets
- 472 Retail of sale of food, beverages and tobacco in specialized stores
- 474 Retail sale of information and communication equipment
- 476 Retail sale of cultural and recreation goods in specialized stores
- 478 Retail sale via stalls and markets
Appendix II – Figures about retailers in Northern Jutland

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### Appendix III – About methodology and research methods

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<td>Do you sell your products online?</td>
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Appendix IV – About theoretical background and hypothesis

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