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MICROFOUNDATIONS OF DYNAMIC CAPABILITIES IN RETAIL IN THE AGE OF ARTIFICIAL INTELLIGENCE AND ROBOTICS

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Abstract

The purpose of this study is to find out what are the skills possessed by people working in physical stores and how these can be utilized and managed in the future. The research problem lies in an assumption that do people working in retail stores obtain required skills and capabilities or not, and are they recognized and utilized by management. Many technological solutions have been introduced within the retail industry, but there seems to be lack of understanding how to utilize peoples’ skills differently as some predictable and repeatable tasks are (or will be) performed by machines.

There have been studies conducted in the previous years about dynamic capabilities from the perspective of strategic leaders of companies. Dynamic capabilities have been researched in customer centric industries also from the perspective of corporate directors. However, there lacks a study that fully concentrates on retail industry (no other customer centric industries) and solely limits the research to study physical stores mainly from the perspective of people who actually work in the stores, not the leaders in headquarters. Therefore, it could be stated that this study fulfils a research gap lying in the analyses of dynamic capabilities and their microfoundations.

The main results of the study show, that there are variations related to information flows as well as there are inefficiencies about information of technological developments happening in the field in general. There is high motivation towards personal and professional development and willingness to learn. Changes made in processes and operations are mostly based on stores’ own customer analyses and communication with their customers. Even though needs for changes are recognized and there is willingness to development, it is highly resources-dependent. Realignments or redeployments are not fully conducted within store operations if their current resources and technologies in use do not allow this. There is a need to move away from certain routines towards being more creative and analytical. Even though there were need to move away from certain routines, there were no indications of considering the routines to be disappearing from store operations. There are structures in stores and in their supportive operations, which enable good customer service, doing the tasks and routines but there are little enabling factors for other things e.g. to innovate and be creative. Skills such as ability to analyse customer behaviour, product knowledge, good communication skills, ability to learn and share new knowledge, plan, organize and prioritize are possessed. However, the structures and processes prevent to utilize these skills to truly fluently communicate new opportunities forward and be part of creating something completely new. Utilization of skills in a new untraditional way are remained in the background because of routines and the traditional role descriptions and therefore it could be argued, that the microfoundations of retail companies are not dynamic.

Keywords
Automation, Artificial Intelligence (AI), Capabilities, Dynamic Capabilities, Microfoundations, Retail, Robotics
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1 INTRODUCTION

The retail industry and its traditional tasks and duties are facing tremendous changes due to automation, for instance utilization of robots, and changes in buying behaviour of consumers. According to Walmart CEO, Doug McMillon, technology is reshaping how workers do their jobs and growth in online ordering have created roles that did not previously exist (Cutter, 2017a). Therefore, it is important to understand the human know-how and how it can be utilized in the future separately and in cooperation with technological solutions and machines.

The aim of this thesis is to find out what are the skills possessed by people working in physical stores and how these can be utilized and managed in the future. At present, public discussion of automation is partly seen as a threat for employees but there are also positive effects of automation and it is important to acknowledge that due to some automated solutions people could perform more complicated duties: the ones that cannot be automated. This thesis discusses what these skills and duties are and tries to help retail operators to allocate their future positions and help employees to become more aware of their capabilities, possessed skills and potential within the field.

According to brain scientist, Katri Saarikivi (Jensen, 2016) from University of Helsinki, organizations that are able to utilize available tools as well as to support human data processing and networking will succeed in the future. Saarikivi states, that everything that can be automated will be automated and what is left for humans is the things that machines cannot do, such as complex problem solving, interaction, learning and creative thinking. Organizations’ structures, cultures and procedures either prevent or support human in doing the most valuable non-automated tasks. (Jensen, 2016). This thesis discusses about these tasks within the field of retail and what are the requirements for people working in the industry and what their skills are.

Since the emergence of information society, the requirements of qualifications of changing working life have been studied particularly in behavioural, educational and social sciences. Commonly, the researches have concentrated on the context of
know-how and professional skills in working life generally. One example of research done in the field of educational sciences is the thesis by Koski (2001), which studied educational scientists’ qualifications in working life. Also, an academic dissertation by Haapanen (2017), studied what kind of specific resources and capabilities are required in internationalizing SMEs and how structures, processes and routines between different operations are able to modify to respond to new situations and how resources are allocated. This research focuses only on retail business and the tasks, structures, processes, routines and required as well as possessed skills in physical stores and whether those skills meet the requirements. Theoretical framework of microfoundations of dynamic capabilities in other studies have mainly been used to observe and study strategic upper managements but in this thesis the approach is to use the framework how microfoundations appear in the operative levels of physical stores without studying headquarter-based managers.

The research aims to answer the following question:

What skills are possessed by people working in physical retail stores?

There is a great personal interest towards the topic because of my more than 15 years’ professional background in retail from operative tasks in stores as well as from different supportive positions in the field. I have knowledge and skills of day-to-day tasks of personnel and management of grocery and fashion stores and also from different projects aiming to develop the functionalities and procedures as well as the surroundings in constantly changing field, where changing consumer behaviour and competition have to be always taken into consideration.

It could be assumed, that there is general social interest to the topic as the labour markets are changing. Also, some significant operators have disappeared from the field due to fierce competition and to prevent more operators disappearing, finding “success factors” of employees, could help the field.

Human skills and how they are managed and recognized were aimed to discover by conducting email interviews with people operating in retail, possessing different managerial roles within physical stores. I utilized my own network within the
industry. The aim of the interviews was to discover the most common tasks, structures, processes and routines within physical stores as well as what are the possessed skills of people working in the stores that possibly cannot be replaced by automation - in what way can these skills be recognized and utilized in the future.

This thesis proceeds as follows. The following chapter describes the general information of what are the trends and phenomena within the field of retail as well as how traditional tasks of employees are changing. The chapter 2.4 discusses the correlations between qualifiers and requirements from human and automated perspectives followed by section 2.5, which focuses on the characteristics of different duties and the future requirements within the industry. Chapter 3 sets the theoretical framework for this work followed by the description of the whole research and its results in chapters 4 and 5. Chapter 6 concludes including managerial implications of the study.
2 AUTOMATION IN RETAIL

2.1 Duties in retail are changing and some disappearing

There are multiple tasks and duties in physical stores within retail. Whether it is for instance a supermarket or a convenience store, a clothing or a department store. The most common duties visible to consumers and customers are sales and customer service related, activities at cash registers as well as visual merchandising, up keeping of the store environment and product selections. The ones that are not as visible, are for example receiving and handling of deliveries and other stock control activities, pricing, dealing with reclamations and other issues demanding communication with suppliers and other stores’ networks. Analysing sales data, budgeting, buying, marketing activities and human relations (HR) like recruiting, new employee training and introduction as well as rota planning, and leading and managing the staff are part of the common duties in stores.

However, the characteristics of the “traditional” duties have evolved and gained new levels and nuances due to digitalization, automation and customer demand. Rapid integration of technology into the servicescape (Hartley & Green, 2016) have enabled consumers to move more and more of their purchasing online. According to Hartley & Green (2016), this virtualizing formerly face-to-face only -service encounters in different ways previously thought impossible creating the notion of service separation, where the service provider is spatially and/or temporally decoupled from its consumption.

Temporal service separation can be seen for instance in situations, where a customer has selected and purchased a product online and collects it from selected physical store demanding less service than before. This has had an impact on the consumer behaviour also in situations where customer executes the whole purchasing cycle in-store expecting the whole event from entrance to exit to flow as conveniently and quickly as it would online (in most preferable scenarios). The emergence of various forms of virtual services such as self-service technologies (SSTs), remote and smart services (Hartley & Green, 2016) have appeared in the retail industry not only to
optimize effectively stores’ resources but to provide the correct level of service according to each individual customer’s demands and expectations. Among self-service registers, the utilization of robots for cleaning, drones for home deliveries (Shead, 2016), or chatbots driven by AI to bring new level of service and innovation to customer experiences (Borpuzari, 2018). Shelf-scanning robots are used to audit stores to help automate tasks that are “repeatable, predictable, and manual” giving employees more time to focus on higher-value work of customer service and selling (Vincent, 2017), utilized for instance in U.S. retailer Walmart’s stores. One of the most time-consuming duties within stores, especially in the fast velocity of stock-sector such as grocery stores, is organizing and stocking the shelves taking into consideration the date of expiries and quality checks particularly of fresh, delicate products as well as scanning the products at the cash registers.

The ability to provide various types, forms and levels of service in-stores and online has had significant impact on many operators within retail being too challenging and competed causing store closures and many companies entirely out of business all around the world. Underperforming stores have been closed which, on the other hand, has generated investments into personalization, omnichannel services and AI to boost digital business operations, done for example by American Gap Inc. (Unglesbee, 2017). However, entire bankruptcies have also emerged for instance by Finnish fashion retailer Seppälä (Santaharju, 2017) and other so-called fast-fashion businesses have faced the effect of change in consuming behaviour, where consumers might not want to spend on quantity rather than quality. Focusing more on quality might be one of the reasons that fast-fashion operators have suffered from unsold inventory, e.g. Swedish retailer H&M announcing in March 2018 that it had $4.3 billion worth of unsold items (Paton, 2018). Department stores have struggled being forced to close stores for example by American Macy’s (Thomas, 2018) and Finnish Stockmann (Kaleva, 2015). Stockmann sold its entire operations in Russian market in 2015 (Stockmann Group, 2015) and its grocery store chain Herkku to Finnish S Group, which was approved by the Finnish Competition Authority in the end of 2017 (Lassila, 2017). Store management jobs have been reduced for example by UK-based Debenhams (BBC, 2018).
The examples mentioned are only few but describe the phenomenon, that to succeed companies need to respond quickly to customer demands and be involved within development. According to Dr. Arhi Kivilahti (Solita Oy, 2015) who has researched retail in Aalto and Oxford Universities, the field have been stigmatized to be an industry, which have not been able to respond changes such as international competition in e-commerce. A study conducted by Solita (2015) about trends and future of retail in 2015, researched the impacts of general economic state, internationalizing competition and digitalization on structures, business strategies and management within the field by interviewing 27 Finnish retail executives. The interviewees stated there to be lack of courage to seize the possibilities provided by internationalization and digitalization in retail companies. To succeed, they put great emphasis on clear concepts including carefully designed value chains and product selections stating, that these issues, however, require ability for company employees to learn new skills. One of the challenges also mentioned by the executives, was the ability to conduct recruitments of foreign know-how to Finnish market.

Digital development impacts on every function of retail: from buying to logistics and from online shopping applications to novel customer service in stores. This development provides possibilities to new business models and ways to serve customers, but these will remain unutilized if the basic functions of retail - purchasing, sales, marketing, logistics, and customer service – are not functioning. (Solita, 2015). The retail executives stated in the Solita study (2015), that even though digitalization provides new services, the physical stores and good service in them will remain fundamental to the success of the companies.

Kivilahti states (Solita, 2015), that the most important sector of commerce will still in the future be the trust between the company and their customers. In the core of the digitalization and good service, is increasingly knowledge and knowledge management, which provide possibilities to more personalized service and better targeted marketing both online and in stores. The lack of skilled people of this “new era”, however, decelerates the utilization of new possibilities. Also, the interviewees of the Solita study shared Kivilahti’s vision agreeing, that to benefit from digital development the retail managements need to possess new kind of courage and
commitment. They also saw, that lack of experience and know-how is the greatest challenge preventing development. (Solita, 2015).

One aspect of retail, which does have faced growing demand, is luxury fashion retail with high-end products. One example being French luxury goods group LVMH (home to labels such as Givenchy, Christian Dior and Louis Vuitton) planning to expand its production in its home country bringing its employees of leather goods specialists to 4000 and by 2019 having 16 leather workshops only in France. After almost two decades of de-industrialization, France’s manufacturing sector has been able to create new jobs. (White & Denis, 2018).

It could be argued, that the sales growth of luxury products is due to consumers shift from mass-consumption to appreciating more of quality than quantity as mentioned before, the growth of purchasing power in Asia, particularly in China and Japan, and availability of these products finally online. Also, when consumers want to do their purchasing in physical stores, these luxury brands’ stores provide high-quality service as well as these stores are almost a sight providing high-end, unique client experiences, which today’s consumers demand. The luxury business is still highly depended on human handicraft skills in production as well as it demands detailed product knowledge, high-quality sales, service, and social skills in stores. However, also luxury retail cannot afford to ignore the significance of online purchasing as it has grown significantly as can be seen in Figure 1.
The challenge could lie in luxury retail on how to make online visits and purchasing experience as unique as the visits and purchasing in physical stores as well as whether the level of utilization of automation differs from the other retail operators.

2.2 Human and technology

Fundamentally, work is very human-centered phenomenon. Work is generated because there are people with problems that have to be solved and needs that have to be fulfilled -these problems and needs are continuous phenomena in societies. Work per se does not change due to digitalization or robotics, instead how work is performed changes constantly. Therefore, good work performance is intelligent problem solving, in which technological development produces continuously added value. Along with technological understanding, there needs to be understanding of humans who use technology in problem solving. If the aim is to achieve good performances, therefore it has to be understood what intelligent human activity in the age of artificial intelligence is. (Huotilainen & Saarikivi, 2018: 9). Also, there need to be understanding what the requirements of different work environments are now and in the future, and which duties in those environments are best performed by
intelligent human activity, or by technological solutions or by the combination of both.

Digital technology is reinventing the overall work experience for all levels of employees and demands new set of organizational capabilities, that will empower the workforce of the future (Accenture, 2018b). The success will increasingly depend on people and machines working together: AI will raise people’s capabilities as they help intelligent machines to learn and adopt (Shook & Knickrehm, 2018) and the further the AI solutions evolve the better people need to comprehend the data and reasoning models utilized by those solutions (Pinola, 2018). This collaboration not only drive efficiency but also create new forms of growth and innovation. To succeed organizations must reimagine work, pivot their employees to new growth models and train new skills to their people to perform more valuable work. (Shook & Knickrehm, 2018).

Economic growth consists of capital, workforce and growth in productivity, which is enabled by technological development, and in business AI will have as pivotal impact as the invention of electricity (AI Optio, 2018). According to president of AI Committee of Finnish Ministry of Economic Affairs and Employment, Osmo Soininvaara (2017), AI is expected to replace around 15% of work performed now in the next 15 years -highlighting this to be a rough estimate. Soininvaara (2017) states, that biases in know-how are estimated to deepen and some work performed will become more complicated and some more simplified due to technological solutions. Therefore, companies need to find new ways to utilize the new technology to be able to create new business models (AI Optio, 2018) within retail and in any field, and to allocate their human and technological resources optimally.

2.3 Automated duties

Analysis of the automation landscape done by CBInsights in 2017 found, that in the US alone 10 million service and warehouse jobs are at high risk of displacement within 5-10 years. Meanwhile, almost 5 million retail workers are at a medium risk of automation within 10 years (CBInsights, 2017). Figure 2 describes the jobs in
immediate risk from automation, and how salespersons in retail rank compared to jobs within e.g. logistics, construction and health care.

Figure 2. Jobs in immediate risk from automation in US (adapted from CBInsights, 2017)

Even though the jobs in the Figure 2 are separated by the main field they operate in, it should be noted that there are different fields that are very related and depended on each other. Retail operations depend particularly on logistics and warehousing and vice versa. The more online shopping has grown, the more it has had an impact on warehousing activities as well as deliveries. Evolution of automation have emerged also in physical stores with for instance self-service registers, usage of robots for cleaning, and drones for home deliveries (Shead, 2016) as mentioned earlier.

Online operators have entered to offline markets for instance in groceries sector, one of them being the American Amazon by introducing a physical, cashierless store Amazon Go in Seattle. The company has 45 000 robots operating in their warehouses (Shead, 2017) and also Walmart, U.S.’s largest private-sector employer, have started to test robotic machinery for cleaning (Cutter, 2017b). Even though traditional need for human labour for instance in warehousing and cleaning have diminished, there might be some duties emerging that could have not been thought before. Since Y2K, numerous new roles have emerged that could not have been imagined at year 2000 as for instance Facebook did not exist and the first iPhone would be announced only
seven years later. The roles, common and popular today, emerged due to technological development are such as data scientist, virtual reality professional, social media influencer, mobile app developer, machine learning engineer, cloud and IoT architect to name a few (Marr, 2018) -and these might also be automated as well in the future.

Even though the significance of online-stores has grown rapidly, it should be noted that the share of offline is still larger, which well explains the entering of e-commerce leaders Amazon and Chinese Alibaba Group to the offline market (CBInsights, 2018) inventing new, automated solutions to attract consumers. Figure 3 represents the shares of online and offline sales in Chinese and U.S. markets in 2017.

![Figure 3. Shares of online and offline sales in China and U.S. in 2017 (adapted from CBInsights, 2018)](image)

Among Amazon’s Amazon Go, Alibaba Group have introduced Hema grocery store in China, where customers are suggested products by mobile app based on items scanned by their phones and final payments are done through Alibaba’s own mobile payment system Alipay. The company has also launched Tao Café, which uses AI allowing customers to skip checkout lines as well as Tmall Supermarket, which is completely automated by augmented reality, QR codes and mobile payment and is to open an entire shopping centre, More Mall, where orders are done via phones and purchasing with payments through Alipay. (CBInsights, 2018).

The automated solutions have also emerged in fashion stores and restaurants. Alibaba’s FashionAI is an AI-enabled screen interface, which suggests additional
items based on what customer is already trying on and solution called Magic Mirror and virtual dressing room to try on clothing virtually. Customers are activated with the help of “Catch the cat”-application to chase virtual mascot in stores to win promotions and discounts. Also, Amazon have opened pop-up stores jointly with U.S. fashion brand Calvin Klein, installing “Alexa” into fitting rooms from whom customers can ask questions as well as control the lightning and music. They have also patented “Physical store online control” -solution, which prevents customers, who have logged in the store Wi-Fi, from comparison shopping via their phones. The solution blocks the access to competing sites redirecting them to an Amazon-approved one and signalling store staff to approach the customer. In KFC fast food restaurants, customers are able to pay on self-service screens with “Smile to pay” facial recognition technology, where process of payment is done by smiling. (CBInsights, 2018).

In customer service online services have become the primary channel for growing majority of consumers, for instance the utilization of speech recognition has become a growing trend particularly in the U.S. market (Törrönen, 2018), and chatbots around the world. AI-powered chatbots are able to deliver instant, 24/7 service and have faster and accurate access to client data bases of companies. For instance, the leading Scandinavian insurance company, If Insurance, handle 67% of their online services using AI and gives customer service professionals time to focus on handling the remaining, more complex customer cases. (Giosg, 2018). The automation of service paths helps also to guide these service professionals forward in guiding the customers and it enhances the orientation of new workers and ensures the consistency of service processes (Törrönen, 2018). However, Dellot and Wallace-Stephens (2017a) point out, it should be taken into consideration that the transformation and development emerged due to automation tends to be thus far task-based rather than job-based, allowing workers to pivot into new roles. Therefore, it should be asked how AI and robotics will alter the substance of those jobs that will remain.
2.4 Requirements in retail

There are different types of demands what defines an individual’s professionalism in a certain duties and tasks. To be a professional, or an expert, in a given field one needs to possess various qualifications and skills. The requirements for possessed qualifications and skills have always evolved and particularly during technological development the pace of this evolution has become faster. There might be some qualifications and skills, that were appreciated and demanded previously, but are not as significant anymore.

Since the economic crash in 2008, the sales figures within retail begun to grow for the first time in 2017. The annual growth within the industry before 2008 was approximately 5% and in 2017 was 2% according to Finnish Commerce Federation (Nalbantoglu, 2018). The growth, however, will not increase the amount of jobs as the available know-how in the labor market are not meeting with the emerged requirements within the field. According to head economist of Finnish Commerce Federation, Jaana Kurjenoja (Nalbantoglu, 2018), new professions and combinations of different skills are needed in retail and for instance sales professionals are needed to obtain more and more expertise of the products they are selling. Also, retail companies are lacking programmers, data analysts as well as service design professionals. One of the facts that prevents the field to grow more is the lack of skilled know-how (Nalbantoglu, 2018).

One of the challenges in retail have emerged to be the late realization, that the traditional duties are not able to respond to the complex needs of today’s consumers and the qualifications have just recently started to be defined. Notions of customer centricity, personalization, service design, responsibilities and visibility in different digital medias, quality and sustainability standards and responding to them instantly, ability to provide experiences for customers etc. are only few examples of the current requirements that stores need to provide. It is for the best interest of workers, customers and the retail operators to scrutinize and define who performs which duties and who responds the best to these requirements: human or automated solution.
2.4.1 Correlation between the requirements and human know-how

Today’s consumer is an effective buyer: they have the purchasing power but less time instead. This means, that the whole service experience from product comparing to the delivery (or the actual purchasing) has to be fast and proficient, and communication effective during the whole purchasing process in every channel. The trend has shifted towards so called conversational commerce. (OP, 2018). Whether the communication with customer takes place in a chat online or face-to-face, conversational social skills and ability to respond to individual needs of the particular customer, are required.

A study conducted in 2016 by Aula Research Oy for Association for Finnish Work studied employers’ and employees’ views of future work and found that employers’ and employees’ views on qualifications and skills do not correlate with each other in all levels. There were 1006 employees and 613 representatives of employers’ top managements and HR professionals represented from different sized companies. One of the findings were that all representatives, however, agreed highly on the importance of multiskilled labour, ability and readiness for change and flexibility. (Talouselämä, 2016).

The most important skills considered by employees participating in the study were IT- and digital know-how (19% of the respondents), professional skills (11%) as well as language skills and international know-how (10%) whereas by employers, good interaction, communication and co-operative skills (11%) was the most important competence area, which was not emphasized by the employees. The requirements for employees by the employers were willingness to develop and learn new skills (55%), flexibility towards working hours and forms of work (48%), and readiness for change and ability to adapt (45%). The employees highlighted the importance of having multiple skills (51%), flexibility (43%), also willingness to develop and learn new skills (38%) as well as readiness for change and ability to adapt (37%). (Talouselämä, 2016). Confederation of Finnish Industries conducted a study “Personnel’s know-how requirements in digital economy” in 2017 as a part of their annual resource- and educational inquiry, in which 530 companies participated. The study’s aim was to find out how Finnish companies see the current state of
digitalization, and what kind of know-how they need and what are the bottlenecks that prevent the progression of digitalization. (Made by Finland, 2017).

The main finds of the study were, that the main drivers in digital culmination are the changes in consumer behavior and goals in effectivity performance. New skills are mainly required in customer surface, marketing, sales and communications as well as in business intelligence (BI) and financial management. The communication was highlighted in retail operations as store personnel are more commonly participating in customer communications through for instance social media. (Heikinheimo & Konttinen, 2017). Finnish Commerce Federation summarized the study’s discoveries from retail’s perspective. Digital know-how is needed in almost every aspect of retail: Figure 4 describes how profound digital skills are required in different functions at the time of conduction of the study.

![Figure 4. How profound digital skills are required in different duties of retail now (adapted from Kurjenoja, 2017).](image)

According to Kurjenoja (2017), due to internationalizing competition the significance particularly of customer service and customer management, logistics as well as employees’ level of knowledge of the field and the operational environment are growing, retail operators should pay attention in finding suitable skills within these areas. And more importantly, employers should be able to recognize these
skills and the strengths of their current employees as well. According to a study by the Association of Finnish Work in 2017, 69% of 2219 Finnish employees aged 17-79 experienced that their employers did not recognize their strengths very well, or at all (Made by Finland, 2017).

Among technical and rather tangible skills there are multiple aspects within human know-how, which may not be easily measured, and these are such as capability to learn, intelligent problem solving, critical thinking and questioning, creativity, coordination between emotions and logical reasoning, different aspects of teamwork, and empathy. So-called soft skills are becoming more vital and more emphasis on “character skills”, such as perseverance, sociability and curiosity are highly valued by employers and correlate closely with employees’ ability to adapt to new situations and acquire new skills (Heckman & Kautz, 2012).

Obtaining knowledge of something has shifted towards continuous learning. Previously it was possible to know rather specifically in advance, what an employee needs to know to perform a certain duty successfully. However, duties where solutions are known in advance, are the first ones to be automated and people will focus more on tasks with characteristics of not knowing answers beforehand or “right answers” do not exist, or know-how required by a certain task is not known in advance, and finding a solution is creating of new knowledge. (Huotilainen & Saarikivi, 2018: 74-75).

According to Huotilainen & Saarikivi (2018: 75), customer service is a good example of complicated problem solving in which as an end-result new knowledge is created. The authors state, that as every person is unique, it is not entirely possible to know in advance what customer wants or what solution fits for them. Therefore, it is complicated to know what kind of know-how is needed. Eventually, when solutions are found, evidently new understanding and knowledge has been born. Ability to continuous learning and combining new information with the old might be more important skill than the ones strictly related to a certain profession, that have built up during one’s career. Also, as the problems to be solved by humans are more complex than the ones left for machines, one person’s problem-solving skills might not always be enough, and this cognitive work load needs to be shared. This distributed
phenomenon of cognition is an important aspect of successful teamwork, where crowdsourcing is utilized in solving complicated problems. (Huotilainen & Saarikivi, 2018: 220). This demands for instance HR and recruiting professionals to analyze different teams’ skills, capabilities, qualifications as well as personalities as a combination to meet not just the company strategies and requirements, but also the ones of their customers.

Huotilainen and Saarikivi (2018) also highlight the significance of creative thinking and intuition. In creativity, it is essential to see familiar things in a new way or create new or unexpected connections between different ideas and thoughts. It could be concluded, that creative thinking is mainly based on experience and existing knowledge (Huotilainen & Saarikivi, 2018: 178). This way of thinking could be meaningful for instance in designing customer experiences within stores.

Intuitive decision-making is guided by emotions and therefore it is fast and rather easy, and in some cases, emotions are important signals in making decisions (Huotilainen & Saarikivi, 2018: 186). Therefore, e.g. a sales person in store need to understand the emotions of customers and what are the driving factors in their decision-making. An example of intuition presented by Huotilainen & Saarikivi (2018: 187) from retail, is the decision-making process of a fashion buyer: a professional who sees and collects plenty of different influences and trends is not necessarily able to explain rationally why they choose a certain trend or collection into their store and pass another one. They have the capability to sense the current tastes of trends and are able to anticipate their customers’ attitudes towards them. The decision is based on years (or decades) of know-how combined with sensing the new trends, as well as knowing and understanding of their customers’ emotions and values. Once the collection arrives the store, it is the task of store staff to display them as well as recognize the potential customers for the products, what demands creativity as well as intuition.

Researchers believe emotional knowledge to support decision-making processes in many time scales: emotions guide in enhancing short-term situations but also, they remind the goals of long-term wellbeing and security. Emotional knowledge is utilized in valuation of signals related to meanings of decision-making as well as in
valuation of the consequences of those decisions. Customer understanding diminishes if there is lack of ability to analyze or take into consideration customer’s feelings in their decision-making and contentment. (Huotilainen & Saarikivi, 2018: 197-198). The more there is a shift in customer service towards individual and personalized service experiences, the more in-depth understanding of the customer is demanded, and this requires also empathy. Empathy being the capability to understand another human being’s state of mind and their experiences as well as obtaining compassion (Huotilainen & Saarikivi, 2018: 235). Whether it is possible for a machine to replace humans’ ability to understand emotions or obtain empathy and how this could be utilized in retail will be touched in the following chapter.

2.4.2 Correlation between the requirements and AI & robotics

Artificial intelligence needs to be separated from robotics as these two are overlapping but still distinct technologies (Dellot & Wallace-Stephens, 2017b). To comprehend the differences between them and varying nuances within these technologies, their utilization need to be analyzed particularly from the perspective of retail industry and in which sections or duties the industry gains the most benefits from.

AI usually refers to duties or tasks performed by a computer software, that would otherwise require human intelligence. There are two broad types of AI: general AI and narrow AI. General AI means a system, that has an equal or greater intelligence to human and demands an understanding of how human intelligence actually work. The most progress has been made within narrow AI, which can perform more discrete tasks within strict parameters. Those tasks are grouped into categories of sensing, reasoning and communicating (e.g. Apple’s Siri). Important aspects to AI also include different levels of learning. (Dellot & Wallace-Stephens, 2017a). Table 1 represents an overview of different types of AI, and examples how they are commonly utilized.
Current time is momentous particularly for machine learning, in which for instance Big Data (collecting, capturing, storing, sharing, searching, analyzing, visualizing and presenting enormous masses of constantly progressing structured and unstructured data) have expanded its possibilities. At the moment, it is rather common to store and handle enormous masses of structured and unstructured information and the current level of machine learning enables for instance to cross-channel understanding of consumer behavior on an individual level. The processing of natural language, utilization of images as well as robotics open large variety of different possibilities. (Havukainen, 2018). The challenge for retail could lie in defining the boundaries in utilizing new technologies, and that ultimately is for consumers and each operators’ customers to define. For instance, in what kind of service experiences robots are accepted as an alternative for human provided service. In this, e.g. exploiting of Big Data could be beneficial.

Dellot & Wallace-Stephens (2017a) define robots as “physical machines, that move within an environment with a degree of autonomy”. While having different functions, as seen in table 2, each of them have mobility as mutual characteristic.
Table 2. An overview of robotics (adapted from Dellot & Wallace-Stephens, 2017a)

| Articulated Robots | • Car manufacturing  
|• Advanced surgery  
|• Stationary robots, which arms have rotary joints, typically found in industrial settings |
| Assistance Robots | • Prosthetics  
|• Stroke therapy  
|• Worn or handled to give people greater strength and mobility |
| Humanoid Robots | • Lifting patients in care  
|• Customer service roles  
|• Physical resemblance to humans and seek to mimic human abilities |
| Mobile Robots | • Parcel delivery  
|• Security services  
|• Wheeled or tracked robots, that can shuttle goods and people from destination A to B |
| Serpentine Robots | • Industrial inspection  
|• Search and rescue  
|• Snake-like robots made up of multiple segments and joints, that can move with hyper dexterity |

The importance of customer service and customer experiences is highly significant in retail. Automation and robotics are very much linked with the development of online services and, at their best, enhance substantially customers’ self-service experiences (Törrönen, 2018). The better the service-experience is online, it could be argued that the better and more advanced experience is demanded and expected also in physical stores. According to Törrönen (2018), in utilization of AI and building of machine learning, companies need to be precise and the development needs to be done as a part of each company’s own, individual service process as the same solution is not suitable for everyone.

As discussed in chapter 1.4.1 the trend in consumer demands has shifted towards conversational commerce, which is technology based on AI and machine learning. According to Kees Jacobs, who works as a digital proposition lead for consumer products and retail for CapGemini, conversational commerce is creating significant changes in the way consumers experience brands and retail operators (Dyson, 2018). A study by CapGemini in co-operation with the Consumer Goods Forum and 50 largest consumer goods and retail companies (e.g. Unilever, Tesco and Walmart) in
the world indicated, that 75% of consumers want to know the storage levels of products before entering to a physical store and 73% want same-day deliveries as well as wanting “brand journeys”, which give them a feeling that the products have been designed for their benefit not that of the retailers. Consumers among convenience and speed demand experiences without barriers, and conversational commerce provides new ways to interact with them with less of those barriers. (Dyson, 2018).

For consumers to interact conveniently provide great possibilities for brands and retailers to speak with their “own voice”. However, this technology is to be developed further to truly provide personalized experiences for each individual customer. The stages of the potential of conversational commerce is described in Table 3.

Table 3. Four Stages of Conversational Commerce (adapted from Dyson, 2018).

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ROBOTIC DIALOGUE</td>
<td>Current stage: Q&amp;A - format with limited sources of information and limited integration into company systems</td>
</tr>
<tr>
<td>2. PERSONAL DIALOGUE</td>
<td>Using more complex dialogue and better access to data enables technology to have conversation with limited representation of brand’s or retailer’s tone</td>
</tr>
<tr>
<td>3. HUMAN EXPERIENCE</td>
<td>Self-learning algorithms allow technology to understand customer better, along with knowledge of purchase history and payment preferences. Full integration to company systems to access products</td>
</tr>
<tr>
<td>4. GENUINE PERSONAL ASSISTANT</td>
<td>Predicts what customer wants and when providing personalized experience. Cognitive learning thinks, anticipates and remembers for the customer while streaming supply chain delivers products quickly and cost-effectively</td>
</tr>
</tbody>
</table>

The studies of Association for Finnish Work in 2016 and 2017 among the study conducted by Confederation of Finnish Industries in 2017 were also discussed in previous chapter dealing with requirements for human know-how. The aspects highlighted from those studies’ results were such as having multiple skills, readiness for change and ability to adapt, willingness to develop and learn new skills i.e. continuous learning as well as flexibility towards working hours and different forms of work. The advantage of AI is, that it does not have prejudices nor attitudes (Haka, 2018) and is trained rather than programmed (Chui et al., 2018), therefore a conclusion could be drawn that AI or robots could fulfill the formerly stated aspects.
However, for these systems to be fully compatible e.g. to develop and learn new skills or adapt to changes, more progress needs to be done for instance in deep-learning techniques. These techniques’ neural networks learn through the use of training data and backpropagation algorithms, and these efforts still demand tremendously human resources (Chui et al., 2018).

Also, in ability to adapt to changes, unlike the way humans learn, AI models have challenges transferring their experiences from one set of circumstances to another. This meaning, that a given circumstance is applicable to that particular circumstance only -even if the situations would be rather similar. Progress, according to Chui et al. (2018), appears to lie within transfer learning where an AI model is trained for a certain task and is able to transfer that learning to a similar activity. Transfer learning could help generalizing user preferences in one area (e.g. music) to others (books) (Chui et al., 2018) as well as retail operators could generalize customer likes and dislikes from one product line, for instance dairy (e.g. organic) to homecare (e.g. natural ingredients in cleaning products) more widely and efficiently.

AI and machine learning provide benefits in conversational commerce online and expert systems such as self-service registers offline. Customer service taking place within physical stores demand plenty of human resources among other tasks not related to customer management. The utilization of robots within retail, thus far, would meet entirely only one of the requirements arisen from the studies by Association for Finnish Work and Confederation of Finnish Industries being flexibility towards working hours and different forms of work. As robots do not get tired or complain nor do they need occupational health care or simulative activities (Koivusaari, 2016), they could be delegated simple tasks e.g. in stores with 24/7 opening hours to redeeming human employees to profit from more stable working schedules, which could have positive effects for comprehensive well-being. At the moment mobile robots are utilized for home deliveries and assisting, humanoid robots have only just been introduced. For instance, Finnish retailer Kesko purchased two humanoid Pepper-robots (in Finland named as Kaima) to be used in their store openings in 2017, but according to Juha Heikka from department store operations of Kesko, at this point the robots have mainly amusement purpose for customers as talking with it is an interactive experience. (Hervannan Sanomat, 2017). However,
Heikka states that in the future Peppers could be utilized in guiding customers to find right items and provide product knowledge. At the moment, they only know what is programmed but as the technology evolves, in the future they could be able to learn from their environment. (Hervannan Sanomat, 2017).

Customer service is significant, or the most significant, aspect of retail operations which demands complicated problem-solving skills, and problems remaining for humans might require utilization of crowdsourcing. The problems to be solved by AI or robots need therefore to be known in advance. Thus, technical solutions may not replace the human know-how in the area. Intuitive decision-making guided by emotions, perceiving emotions in general (emotional knowledge) as well as obtaining empathy play considerable role in understanding different customer demands and behavior as well as co-workers, subordinates and supervisors in every work environment.

Affective computing, also known as emotional artificial intelligence (Calistra, 2015), is a research area that focuses on how a machine could better understand human emotions and mood (Huotilainen & Saarikivi, 2018: 202). For instance, there has been plenty of development in computers’ and cars’ ability to read human emotions in recent years. Due to sensor technology, cars are soon able to measure more accurately driver’s movement, pulse, density of breathing and react to driver’s vitality and changes in emotions. Machine sight algorithms have been developed to measure emotions from human facial expressions as well as speech recognition algorithms can collect data from tone of voice of human’s current mood. Voice directed interfaces have made communication with machines more human. Due to better emotional understanding, relations with machines becomes more natural and personal. However, it should be noted that machines do not have a consciousness and therefore are not truly able to understand or sense feelings. (Huotilainen & Saarikivi, 2018: 202-203). But, the better the machines are taught to read human emotions, the better they are able to utilize this data and pass it forward (Huotilainen & Saarikivi, 2018: 205). Neuroscientific perspective to empathy contains an assumption, that to be empathic one needs to have subjective mind, emotional life and imagination to be able to simulate and understand another human’s emotions and state of mind. Categorically machine cannot be empathic as it does not have subjective mind,
emotions nor imagination i.e. it does not have consciousness. (Huotilainen & Saarikivi, 2018: 246).

According to Hannu Toivonen, Professor of Computing Sciences in University of Helsinki, creativity is often considered as a thing, that is difficult to automate and has challenged this assumption with a study where the aim is to discover machines’ calculator creativity by developing a program called Make a Poem (in Finnish “Runokone”). In the program, computer utilizes tens of thousands of lines from Finnish poetry, using an existing poem’s layout and imitates it generating new text. The researchers aim to discover how different creative tasks could be enhanced in a way, that computer solves certain parts of the task or helps humans to solve them. Toivonen gives an example from architecture, in where the creative responsibility would remain with professional architect, but machine would conduct calculations and suggestions of new solutions and structures. (Honka, 2017). This could also be utilized in retail in store design as well as in visual marketing with displaying e.g. store windows and products in stores. The example highlights the cooperative relation between machines and humans, which will be discussed more in depth in the following.

### 2.4.3 Relation between human know-how and AI & robotics

AI solutions and robots do not possess human kind of intellect or emotional intelligence, at least not just yet. Instead, they do have consistent and indefatigable calculation and performance capacity. In many scenarios, human is defeated by AI, but together human and machine will ultimately win. (Pinola, 2018). Companies should create automation strategies together with their employees keeping in mind the drafting and signing up to ethical frameworks as well (Dellot & Wallace-Stephens, 2018b). The efficiency thinking is in the “dna” of retail operators but as the quality standards of consumers are more demanding, the challenge lies in where to draw the line between automation and human, effectiveness and quality in ever changing environments.

The operational environments of companies and societies are changing fast, which requires quick decision-making as well as organizational structures which support
the core businesses. Different AI technologies are being utilized by many companies’ HR-operations for routine tasks and for instance in payroll computation. This has released human resources into supporting people in their companies to achieve better results. Also, in takeovers or mergers & acquisitions integrating different information systems, technology is of great help. (Korvenranta, 2017). Finnish recruiting company Rainmaker utilizes robotics in reporting and state that they have been able to reduce the handling of different Excels’ manual markings in payroll computation with the help of automation. According to Rainmaker HR-professionals, Annika Syrjänen and Sami Pääkkönen, they have gained more time to learn and develop processes, and also to develop the way they are performing their own work among meeting and serving more of their employees (Duunitori, 2018) -the actual human resources.

Utilization of automation in HR-operations and in payroll computation could have varying benefits for retail operators depending on whether it is large chain or an independent company. Retail chains consisting of multiple stores most commonly have headquarter-based HR and payroll departments and therefore the deregulated resources in these departments would not directly be allocated into store operations. However, the HR professionals’ resources could be focused more on e.g. training and educating of store staff as well as concentrating and analyzing of employees’ strengths and development areas in reaching for more evolved resource allocation. In smaller companies, where HR and payroll computation are often done by entrepreneurs themselves or store managers among the duties of customer service and other operational duties within stores, would help to even the work load and help to concentrate more on demanding analytical functions to develop their businesses.

An important responsibility, most commonly of store managers’, is rota planning. Scandinavia’s largest retailer of pet equipment, Finnish Musti and Mirri, is testing AI in rota planning. According to company’s Country Director Juhana Lamberg (Koistinen, 2018), their aim is to ensure the optimal amount of staff at the correct times in their stores. AI is able to predict customer volumes and formulate hour- and day-specific needs for each store. The system processes enormous amount of data and is able to discover phenomena that affect each other. As a base for these predictions, Musti and Mirri’s AI was fed 10 million electrical receipts and
information of 2.6 million work hours and based on this data is able to give a recommendation of a rota for human planner. This has enabled store managers to focus more on sales management and customer service. According to data-analyses experienced managers are also the best sellers, which impact also to the company profits. The optimization has saved approximately 6000 working hours on an entire company level (company having 120 stores in Finland) and has enabled to offer more hours for permanent staff and diminished the need for temporary workers. Lamberg adds, that their AI still needs to be educated to take into consideration, that there is always dog- and cat- experts in stores as well as it needs human to consider personnel’s personal requests for days off and for holidays. (Koistinen, 2018). However, this would only require more education for the system, e.g. feeding store staff’s expertise areas and specific skills.

Digital algorithms are utilized in recruiting processes to identify ideal sales people in to stores for instance by home electronics retailer Gigantti. The applicants fill in three online tests and the program measures their motivation, ability to learn as well as how they perform in customer service situations. The algorithms are doing the preliminary selection of potential candidates, which saves time from the store managers who perform the recruiting in Gigantti. The company’s HR Manager, Päivi Mäenpää, highlights that previous work experience, studies and the final face-to-face job interviews are still important but as humans have the tendency to hire people similar to themselves, the algorithms reduce the possibility for emotions affecting too much in the decisions by being objective. The algorithms do not take into consideration for instance applicant’s gender, ethnicity, age or appearance. Within Scandinavia, Gigantti hires approximately 2000 people in to hundreds of stores per year, and according to Mäenpää the people hired based on the tests have brought better results and profits for the company than the more traditional way of recruiting by using only humans in the selections. (Koistinen, 2018).

As discussed in chapter 2.4.2, Hannu Toivonen from University of Helsinki gave an example from architecture in where creative responsibility would remain with professional architect, but machine would conduct calculations and suggestions of new solutions and structures (Honka, 2017) and this could be utilized in store designs. Creative and visual aspects are highly important for instance in beauty
industry. The world’s largest cosmetics and beauty company L’Oréal is using Virtual Reality (VR) to test differences in packaging of their products and different store layouts with a focus group. The group giving instantly valuable information of what makes products easily identified within different store environments, and what changes would have a positive impact on their brand. Utilizing VR has saved remarkably company’s resources in rebranding, remerchandising and repackaging. (Deck, 2018). This could be utilized also for instance by grocery retailers, which all have their own store brands in standing out from other brands.

According to Deck (2018), investing in VR solutions would be beneficial for smaller individual retailers and brands as well. American NYX Cosmetics (currently part of the L’Oréal Group) is utilizing VR in their stand-alone stores and providing customers a service where they scan products and details of the products are presented on their phones. It could be suggested, that customers could create an account with their skin type and product preferences and after scanning the item, among general information, personalized recommendations would appear for them. After scanning a foundation or a moisturizer, customer would receive information of the suitability for their skin and beauty advisor or a sales person would be alerted to apply it and serve the customer. This cooperation between store personnel and technology would add value for the connection between customer and the company. (Deck, 2018).

The examples from specialty stores discussed above, highlight the significance of the cooperative characteristics between human and technology. Whether it is an AI solution, a robot or other technological solutions, it could be argued that within store environments they need human know-how as well to fulfil customer satisfaction and experiences. The extent of which carries out of which duties varies depending on the company strategy and their customer demands. The challenge lies in companies’ ability to combine technology, cognition and social aspects. Individual-level components, such as characteristics, abilities and cognition are important building blocks for comprehending collective phenomena (Felin et al., 2012). Figure 5 represents the needed combination for intellect activity.
Tools provide the help for human to exceed the deficiencies of their own capabilities or the limitations set by their environment. The intellectual utilization of digital tools as a part of working entails that they support the problem solving and not complicate it. Tools just by themselves are not intellectual nor enhance productivity and efficiency. Productive and smart utilization of the tools requires understanding of the context where they are utilized as well as how they correlate with human activity and thinking. What is possible for human thinking and activity is constantly defined by the development of different tools. The tools also on some extent define, what skills are required and how to invest everyone’s time at work. Human activity is good to complete technologically only if machine excels human capabilities. However, digitalization has not added productivity in the scale that was expected: it has not been deliberated what those solutions mean from the human work perspective, nor has it been understood in what ways could optimal circumstances for human thinking be created, in which machines are not capable. Technological skills have been increased but utilization of human know-how as a part of it is not very well developed. (Huotilainen & Saarikivi, 2018: 155-161). Huotilainen & Saarikivi also state (2018: 166), that the most important aspect seen in the figure 5 for intellectual utilization of tools, is sociability: after all, whether the utilization of a certain tool leads to smart problem solving is defined in interaction.
2.4.4 Future requirements for human know-how

New technologies driving growth and innovation need to be addressed strategically, but at the moment companies are facing a challenge that they do not really know what to invest in. According to Senior Vice President of Oracle APAC, Francois Lancon, people are still the future of business as they possess the creative and innovative capital companies need to invest in, and resources should be aimed at activities that make businesses fast, agile and customer-obsessed. (Borpuzari, 2018). But how people are performing the different duties and how it is determined lies in the challenges of companies and their abilities to allocate their resources “correctly”.

Being close to customers and ability to actively monitor weak signals will be increasingly important. Being able to combine needs of one’s own customers to global trends and scientific researches to the strategy of one’s own organization is challenging. However, if organizations possess employees who are willing and capable to learn will be most likely be the ones that succeed. People who work closely to customers and follow continuously new trends within their own field and expertise will be the future advisors for their management. The data based on the understanding of these advisors, it is easier for organizations to face changes and form future strategies. (Ahlroth, 2018).

The role that technology and data can play in forming “stores of the future”, the biggest trend to come is instilling humanity, according to retail executives visioning the future of retail at Future Stores Miami in February 2018. They state, that retailers need to differentiate in what kind of relationships they can offer to their customers and also invest to store staff and make easy-to-use technologies allowing the staff to personalize shopping experiences better and enable them to build loyalty. However, key to engage customers coming to stores is not necessarily in technology but rather in human connection that store staff establish in-person. (Ruff, 2018).

Different human connections can be described with examples from a grocery store environment discussed by Huotilainen & Saarikivi (2018: 168) whether it is so straight forward to automate e.g. cash registers and redeem store staff’s intelligence
to more complex problem solving. However, going to a grocery store can fulfill more needs than just getting the products customer wants - depending on the customer and very few are able to recognize all their own motives. For instance, to an older person living alone going to store fulfills their social needs and if only automated registers would be available, they might go to a different physical store. For a customer interested in special and organic food and wanting to discuss about cooking and products with store experts consider food as an important environmental and health choice and receives support for their thoughts with store staff. If services were automated, this type of customer would most likely to switch buying their food online. A busy customer coming to a store straight after work not knowing what to cook for their family appreciates store staff’s ideas and recommendations. If not receiving help for their cooking, this type of customer might go to a restaurant for take-out. The best way to recognize these types of differences in customers is to be in interaction with them. With the help of different data, these customers can be segmented but they only give general frame values and lack the ability to see small nuances, that differentiates customers from each other. Eventually, the interaction between the employee and the customer support to receive inspiration and ideas of customer’s hopes and needs, which can turn in to customer loyalty. (Huotilainen & Saarikivi, 2018: 168-169). To achieve loyalty, employees need to possess capability of emotional intelligence and also willingness to sense these hopes and needs.

Finnish retailer Kesko has also visioned the store of the future, and highlights the significance of communication and interaction between customers, food producers and stores and have considered the needs of different types of customers like discussed by Huotilainen and Saarikivi. Kesko has divided the future customers in to traditional, modern and the ones needing easiness and convenience. (Kesko, 2018). The requirements for store staff vary depending on the customer segments they are dealing with. For traditional customers providing new ideas from cooking with traditional ingredients, for modern ones, new inspirations providing them opportunities to be the first ones to come and test new products, and the ones needing easiness and convenience with pre-prepared foods (Kesko, 2018).

To store staff to focus more on for instance guiding customers how to use the products, can be ensured with help of machine learning doing the ordering of the
products. Traditional supply-chain planning systems are already utilized to forecast the demands for stable and predictable products but for fresh food it is more complicated as local demands and conditions vary on a daily basis. However, algorithms that allow computers to learn from data, machine learning redeems store staff from manual processes combining many influencing parameters. Ordering of fresh products is heavily reliant on an individual planner’s experience and gut instincts. (Glatzel et al., 2016). It could be argued, that these professionals’ experience and mentioned gut instincts could be in better use for instance in sensing and serving the customer needs.

Duties that require complicated human interactions and high emotional intelligence are less exposed to automation. There is an increasing demand for people who possess creative intelligence and have skills in e.g. story telling, strategic planning and product design. (CBInsights, 2017). The mentioned intelligencies and skills could in store environments be utilized for instance in marketing activities, customer research as well as in duties requiring artistic capabilities like visual merchandising.

How many new jobs will be created due to automation and whether the ones who lose positions will be able to fill these new roles, remains to be seen in the future (CBInsights, 2017).

2.4.5 Requirements for management

The speed of changes within operational environments have grown so enormously that ability to “see to the future” is diminishing constantly. Investing for instance to new technologies can be a risk but not to invest might be even bigger one and development might pass by organizations that wait (Ahlroth, 2018). Managers need to have an ability to build communal teams and capability into coaching leadership, which entail e.g. strong team work, information sharing and learning from other people. Also, managers need to be able to differentiate momentary trends from longer perspective’s know-how needs. (Mikkonen, 2018). In the future managements need all employees’ contribution in defining competencies. The further managers, or HR, drift from customer service and care, the worse qualifications to see constantly changing needs in know-how they have. In those circumstances, the capabilities of
their own organizations are overestimated, and the challenges brought by the speed of changes are underestimated. (Ahlroth, 2018). As information moves up and down a hierarchy companies should design mechanisms and procedures to keep their managers informed and to prevent them becoming isolated what is going on at lower levels in the organization as well as outside of it (Teece, 2007).

For managements within retail for instance measuring of performance and profitability, according to Albert Vita, Director of Strategy Insights and Visual Merchandising at world’s largest home improvement retailer The Home Depot, in-store innovation needs new metrics (Ruff, 2018). Vita states, that instead of concentrating on year-over-year sales, return on investments and sales per square foot, retailers should consider new ways to measure their success, such as the impacts on brand impressions, digital purchase intents, inspiration per square foot, return on different frictions and the convenience for personnel and customer experience. (Ruff, 2018). To be able to develop, for instance different measurement systems, it demands daring and unprejudiced attitude particularly from top managements. They should possess active as well as critical perspective in evaluating their own performance and development. (Solita, 2015: 40). It is also important to determine what is the core focus and direction of each businesses: what is the added value of one’s company as well as; what would the customers be missing if the company would not exist? (Solita, 2015: 42).

According to study conducted by Solita (2015: 44), there is plenty of digital know-how in the world but people who are capable to combine traditional commerce with digital one there are rather little know-how. Therefore, one of the biggest challenges in the development of retail’s future is in accumulating of experience and know-how (Solita, 2015: 44) and managements to enable their employees to participate in this accumulation. When the basic functions, structures and organizations, are in order, encounters in store environments guarantee that customer experiences are to be valued. Also, the staff desires to be valued as well, and through mutual appreciation it is possible to build the most important currency of commerce, the credibility. (Solita, 2015: 45). Among structures and organizations, “right” processes and routines as well as optimally allocated skills, enhance the survival and success in the ever-changing field.
3 THEORETICAL FRAMEWORK

Teece, Pisano and Shuen (1997) examine how and why companies build competitive advantage in ages of fast (technological) change. Teece et al. (1997) state, that control over scarce resources is the source of economic profits and their approach follows issues such as skill acquisition, the management of knowledge and know-how, and learning becoming fundamental strategic issue and being the greatest potential for contributions to strategy. The authors describe the term dynamic as ability to renew competencies in a changing environment, and the term capability as the key role of strategic management in adapting, integrating, reconfiguring internal skills, resources, and functional competencies in changing business environment: “dynamic capabilities enable a company to address rapidly changing environments” (Teece et al., 1997). The potential for companies to gain long-term competitive advantage lies in using of dynamic capabilities faster than their competitors to create resource configurations that possess that advantage (Eisenhardt & Martin, 2000).

Dynamic capabilities are antecedent organizational and strategic routines through which companies change their resource base (acquire and divide resources, integrate them together and recombine them) to produce strategies that create value. Being value-creating, they are drivers of creation, evolution and recombination of other resources into new sources of competitive advantage. (Eisenhardt & Martin, 2000) and are relatively simple rules followed by organizations and more concretely refer to attributes such as ability to offer superior customer service (Felin & Foss, 2009), which is highly critical for retail stores. Dynamic capabilities provide companies to have a capacity to create, extend or modify their resource base and therefore are about change. (Helfat et al., 2009).

According to Winter (2003), in the literature there is a broad consensus that dynamic capabilities contrast with ordinary, or operational, capabilities having the emphasis on change, stating that dynamic capabilities manage the level of ordinary capabilities’ change. Table 4 describes how operational capability and dynamic capability can be distinguished based on the views of Ande et al. (2018)
Table 4. Difference between operational and dynamic capability (adapted from Ande et al., 2018)

<table>
<thead>
<tr>
<th></th>
<th>OPERATIONAL CAPABILITY</th>
<th>DYNAMIC CAPABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEFINITION</strong></td>
<td>Routine to purposefully perform basic function in a company (Lee &amp; Teece, 2013)</td>
<td>Routine to purposefully create, extend or modify company resource base (Helfat et al., 2007)</td>
</tr>
<tr>
<td><strong>ALSO KNOWN AS</strong></td>
<td>Ordinary capability, lower or second order capability</td>
<td>Higher or first order capability</td>
</tr>
<tr>
<td><strong>EXAMPLE</strong></td>
<td>Delivery process, just-in-time inventory, reporting system, disbursement procedure</td>
<td>Routine to extend, create, or modify delivery process, just-in-time inventory (including other assets)</td>
</tr>
<tr>
<td><strong>INDICATOR OF SUCCESS</strong></td>
<td>How effective and efficient a capability performs its intended function</td>
<td>How well this capability enables a company to survive, or even grow, in a dynamic, changing environment</td>
</tr>
<tr>
<td><strong>SUITABLE</strong></td>
<td>Valuable when environment is relatively stable</td>
<td>More valuable in turbulent environment</td>
</tr>
</tbody>
</table>

Dynamic capabilities are companies’ processes which utilize resources (especially the ones that integrate, reconfigure, gain and release resources) to match and in some
occasions create market change. Therefore, it could be stated that dynamic capabilities are strategic and organizational routines by which companies are able to accomplish new resource configurations when markets emerge, collide, split, evolve or even cease to exist. (Eisenhardt & Martin, 2000).

3.1 Microfoundations of dynamic capabilities

Micro-level phenomena, especially individuals, processes and organizational structures have played a central role for instance in the origins of management theory. Microfoundations can play a role in explaining the creation of a routine or a capability within organizations and they can have an effect on the development, operations, maintenance or change of those routines or capabilities. (Felin et al., 2012). Teece (2007) describes microfoundations being the distinct skills, processes, procedures, organizational structures, decision rules and disciplines, which are a foundation for company-level sensing, seizing, and reconfiguring of capacities that are difficult to develop and deploy, stating that each capability class is built on its microfoundations.

3.1.1 Distinct skills

To be able to build competitive advantage and spot new opportunities, companies need to have individuals who possess different cognitive and creative capacities. Opportunity discovery and creation requires specific knowledge, creative activities and skills to comprehend customers’ decision-making and have practical wisdom. Practical wisdom could be described as an ability to interpret gained information (in whatever form) or having an eye for others’ feelings, for instance angst expressed by a disappointed customer. (Teece, 2007).

Managers need to possess skills for leadership to sustain dynamic capabilities within their organizations. They need to be able to “orchestrate” the possessed assets, achieve corporate renewal, redesign routines and have the skill to make “right” investment decisions (when and how to invest). Studies have found (e.g. by Iansiti & Clark, 1994), that so-called integration capability has a connection with positive
company performance, which demonstrates that knowledge integrations skills are important. Organizations in fast-paced environments need to have considerable autonomy to make fast decisions but at the same time stay connected to duties that need to be coordinated. This kind of balance is called “near-composability” and being able to implement it is an important microfoundation of dynamic capabilities. (Teece, 2007).

Even though many individuals may have the needed cognitive and creative skills, it is still more necessary to embed scanning, interpretative and creative processes inside the organization itself (Teece, 2007).

3.1.2 Processes, routines and procedures

To accomplish changes, companies need to utilize different processes, such as search processes, decision-making processes and change management processes (Helfat et al., 2007). What companies’ processes entail to develop competitive advantage depend on the assets the company possesses and the path it has adopted. “Company’s dynamic capabilities and competence is determined by the combination of managerial and organizational processes, shaped by its asset positions and paths available to it” (Teece et al., 1997).

The benefits from dynamic capabilities are dependent on the efficiency of the underlying organizational and managerial processes which are executed. Therefore, to understand the operation of dynamic capabilities it is necessary to understand those processes. Dynamic capabilities are occasionally described in the literature as being processes, likely because of their performance is dependent on the performance of the processes used to apply them. It is difficult to observe what kind of dynamic capabilities a company possesses unless they are put in use -the processes are the mechanisms which make that possible. Whenever dynamic capabilities are observed in use, the underlying processes need to be observed as well. (Helfat et al., 2007).

Managerial and organizational processes are referred as how things are performed within a company and what are the routines or patterns of current practices and
learning (Teece et al., 1997). Routines could be described as a behaviour that is learned, highly patterned, repetitious and founded in part in tacit knowledge (Winter, 2003) as Felin & Foss (2009) put it, routine being “an executable capability for repeated performance in some context that has been learned by an organization in response to selective pressures”. Routines are concepts on a collective level which include prior learning and are environmentally activated and selected for (Felin & Foss, 2009).

The organizational processes have three roles: coordination/integration (static concept); learning (a dynamic concept); and reconfiguration (a transformational concept) (Teece et al., 1997), which are discussed in the following.

There are formal (rules, standard operating procedures) and informal (experience, norms, values) forms of coordination which influence interdependent events of actions within a company (Felin et al., 2012). It is significantly important how efficiently and effectively managers coordinate and integrate activities. Strategic advantage also demands external coordination and integration of external activities and technologies. How these activities are organized by management has a significant impact on company’s competence. How competencies and capabilities are embedded by coordinating and combining, even in minor technological changes, may have an enormous impact on the competitive capability of the company. (Teece et al., 1997).

Modularization, constant communication and tacit mechanisms are distinct processes that have critical impact on what are the consequences of performance. Formal processes support the integration of different organizational elements such as individuals, teams, departments or information resources. Those integrating mechanisms enable cooperation and coordination among different members within an organization. In this way those mechanism obtain critical role in shaping the collective constructs of interest. Therefore, formal and informal coordination mechanisms either constrain or enable individual action. (Felin et al., 2012).

Teece et al. (1997) consider the learning aspect of the processes to be even more important than coordination/integration as it enables tasks to be performed better and
faster as well as it enables identification of new opportunities. Interaction between individual and processes which involve utilization of technology shapes organizational outcomes. The use of specific technologies structure social interaction and positively influence learning rates. (Felin et al., 2012). One of the key characteristics of learning is that it involves organizational as well as individual skills (Teece et al., 1997). Particularly the individual skills are of relevance in Teece et al.’s (1997) approach, it is highly relevant also in this thesis.

Learning processes are social and collective, and through individual or a cooperation of groups leads to understanding of complex problems requiring common rules of communication and coordinated procedures. (Teece et al., 1997). Knowledge lies in an individual level whereas learning process follows a spiral path from individual to organizational level and vice versa. The challenge for organizations is how to integrate individual knowledge to create company level knowledge and how to utilize it in generating commercial value. Knowledge could be considered dynamic as it is created in social interactions. (Ande et al. 2018).

The main source of competitive advantage of companies is knowledge (Chen & Huang, 2007). Organizational knowledge is created by learning and resides in new patterns of activity or a new logic (Teece et al., 1997). Knowledge just as itself does not create value but value is created only if it is shared within an organization and applied where it is needed (Chen & Huang, 2007).

Ande et al. (2018) describe three different levels of knowledge: knowledge creation; knowledge sharing and; knowledge use. Creation of new knowledge entails finding, identifying and receiving required information from internal and external sources. The attempt in knowledge sharing is to transfer information among personnel, between different functions (for instance between a store and supportive departments in headquarters) and between different organizations. Sharing of information demands high level of motivation from all participants, the source and the recipient. (Ande et al. 2018). Chen & Huang (2007) highlight, that to gain competitive advantage companies need not only create knowledge but also depend on knowledge diffusion and how to apply it. The notion of dynamic capabilities as a coordinative
management process enables interorganizational learning through cooperation and partnerships (Teece et al., 1997).

The ability to determine the need to reconfigure the company’s asset structure and to be able to make necessary internal and external transformations is crucially important in quickly changing environments (Teece et al., 1997). Reconfiguring is an effort to align company’s resources to meet the customer demands within a market place. This entails emphasis on managing change and maintain innovation, coordinate assets as well and build self-imposed teams. (Ande et al. 2018). To be able to reconfigure and transform, Teece et al. (1997) emphasize the requirements of constant alertness towards the field of industry and operational environment and technologies, and to be willing to adopt best practices.

The grasp of market opportunities emerges with individuals in the market interface (Felin & Powell, 2016) and for instance in the retail sector, the individuals working in sales positions in stores are in close connection with customers. Therefore, these individuals have an important role in identifying market opportunities (Haapanen et al., 2019), which involves for instance seeking and filtering technology (knowledge and equipment) and markets (suppliers, consumers, distributors or business partners) (Ande et al. 2018).

To create value to consumers and for the company, there need to be two-way interactions which are described in figure 6.
Path dependencies emphasize the significance of company history: investments made before as well as the whole company culture with different routines and procedures affect its future performance and has an impact for instance on learning as it is usually a process of experimenting, feedback and evaluation. If many aspects of company’s learning environment are changed at the same time, individual’s ability to get to know cause-effect relationships is confused as cognitive structures are not built up and rates of learning decrease as a result. An industry’s technological opportunities need to be considered among path dependencies and the criticality of how agile a particular area of industry is in moving towards those opportunities. The ability of the industry to shift their allocation of resources away from traditional objectives is of high importance. In addition, a company’s past experiences set the circumstances to what options management is able to comprehend. (Teece et al., 1997).
As discussed, Teece et al. (1997) define capabilities and competencies of a company being based on its processes shaped by positions and paths. The authors, however, add in to their approach that to accomplish competitive advantage, competencies need to be accumulated of routines, skills and complementary assets that are not easily imitated. Especially in rapidly changing environments, there might occur competencies that have lost their significance or have become easily replicated or imitated. (Teece et al., 1997).

Emulation is performed when companies find alternative ways to achieve same functionalities (Teece et al., 1997), capabilities reflecting organizations’ ability to automatically revisit what they routinely do, especially in dynamic, changing environments (Felin & Foss, 2009). Competencies and capabilities are usually rather difficult to replicate. But if in some occasions it is possible, it might indicate that a company has good foundations for learning and improvement. Understanding of processes (both workers and managers) is a key factor to process improvement and therefore could be argued, that organization is not able to improve that which it does not understand. (Teece et al., 1997).

3.1.3 Organizational structures, decision rules and disciplines

Organizational structures can be divided into three different elements of formalization, centralization and integration. Formalization meaning, that what is the degree of standardized jobs within a company and what is the extent of guiding employee behaviour with rules and procedures. If level of formalization is high, rules and procedures are likely to disturb workers to be spontaneous and flexible, which is needed for internal innovation. On the contrary, if formalization is low work is more unstructured and employees possess more freedom dealing with their duties and stimulates more social interactions between different members of the organization. (Chen & Huang, 2007).

Centralization element of organizational structures refers to the decision-making authorities’ location within the higher levels of organizational hierarchy. If an organization is highly centralized, it creates non-participatory environment where communication, commitment and involvement are low. If individuals possess more
freedom, independence and power to make their own consideration on actions related to their work, the ultimate decision is more likely to be accepted by them because they have had an opportunity to influence and communicate their ideas further during the decision-making process. The more autonomy workers have the more responsible they will feel towards their work. It could be stated, that employees are able to solve new or existing problems only if they are allowed to do so. (Chen & Huang, 2007).

The third element of organizational structures, integration, is described by Chen & Huang (2007) with what is the extent to which different departments and divisions of an organization work interrelatedly. If a company has high level of integrated mechanism, they are more likely to have increased social interaction within their organization. To enable this, employees should have an easy access to information related to their work and problem solving. This type of integrative work structure enables employees to learn from each other, work together, share information, to watch out for one another, and build communication and coordination channels to exchange expertise and knowledge. Social interaction among different members of an organization is most favourable if the organizational structure is less formalized, less centralized and more integrated. (Chen & Huang, 2007).

3.1.4 Sensing capability

The sensing capability of a company entails that in order to identify market opportunities, it needs constantly observe its environment and search for opening internal and external opportunities. Activities that demand this type of capability are for instance exploring consumer needs, practices in processes that enable creation of new knowledge and operations that lead to comprehending new technological transformations. (Breznik & Lahovnik, 2016). Ljungquist (2014) states “sensing could be described as an ongoing iterative process linked to daily activities”. Sensing includes efforts to analyse systems and resources which create new opportunities. This involves seeking and filtering technology and markets (Ande et al., 2018). The previous aspects discussed apply to managers’ task to envision and lead their organizations into the future (Ljungquist, 2014).
Opportunities are discovered and created through cognitive and creative capacities of individuals. It requires that individuals not only have access to information but also obtain ability to recognize, sense and shape developments. One needs to be able to interpret the information and then filter it from professional and social contacts to create assumptions for instance on evolution of technologies or customer needs. (Teece, 2007). Organizational processes need to support the gathering and filtering of technological, market and competitive information (Teece, 2007) as well as for collecting customer requirements, and if these processes are well-functioning invaluable market information is further incorporated (Haapanen et al., 2019) e.g. from sales to other functions within the organization. Figure 7 describes the framework for this kind of sensing activity within a company (the examples of processes described in the figure are information presented in different examples in chapter 2).
3.1.5 Seizing capability

After a new opportunity is sensed, it must be prepared (Teece, 2007) and its value and potential have to be recognized (Breznik & Lahovnik, 2016) which requires resources in development and commercialization as well as maintaining and improving technological competencies and complementary assets (Teece, 2007). Seizing encompasses the analysis of resources and there needs to be organizational support to capture sensed opportunities. This process includes business models,
organizational structures, incentives, decision-making protocols and control systems. (Ande et al., 2018). In the age of rapid technological investment, it is important for companies to possess tacit investment skills on managerial level as well as ability to make decisions related to company’s business model (Teece, 2007), for example having the capability to select “right” technology or recognizing the target customers (Breznik & Lahovnik, 2016).

Figure 8 presents different aspects companies need to consider in their decision making when seizing opportunities, which all have an impact on employee performance (the examples described in the figure are information presented in different examples in chapter 2).
3.1.6 Reconfiguring of capacities

Top management leadership skills are required to maintain dynamic capabilities within the company (Teece, 2007). Reconfiguring is an effort to align resources to serve customers in the market. This involves efforts to manage change and maintain innovation, coordinate assets and build self-organized teams. (Ande et al., 2018). Companies need to be able to renew and redesign their routines. These maintained achievements of profitability demand continuous aspirations to “build, maintain, and adjust complementarity of product offerings, systems, routines, and structures”. To
perform work efficiently resource alignments, coalignment, realignment and redeployment is necessary. (Teece, 2007).

The capability of reconfiguring means that there needs to be ability to recombine and reconfigure the existing resource base to address changes and opportunities in the company’s operating environment and usually involves business model redesign (Breznik & Lahovnik, 2016). Breznik & Lahovnik (2016) state, that in many cases, however, new opportunities can be easily recognized but it can require lot of effort and resources particularly in the reconfiguration process. But the ones that do deploy relevant capabilities as dynamic capabilities possess the potential for a sustained, competitive advantage -especially the ones operating in turbulent environment (Breznik & Lahovnik, 2016).

Figure 9 describes the demanded skills for combination, reconfiguration and asset protection (the examples described in the figure are information presented in different examples in chapter 2).
Figure 9. Required skills for combination, reconfiguration and asset protection (adapted and adjusted from Teece, 2007).

3.1.7 Combining the capabilities

Companies need discussed sensing, seizing and reconfiguring capabilities to be able to build and maintain their competitive advantage and also be able to continuously reinvent themselves (Teece, 2007). If these three capabilities are strong, they can lead to different innovative market and technology outcomes and therefore be a well-established link of innovation and performance. (Arndt, 2019).
Figure 10 combines the three capabilities from figures 7-9 representing the microfoundations for companies to maintain those capabilities.

**Dynamic capabilities**

**Sensing**
- Analytical systems & individual's capability to learn, sense, filter, shape and assess opportunities
- Processes to direct internal R&D and select new technologies:
  - Store closures generating assets, robots for assisting, AI for reporting, digital algorithms in recruiting
- Processes to exploit developments in external science and technology:
  - Transfer learning of AI, affective computing, VR, machine learning (big data)
- Processes to identify target market segments, changing customer needs and customer innovation:
  - Knowledge management, service separation, AI & robotics enhancing self-service experience

**Seizing**
- Company structures, procedures, designs and incentives for seizing opportunities
- Determining customer solution and business model:
  - Virtual services e.g. SSTs, smart services for personalization (chatbots), robots for cleaning and shelf-scanning, drones for deliveries, mobile apps
  - Customer centricity, personalization, service design, quality & sustainability standards, providing experiences, VR to test packaging and store layouts
  - "Reimagining work", pivot employees to new models, training new skills, payroll computation, AI-powered rota planning, sensor technology, machine sight algorithms
- Selecting company boundaries to manage rewards and "control" platforms:
  - "Reimagining work", pivot employees to new models, training new skills, payroll computation, AI-powered rota planning, sensor technology, machine sight algorithms
- Selecting decision-making protocols:
  - Customer centricity, personalization, service design, quality & sustainability standards, providing experiences, VR to test packaging and store layouts
- Selecting company boundaries to manage rewards and "control" platforms:
  - "Reimagining work", pivot employees to new models, training new skills, payroll computation, AI-powered rota planning, sensor technology, machine sight algorithms
- Building loyalty and commitment:
  - Mobile payments, virtual dressing rooms, speech recognition

**Reconfiguring**
- Continuous alignment and realignment of specific tangible and intangible resources
- Decentralization and near decomposability:
  - Investments in solutions that make business fast, agile and customer centric, ability to monitor weak signals of customers, combining needs of own customers with global trends, differentiating momentary trends from long-term know-how needs
- Governance:
  - Investing in people in customer surface, willing to learn and follow new trends (future advisors), redefining in-store metrics
- Co-specialization:
  - Ability to combine technology, cognition and social aspects, intellectual utilization of digital tools to support problem solving, understanding of context where tools are utilized
- Knowledge management:
  - Selected tools defining what skills are required, enabling employees to participate in accumulation of experience and know-how, determining where machine excels human capabilities

**Selected microfoundations**

Figure 10. Foundations of dynamic capabilities and business performance (adapted and adjusted from Teece, 2007 and figures 7-9).
The dynamic capabilities framework and its microfoundations approach competitive advantage not only emphasizing different traits of individuals and different processes but they also consider, what it takes for companies to ensure that once opportunities are sensed, can be seized and how and when they need to make transformative decisions. (Teece, 2007). Companies need continuously deploy all company-relevant capabilities in line with the dynamic capabilities approach. Ignoring the deployment of a single dynamic capability can harm the deployment of another as they are correlated and interwoven. (Breznik & Lahovnik, 2016). If an organization has a strong sensing capability but is not balanced with equally strong seizing and reconfiguring capabilities obtains a risk of overdoing innovation. If sensing, seizing and reconfiguring capabilities are not balanced, they cannot bring organizational success (Ljungquist, 2014).

Breznik & Lahovnik (2016) set an example of an unbalanced utilization of these three capabilities: “if a unique marketing opportunity was recognized, a strategy for developing this new opportunity would be established and an important step in recognizing and exploiting this would be made before competitors. But doing that would not be enough. The strategy would not be successful if other dynamic capabilities would not be simultaneously adapted and exploited. It could easily happen, that a new product would be developed, and all new marketing activities would be set but the market and customers would not yet be prepared”.

If a necessity to adopt for example a new technology and redesigning business model are sensed and recognized, there is an equal need to exploit it and continuously manage it. The companies that do obtain stronger commitment to deploying dynamic capabilities are more successful, and vice versa. To answer to question of “How to sustain competitiveness?”, the answer is rather straight forward: companies should renew their resource base upon dynamic capabilities approach. (Breznik & Lahovnik, 2016). Managers limiting and framing biases, based on current resources and capabilities, can limit organizations dynamic capabilities (Ljungquist, 2014). Organizations tend to be “path-dependent” relying on the same historic seizing and transforming activities (Ljungquist, 2014) and there lies one of the greatest challenges in the field of retail.
4 THE EXECUTION OF THE RESEARCH

The general information of what are the current and future trends within the field of retail and how, or whether, traditional tasks of employees are changing for instance due to automation and changes in consumer behaviour were gathered from various written sources available in different data bases, journals and publications. The data collection of different resources was started in the end of 2017 and collected through 2018. Once the theoretical framework was established it was possible to start designing the structure and themes for the interviews. The interviews and data analysis gained from those interviews as well as conducting final results and drawing conclusions took place in Italy in summer 2019.

As stated in the introductory part, the research focuses on retail business and the tasks, structures, processes, routines as well as required and possessed skills of people working in physical retail stores and whether those skills meet the requirements and whether or not they are recognized by management. The aim of the research is to answer what skills are possessed by people working in physical retail stores.

The research problem lies in assumption that do people working in retail stores obtain required skills and capabilities or not, and are they recognized and utilized by management. Many technological solutions have been introduced within the retail industry, but there seems to be lack of understanding how to utilize peoples’ skills differently as some predictable and repeatable tasks are (or likely will be) performed by machines.

4.1 Methodology of the research

This thesis is conducted by qualitative research method, as the aim is to study people and dynamic capabilities of their working environment. A qualitative researcher is an observer who’s aim is to try to make sense of different phenomena by putting together different pieces of information gained from people. A range of different width of different peoples’ thoughts and opinions give to the qualitative researcher a
richer view of the studied subject. (Denzin & Lincoln, 2005: 3-4). The nature of this research is qualitative as it suited best when peoples’ skills are studied.

The research approach is abductive, which uses both deductive and inductive approaches and moves back and forth from the empirical to theoretical dimensions of analysis (Alrajeh et al., 2012), which is demonstrated in Figure 10.

![Abductive Research Approach Diagram](image)

**Figure 10. Qualitative research process using abductive approach (adjusted from Alrajeh et al., 2012).**

According to Lukka & Modell (2010), abductive research approach is gradually accepted as an important part in interpretive research, which could be described to be the nature of this thesis. This research uses thematic analysis, having divided the conducted interviews in different themes based on the theoretical framework. The data gained through the interviews are also presented, interpreted and analyzed theme by theme.

The empirical data collected for the research was done by conducting email interviews with five people working in physical stores within retail industry. The interviewees were representatives from hairdressing & beauty retail, from fashion, sport’s apparel & equipment and from grocery retail. The questions were divided under different themes and all of them were open questions. All interviewees
answered nearly all 56 questions with more than one word and once the answers were received and gone through few times, I decided not to exclude any information from the analysis as all of them indicated to have good value for their specific theme.

The analysis process started from reading all the interview answers multiple times to receive a general view of the data gained. At this point the decision to include all the data in the process was made. To be able to analyze each question one by one with five given answers from all the interviewees, all questions were written down and under them all answers included to have a clear view to compare the differences and similarities of the answers. Usage of same words and similar descriptions were color coded and calculated, how many interviewees used them and how many times. This method gave a general idea of the people, their capabilities, skills and characteristics. Once all answers were combined with their questions under the correct themes, I started to write them down in the chapters 4.3.1 – 4.3.5 presenting as many straight quotations from the interviews as I felt necessary to present the data relevant to that particular theme.

Drawing of conclusions was rather straightforward after presenting the results in their own clear sections based on the theoretical framework of microfoundations, and what kind of structures, processes, routines and skills could be spotted from the obtained data. Also, reflecting the relation between those microfoundations and requirements of retail industry described in the introductory part of the research, provided a clear view to conclude the work.

4.2 Implementation of the research

One pilot interview via email with long-term fashion retail professional working in Switzerland turned out to be giving good quality answers and gave the confirmation that interviewing via email would work well for this research. I utilized my network within the retail industry in Finland and conducted the interviews by email questionnaire. The pilot interview also confirmed that conducting rather large amount of questions would have demanded many hours per one face-to-face interview (might have been relatively heavy to execute to keep interviewees’ interest
alert), the email interview was selected to be the best suitable choice. Some questions were adjusted based on the pilot interviewee’s comments which were went through via telephone, but no questions were reduced to provide as many answers as possible for each selected theme. This fact also backed up the decision to conduct the interviews by email.

I contacted six people working in different stores in different positions and five of them agreed to be interviewed. The interviewees work as sales manager, department manager, service manager, merchant/entrepreneur and one in sales and marketing. After translating the themes and the questions from English to Finnish, they were sent, and all the interviewees were given one week to answer all 56 questions. Interviewees were promised to be kept anonymous and also not to reveal the companies they work for. The structure of the interviews to discover, what are the most common skills and capabilities of people and in what way these skills could be utilized in the future, are described in the following.

The approach to gain answers for the research questions was formulated around the theoretical framework of the thesis. The interview was structured around themes that constitute, according to Teece (2007), microfoundations of dynamic capabilities: distinct skills; processes (managerial and organizational); procedures; organizational structures and; decision rules and disciplines -these being the foundation for company level sensing, seizing and reconfiguring of capacities (Teece, 2007).

Interview questions were categorized under the above mentioned themes (see Appendix 1) The questions for interviewees were sent via email in Finnish (see Appendix 2) instead of English to avoid misunderstandings as all the interviewees were Finnish. Table 5 presents the quantity of interviews and description of the interviewees’ current position in the store they work in with the description of a type of the company they work for. The interviewees were given the freedom to be anonymous (only referred to as interviewee “A”-“E”), therefore descriptive titles of them are only presented.
Table 5. List of interviews.

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Date (answers returned)</th>
<th>Current position, title</th>
<th>Type of company</th>
</tr>
</thead>
<tbody>
<tr>
<td>“A”</td>
<td>5/7/2019</td>
<td>Sales and marketing, no title provided</td>
<td>Small fashion store in a city centre</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“B”</td>
<td>7/7/2019</td>
<td>Sales manager</td>
<td>Hairdressing services of a department store chain</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“C”</td>
<td>10/7/2019</td>
<td>Department manager</td>
<td>Sports chain (apparel &amp; equipment)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“D”</td>
<td>10/7/2019</td>
<td>Merchant, entrepreneur</td>
<td>2 Supermarkets, national chain</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“E”</td>
<td>12/7/2019</td>
<td>Service manager,</td>
<td>Supermarket, national chain</td>
</tr>
</tbody>
</table>

The following chapter demonstrates how the data gained from the interviews were analyzed as well as their summarization and drawn interpretations.

### 4.3 Analysis of the research material

The conducted interviews were divided into five different themes: background of the interviewees; managerial and organizational processes; paths; positions, and;
microfoundations of dynamic capabilities. The analysis of findings are also presented in their own thematical category in their own sub-chapters.

Among the five themes, gathering of professional and personal background information of the interviewees was conducted, and they were analyzed not based on the theoretical framework but selecting different words and descriptions of each answer and dividing them into three categories (see Appendix 3): all (relevant to the research topic) *adjectives* to best describe interviewee as a person and their attributes; all *nouns* to describe for instance different responsibility areas and characteristics, and; all *verbs* to note different kinds of doing and tasks in the working environment of stores the interviewees work in. Repetation of a certain word by different interviewees can be seen in the categorization in Appendix 3. Including this section also to the research is important to draw interpretations, analysis and conclusions to the topic of human know-how discussed in the introductory part, specifically in chapter 1.4 about Requirements of retail. All the interview answers were combined in separate notes and below each question all the five answers were written down and combined to be analyzed at the same time. Documentation of the combining of the answers can be seen in the pictures in Appendix 4.

**4.3.1 Background and characteristics of interviewees**

Four out of five interviewees have commercial and customer service-related working experience of 10 to more than 20 years. One of the interviewees had a technical background having studied electric and computer technologies and worked for Nokia in different duties from production to varying projects for 20 years. However, the interviewee wanted to change profession and have now been working in sales and marketing for few years. Also, another interviewee had an educational background of having bachelor’s degree in marketing but due to lack of work had studied to become a chef and had worked as a chef approximately for seven years, becoming later on a shift manager and eventually towards the current role of service manager in counter services in a supermarket. One interviewee has an education of barber-hairdresser/makeup-artist and the remaining two have worked their whole
professional career in retail in different shops and positions and educated themselves while working.

General description of the interviewees as persons and workers is very work-oriented and they seem loyal to their employers. Also, sociability, ambition and positive attitude can be reflected from their answers.

“I’m loyal, gutsy, reliable and approachable person. I like doing and sometimes I collect it for myself too much. I’m always interested in learning new things and exceeding myself. As an employee these characteristics are able to shine. I boldly take new tasks because I like responsibility. Also, as a worker I am ambitious and set goals for myself.”

“Cheerful, talkative, good listener. Hard-working, flexible worker possessing good organizational skills.

“I’m social, cheerful and positive personality, I want that co-workers and myself enjoy being at work. As a worker (in my own opinion) I am hard-working, helpful to the colleagues and get along with everybody.”

“I’m very determinant and goal-oriented personality. I always aim to challenge myself and others to find "winning" solutions. I am very strong personality who wants to succeed in everything. As a worker I am uncompromising who really does not want to cut corners. I am very reliable worker who does what is promised.”

”Cheerful, laughable person, I get along well with people and throw myself in situations with all my heart. As a worker I am hard-working, reliable and committed.”

When asked to analyze how their employers would most likely describe them, similar descriptions follow but are more task related.
"As a person loyal, hard-working, reliable and skillful. As a worker good customer servant and seller, versatile know-how in sales and marketing."


I believe my supervisor would describe my personality with pretty same words. As a worker as well but added, that at times I have too many things going on at the same time. Should deal one thing at a time."

Being hard-working is emphasized and having many things on their plate. Taken into consideration the environment all the interviewees work in, multi-tasking is needed and dropping some other task for instance when a need for customer service occurs. However, it can not really be said whether or not it is a good thing or even efficient (in an industry where efficiency is emphasized) to some tasks being interrupted most likely multiple times a day. This might cause unnecessary load as the worker has to switch from one channel to another, so to speak.

All interviewees consider that they are able to utilize their best characteristics and qualities in their work. The interview questions to find out different characteristics of the interviewees were asked altogether with four different, but rather similar, questions. Still, whenever question was repeated just a little bit differently, new descriptions of interviewees as persons and workers arose. Three of these types of questions were asked in the beginning of the interview and also as a last question to determine what the interviewees think their employers would miss if they went working for somewhere else, which is included in the analysis of this chapter instead of chapter 3.4.5.3. Arranging few similar questions differently was an attempt to receive as much descriptions of the interviewees as possible to get the best possible analysis of them as persons and retail workers and how well they respond with the requirements of the field, at least described by themselves. The answers what interviewees consider to be their best qualities and what their employers would miss if they went working for somewhere else are combined together in the following.
"Good knowledge of human nature/people skills, courage, hard-working and kindness. (Employer would miss) versatile know-how and top seller."

Good tolerance for pressure...my work is very hectic and you need to be on top of things all the time. (Employer would miss) efficient worker, who seizes tasks fast and does them, also flexibility."

Openness, hard-working and visualizing of product presentations. (Employer would miss) efficient and nice worker.

"My best qualities are most likely problem solving skills, having 'eye for the game' in different situations. Strength of character and limitless self-confidence. Also in the softer side, ability to understand people and situational awareness towards things. (Employer would miss) Present strong leadership."

"Ability to get inspired and to inspire, endless interest in food culture related things and ability to throw myself fully into work. Professionalism. Ability to see and understand different things’ interconnectedness and understanding of key figures and how they are formed and how to read them. (Employer would miss) hard-working multitalent, who dares to seize any work and isn’t afraid of big responsibilities. Sunny personality."

The combination of the descriptions can be seen in the Appendix 3.

4.3.2 Managerial and organizational processes

All interviewees possess managerial position, however one of them, interviewee “A”, do not possess descriptive title of one’s responsibilities even though they could be interpreted as managerial. This could be due to the fact, that “A” works in a small, independent brick & mortar store where organization is small and the others in large, national chains where responsibility areas are more strategically defined. How efficiently and effectively managers coordinate and integrate activities and technologies, how competencies and capabilities are embedded by coordinating and
combining (Teece et al. 1997) as well as how learning is enabled are discussed in the following (refer also to Figure 9).

4.3.2.1 Coordination and integration

Managers need to coordinate and integrate activities efficiently and effectively. To gain competitive advantage external coordination and integration of external activities and technologies is important. (Teece et al., 1997).

All the interviewees were very well aware of their responsibility areas and their position within their organizations. Interviewee “A” having overall responsibility of the store, sales activities, stock/storage and marketing activities as visual merchandising, designing of campaigns, updating social media, web pages as well as orientation of new staff. “B” being supervisor for 19 workers in the hairdressing department as well as 2nd manager for 23 workers in beauty department. Responsibility areas of “B” are HR-related: rota planning, recruiting, handling of sick leaves and holidays. Also, daily responsibility for sales’ and stock follow-up and making orders. “C” works as a department manager and among sales and customer service, is responsible for stock follow-up (e.g. minus balances) and orders and dividing daily duties for the staff. “D” differs from the rest of the interviewees as being the owner of the business and therefore having a wider CEO responsibility of overall operations: profitability and development of operations. “E” works as a service manager for a service counter in a supermarket with responsibility area of meals and meat. Main responsibility areas are making orders, in-house control and partially rota planning.

Taken into consideration the sales and customer service-focused environment all interviewees work in, during their working day there is not much time for them to do extra duties among their responsibilities. However, answers somewhat varied when occasionally extra time occurred during their working day. Two of the interviewees, “B” and “C”, concentrate their efforts more on customer service and sales, “A” read through the news, E” uses the extra time for analyzing sales figures, discussing plans with others, designing new products/concepts, clean the premises and taking care of the stock. “D” as an entrepreneur could not define clear working hours, stating:
“Working hours are relative -it is really difficult to define. The big difference for my previous positions is, that I am responsible person 365/24/7 so you need always to be ready to react for things happening in the store.”

There has been changes in every interviewees’ work since they have started to work for their companies. “A” and “B” have gained more responsibility, however only “B” getting officially promoted. Personal changes for “C” have been moving from varying shifts towards more working from 8am to 4pm, which interviewee considered to be a good thing. In “C”’s organization the whole store concept has been changed to so called self-buying stores, where service for customers is given only when asked or needed, adding:

“And of course, tight competition and expense situation these days have driven to the fact, that stores are run by very little amount of staff”

The shift of the store concept further away from customer centricity somewhat contradicts with the general, current trends within retail where extraordinary service and even buying experiences are demanded and perhaps expected. However, the concept of this particular sports retail chain is not based on these factors, but their way of differentiating is primarily based on low prices and quick reaction for new products in the market, which could be stated their competitive capability. Customer service is provided only when customers ask for it, not given automatically.

“Ability to react. We try to bring in new products even before demand occurs.”

The supermarket environment, where both “D” and “E” work in, have gone through changes as well. Both interviewee state, that change is constant.

“Changes in department responsibilities, new members of staff, development of procedures and changing them if needed is constant.”
“My department lives all the time. Aim is to be most efficient in procedures. One member of staff left for parenting leave, that demanded re-organizing.”

As also “C” stated, that stores are run by very little amount of staff can be also seen from the comment of “E” stating that one member leaving for parenting leave was not replaced by a new worker, but rather duties were re-organized, which could be stated efficient and effective coordination and integration of activities. However, the answer does not provide room to interpret whether or not the decision made was good for the organization or not. Or, how re-organizing happened, and did it demand some kind of compromises within the organization and whether or not this was to be seen by customers and did this decision have an impact on company’s competitive capability.

4.3.2.2 Learning

All interviewees work independently within their responsibility areas but also as a part of a team, except for “D” but highlighting the fact, that team must be taken into consideration in every aspect and in decision making. Also, “C” states the importance of a team to reach targets.

“Achieving goals demands team work.”

What all the interviewees seem to like in working independently, is the freedom what it brings in one’s performance especially in efficiency and in thinking processes. “B” liking to make own decisions and coming up with solutions immediately, whereas “C” considering to get more things done on one’s own. “D” and “E” both highlighted the importance of their own thinking process.

“Freedom of thinking and for instance not being affected by negative thoughts of some others.”

“Proceeding with my own thoughts and ideas in my own pace.”
The freedom to also work independently could be interpreted to enhance one’s learning as it gives the space to process things in one’s own pace and likely to come up with new ideas, which later on can be shared with a team. As Teece et al. (1997) state, learning processes are social and collective, and through individual or cooperation of team, leads to understanding of complex problems. Therefore, it could be interpreted that given a freedom to first process things on their own, and only after going through them within a team, can lead to better and more dimensional learning. All the interviewees back up the concept of sharing and the importance of a team even though they enjoy working independently.

The most likeable aspects the interviewees mentioned about working in a team, were sparring together (“B” and “D”), sharing enthusiasm, and getting other peoples’ points of view.

“*Constructively thinking people refine ideas.*”

The answers related to team work are not somewhat related to get things done efficiently or faster but more highlight the sharing of ideas and thoughts, which could be said to feed a person’s innovative thinking and perhaps coming up with new development ideas and getting motivated. The importance of working in a team seems to be more abstract than related to some sort of concrete duties as such.

The interviewees’ cooperation are not restricted only inside their own organizations but also working with different stakeholders outside their companies such as colleagues of other stores of the same chain, importers, wholesellers, manufacturers, and people in supportive positions in the back offices of the chains such as category managers. Being asked about what was the most memorable and most significant thing in working as a part of a team, it occurred that all the interviewees brought up an event that did not occur inside their working place or did not have anything to do with their normal working week -all the examples were outside of routine doing and perhaps exceptional.

“*Successful fair event*”
“We did with the hairdressing chain a decision related to importers. We were stores of two importers and we did calculations/action plans/surveys etc. with which one we would proceed to cooperate or would we proceed with either of them.”

“Once a year there is an annual meeting of department managers, there you can hear good thoughts about different procedures and ideas. There we have together decided common procedures, which have helped to make way of working more efficient.”

The previous quote support the concept of organizational knowledge by Teece et al. (1997), which they state is created by learning and resides in new patterns of activity or a new logic, which has occurred with department managers first sharing ideas and bringing new ways of working with them to their own stores.

“I remember well a one time when we were driving in a car with a colleague from a different department, where we were thinking about a situation of one supermarket. During that drive an idea was born which concretized genuinely innovative experiment of an organic store. The experiment turned out to be good for that particular store on that particular time and turned out to be profitable. With that particular person, also other numerable good thought sparrings and procedures, which I have been able to utilize later on in other situations.”

“When the store was being built before the opening and products were shelved, everybody were involved in the shelving, doing long days and weeks. The work was done either alone or in groups and everyone were involved with 100% enthusiasm. The store looked good by the time of the opening and in the opening weekend hard pace of work continued with a good spirit. Then the whole group was clearly one team, which had one goal and wanted to be doing particularly just that. The feeling has continued after the opening week as well.”

The examples give a notion of sharing something meaningful together with others, which has not been left only on level of ideas and thoughts but has later on concretized leaving the interviewees a feeling of success and achievement. The
events represent doing something out of the ordinary which most likely have taught
the participants some new skills and enhanced their know-how also for their
everyday work for later on and most likely enhanced their motivation.

The professional educating and developing of interviewees involve official training
and coaching provided by their employers (will be discussed further in the chapter
4.3.5.2) and through official education gained in the past. Development of ones’
personal skills and knowledge happens mainly through their individual interests,
which may support their know-how also in the working environment. For instance,
interviewee “C” follows and does sports during the free time which supports working
as department manager in the sports store. The active following of different sports
help spotting new product launches within the market. Also “E” being the service
manager for counter service’s meals and meat, cooks on the free time and reads
different books and journals related to the field. “A” being responsible for a fashion
store’s marketing, updating of social media and web pages, does photography and
updates other companies’ web pages during free time. Discussions with different
stakeholders such as manufacturers, producers and customers are mentioned by “E”.
It could be argued, that more well-informed and interested one is about their field, it
also fulfills the time spent outside work and this could enhance information-sharing
inside the work place.

All the interviewees considered having evolved and developed as workers once they
had started working for their current employer. Due to having more responsibility,
“A” had gained more confidence, whereas “B” had better organizational skills. “E”
among “A” had gained more confidence or courage, stating:

“I’ve also learned to say no and tell people that kind of things, what
they not necessarily want to hear.”

“C” and “E” both considered to be now better in sharing their work load and being
more able to work in a background and “seeing a bigger picture”. “D” highlighted
the ability to make more decisions based on rational consideration and taking more
overall responsibility of the whole company. It could be interpreted, that longer and
more committed an employer is for their company, they start taking more wider
responsibility, see the company more as a whole and not only through their own responsibility area. Among time, they recognize which of their duties can be shared or delegated to others to ease one’s own workload as well as teach others new duties.

4.3.2.3 Reconfiguration

Reconfiguration requires constant alertness towards the field of industry and operational environment and technologies (Teece et al. 1997), and an interpretation from the answers could be drawn that the interviewees utilize all the provided information channels to be well-informed about things related to their work. All the interviewees’ information sharing channels are rather similar involving official scheduled meetings (personal with their supervisors and with the whole team), email, phone and Whatsapp. In one organization, information for the staff was shared traditionally via noticing board instead of any electronical channel. The stores being part of a chain have their own Intranet and in one organization company’s own chat forum is being utilized. All the interviewees considered receiving relevant information related to their work and company via these channels, “E” adding the importance of indirect information through different medias for instance about upcoming trends and events which might concern their customers.

One of the ways the gained information is utilized or shared, is for instance in timely, visual appearance of the stores. “A” utilizes information about current trends in visual merchandising and aiming to attract certain target groups via shop window displays. Also, “E” highlighted the importance to follow what competitors are doing and reacting accordingly, which represents the definition of reconfiguration being identifying (sensing and seizing) market opportunities by Felin & Powell (2016).

"For example, when a renovation of our biggest competitor was approaching, we altered our marketing, that we brought up the fact that we have service counter from where you get among fresh meat and fish the best pieces of advice."

It was considered to be obvious, that information is shared with everybody to whom it might concern. “E” bringing up the fact, that not all information is written but there
are also some professionally technical things, that need to be shown as styles of cutting of meat. Also, the filtering of information was considered to be important by “D” as there are so many different channels and lots of information received, that it should be considered when and what to share to avoid staff from getting an information overload.

The grasp of market opportunities emerges with individuals in the market interface (Teece et al. 1997), where all the interviewees work in. They all highlighted similar changes having occurred in the past years within the retail industry, them being the changes in buying behavior and competition not only due to online shopping but changes in customer demands.

“Yes, changes in buying behavior.”

“Share of online store has grown. Customers compare online and select a store based on that info...Biggest changes have come in online environment. One (physical) store level, availability of products and correct stock levels have gained more of importance.”

“Tightening competition. The weak won’t survive, the strong ones need to provide store specific business models and ideas, which have to be rock solid giving value for customers.”

“Meat industry is in huge transition due to concerns over climate change and carbon footprint, which guide considerably consumers’ behavior when it comes to buying meat. Also, the purchasing behavior has changed among long term considerably more from the service counter to ready-packed meat.”

The reactions to these above-mentioned notions have been made within the interviewees’ companies. As the share of online had grown, “B”’s company has introduced a so called click & collect -service as well as service, where consumers can see the real-time selections of the stores. In the supermarket environment consumers shifting more from service counter to self-service, they have re-thought more about the product selections, their availability and presentation in the store.
4.3.3 Path dependencies

Significance of company history, for instance investments made before, the whole company culture with different routines and procedures affect its future performance and also has an impact e.g. on learning as learning is a process of experimenting, feedback and evaluation (Teece et al. 1997). No matter how long the interviewees had worked for their current company, they seemed to be aware of the evolvement and development during the companies’ existence. “A” knowing the long history of the company with a noticable look as well as stating, that every employee having made their mark to that look and different procedures, and “B” considering their company evolving for the better all the time.

Developments in efficiency and new technologies, were discussed by “C” and “D”, stating the new technologies helping for instance in stock control, such as wireless PDA-equipment (personal digital assistant), and in efficiency.

“...cutting needless processes...”

“E” stating their company being a learning organization, which development is based on customer demand and behavior that has caused to alter working processes. Recognizing the changes in customer demand and behavior is also backed up with “D” emphazising the signifigance of social media.

“It used to be enough that staff knew the routines and repeated them from one day after another. Today, you need to recognize customer needs better for instance through social media. SoMe indeed has grown to be significant factor and without knowing how to use it, department managers cannot do their job fully efficiently from customer perspective.”

An example of a meaningful development of a fashion store is provided by “A”

“Cooperation with a known fashion designer has molded the look of the company and brought some new, unexperienced procedures, challenges and differentiation. Designig of our own collection, selection of materials, finding of
cooperation partnesr, execution of the production process all the way from the beginning to the point where the finished product is in the store available to customers, has demanded taking of risks and passion towards the industry.”

The mentioned examples, provide insight of an understanding of cause-effect relationships (Teece et al. 1997) to react and alter operational processes as well as e.g. product selections according to the changes within industry and its customers.

Different routines are part of every position represented by the interviewees. These duties described as routines are receiving and un-packing of deliveries, checking and updating rotas, follow-up of sales figures and stock levels, making orders, paying invoices, gathering information about products in store and utilizing a pricing tool, preparing and up-keeping of counters or shelves (product displays) and entire store (tidiness) as well as dividing duties among the team. One interviewee categorized also customer service as routine but taken its nature of not always being exactly the same situation and therefore not entirely repeatable, this is excluded from this discussion of routine duties -the other routines mentioned were part of the interviewees everyday responsibilities and stated by all, they had always been the same and considered them to remain same also in the future. Only “D” considered routines to somewhat to be refined in some point in the future as well as “E” predicted some new ones to emerge. Also, “A” and “E” considered the routine tasks to be the most important part of their work.

It could be interpreted, that as the routines are such a big part of the interviewees everyday work and have remained the same as long as they have worked within their companies, that it seems immaginable to them that they would disappear or be performed for instance by an automated solution. Even though all the interviewees are well-informed via various channels about new technologies and trends within the industry, thinking of for instance not doing the rota planning, or making orders, or paying invoices, or such as cleaning, is not considered to disappear from their responsibility. “B” and “C” do state, that some procedures and practices have already changed due to technological development but do not think their own routines would disappear. “E” has a customer oriented approach towards reasons for changes in routines.
Changes usually come from direct or indirect feedback received from customers. Direct feedback is received by speaking with customers or through other communication channels, which often repeated might change a bigger routine. Indirect feedback can for example be seen in sales figures, which can lead e.g. dropping baguettes off from the selection, which alters the order of daily work considerably.

When discussed the hypotheses of routines disappearing from the interviewees’ daily work and how they would utilize that time, all the answers have aim to develop operations and serve customers.

“I would work on marketing material and deal the unfinished things related to the loyal customer program.”

“I would guide sales and serve customers.”

“I believe I’d do more sales.”

“I would spar more with the staff.”

“I would develop the counter as a whole, I would search for new products and suppliers, would systematically enter into sales figures, would organize the working of the staff towards more efficient way etc.”

Even though routine tasks are considered to be important (and have to be done by someone or some solution), given the situation if the routines disappeared, the approach of each interviewee is giving a hint of willingness to be more analytical and develop operations. The routines partly fulfill the day but if they were to disappear it would give time potentially for new ideas, which might come via sparring with others, serving more customers and through that potentially raising sales.
4.3.4 Positions

Competencies need to be accumulated of routines, skills and complementary assets that are not easily imitated and there need to be ability to shift allocation of resources away from traditional objectives (Teece et al. 1997). This can be seen what the interviewees would like to change in their current responsibilities for instance wanting to be more creative and reduce some of their routines.

“To be able to design presentations/store displays by ourselves. The common line does not necessarily work in every store.”

"I would do less routine work and would pay more attention to that routine duties are easier are more efficient to do, and for those that perform them would make sure they are up to date on their duties and they have all the necessary information, skills and equipments to do their tasks."

The aim could be stated to find alternative ways to achieve same functionalities as Teece et al. (1997) describe. The interviewees seem to be having a way of constantly thinking how to do their work better and more efficiently and three out of five state straight forwardly, that they do not have enough time to do every duty assigned for their responsibility, one stating that these days does but did not have before, and “D” stating having enough time. However, it should be noted that “D” is the only interviewee who is the owner of their business and stated before that the working hours are relative and is available “365/24/7”.

Among duties that interviewees would like to be removed from them, there are positions or tasks that they would wish to do, which relate to wanting more responsibility.

“I would take overall responsibility of the beauty department staff.”

“I’m interested in store manager’s position.”

Also, there was need for clarifications to one’s responsibilities.
“Sometimes it feels, that I have too much responsibility in so many different areas, which leads to that sometimes some area is left with less attention because there is not enough time...I would want to concentrate directly to my own, assigned responsibilities, which does not now work because of the organization of work.”

"I would want my working title to be updated correctly so it would correspond with my real responsibilities.”

Understanding of processes (Teece et al. 1997) by each interviewee of their own company (on store level as well as chain level if being part of one) seem to be good, at least that could be drawn from clear development suggestions and what they would want to change. Also, interviewees were clearly able to define where they consider themselves being best at, which were mostly “human-related” such as customer service, sales, prioritizing and organizing, sharing of duties and visual merchandising. What they also liked the best were rather similar: customer service, marketing, planning, choosing of selections, purchasing, being present to staff, sparring and developing new things and interacting with customers. Among identifying one’s individual strengths, every interviewee had a clear vision of what makes their company differentiate from competitors, where aspect of service is emphasized.

“Unique, different look and our own collection.”

“Service”

“Self-service concept. Easiness of buying and low prices.”

“The speed of reacting and with the freedom being an entrepreneur to be able to implement things, that stiffer organizations cannot bend.”

“Enthusiasm for our doing, willingness to serve customers and willingness to be of high-quality and versatile.”
4.3.5 Microfoundations of dynamic capabilities

This chapter concentrates on the distinct skills, processes, procedures, organizational structures, decision rules and disciplines, which are according to Teece (2007) the foundation for company level sensing, seizing and reconfiguring of capacities, which are built on its microfoundations.

4.3.5.1 Sensing

The personal attributes helping to perform one’s work discussed by the interviewees were attributes, that could also help to learn and to sense, filter, shape and assess opportunities (refer to Figure 6 adapted and adjusted from Teece, 2007). The attributes described were courage to seize into new tasks, human proximity, openness, being social, getting along well with other people, strong focus on one’s doing as well as having strong personality, enthusiasm and ability to inspire others, being helpful as well as being a professional within one’s field. For instance capability to identify changing customer needs have already come up in the previous sections.

The interviewees considered that the above-mentioned attributes were utilized by their employers when having designed their responsibility areas. However, all felt that there were aspects that should be further developed withing their companies.

“General procedures should be up-dated, information flow and openness highlighted, more clarity in responsibilities and methodicalness.”

“Information sharing with my own supervisor could be more efficient.”

“ I would wish development in communication between purchasing organization and stores.”

”We have aimed to make changes all the time when needs occur. Next most likely changes in purchasing responsibilities to the To Do-list.”
"We can develop how we do our work and what entails in it. We can develop the sharing of duties and how know-how is focused in the right place at the right time."

It was considered to be easy to communicate change and development ideas forward, “C” highlighting that you need to know the right contacts within a big chain organization to get one’s voice heard, “B” also stating, that information needs to be shared with people who have the power to influence things. Also, all interviewees considered to possess information that could benefit the whole company and were willing to share it forward in meetings, where they could be discussed together as a team and directly with people that they knew could utilize the information in their own work.

4.3.5.2 Seizing

The company structures, procedures, designs and incentives for seizing opportunities (refer to Figure 7 adapted and adjusted from Teece, 2007) were studied via the interviews by observing the possibilities provided by employers for instance to education and training. Four out of five interviewees work for large national companies, where are good selection of different kinds of trainings. However, it could be assumed that it is up to each one’s own supervisor whether or not they perceive these trainings to be useful to their staff. Nonetheless, all four had participated in different kinds of programs: supervisory training; product trainings; general company coaching programs; personalized trainings etc.

"We aim to educate our staff constantly. At the moment we have persons educated in fish and meat mastering -programs. Also, we constantly send our staff from different departments to different professional trainings."

"There are plenty of possibilities. Our company (the chain) organizes different coaching and trainings and my employer is more than motivated to organize employers to these trainings. Usually the trainings cover one’s own area, like in my case official qualification in meat mastering, where my employer sent me."
The difference can be seen in the smaller, independent company which is not supported by any chain back-office operations:

“Normal orientation to work duties happens during working hours, but other professional development happens in one’s own time.”

Interviewees’ motivation for learning and for personal development is emphasized. How the interviewees mostly have learned to do their current job is simply by doing and through experience as well as in cooperation with colleagues with the support of their supervisors. Three out of five wanted to learn more, “B” wanting support in how to orientate others. “C” was content with the know-how for the current position but would like to learn rota planning. Common opinion, however, was that interviewees did not think that there are solutions within the industry, that would make them to perform their work easier and/or better. Even though, some e.g. technological solutions were brought up in the previous sections of the interview answers, they were solutions already having been introduced within their company - no new ones, perhaps utilized by competitor, were spotted nor mentioned in this section.

4.3.5.3 Reconfiguring of capacities

According to Teece (2009) the reconfiguration of capacities is difficult to deploy and develop. This aspect was aimed to receive answers by studying for instance interviewees’ companies ability to react to different changes as well as employer’s level of freedom to affect their own work. This section can be mirrored with the Figure 8’s (adapted and adjusted from Teece, 2007) description of continuous alignment and realignment of specific tangible and intangible resources.

The ability to react to changes within the interviewees’ companies is dependent on available resources, not rather on willingness.

“If the change is easy to implement and there are enough resources, there is ability to react.”
“The demands and wishes are reacted fast according to resources. All wishes are heard and industry being followed with sensitive ear so necessary changes can be implemented.”

"The reaction towards customers’ wishes and demands is positive in principle. Answering to customers’ wishes is an opportunity to strengthen our customer loyalty.”

There is not only willingness to respond to customer demand but also willingness and aim to respond to them as fast as possible.

“Usually changes for us are related to products. When new hit product emerge into market, we try to get them as soon as possible.”

All the interviewees consider to have freedom to affect how they do their work. The difference can be seen between smaller and larger companies in whether or not interviewees can affect when they do their work. Working in a smaller, independent store, the interviewee considered powerless to affect on working days, which could be caused by scarce resources. Employers working in the larger companies, considered to be able to affect on their working times as well where the resources are more of volume and versatile.

“I can’t always affect on when I have my free days. Sometimes it shows in coping and as an exhaustion during free time.”

"...I can also regulate my working time by myself, how to get things done."

When there is more flexibility also in the working times, it could be argued that it has a straight affect also on working energy as the only interviewee mentioning notions as coping and exhaustion is the one with no influence to the working times. The
same interviewee mentioned also in the section of learning (covered in chapter 4.3.2.2), that “In team work organizing and sharing of duties is relieving.” In larger organizations, sharing of work load can be easier but usually they are divided based on each worker’s responsibility area, together as a team or by their manager.

“We have a discussion of things and prioritize/share tasks between workers.”

“We utilize a duty list, where I every morning put marks what every worker is to do that day.”

"Authoritarian democratically -based on each situation.”

“Based on responsibility area or by strenghts.”

All the interviewees were aware of the future plans of their companies without revealing specific plans, however, due to promised confidentiality for their employers, which demonstrates their loyalty. One development aspect was given by one interviewee about general future development need for their company.

“….operations should be developed and modernized to respond consumer habits. This is how we could also expand our target group.”

When discussed about whether or not there should be new positions for the companies in the future, four out of five interviewees did not consider that to be necessary. It could be due to the fact that all current duties are taken care of someone and there is some level of inability to see further in the future as some jobs have not been invented yet -usually the need emerges during evolvement of time. However, one of the interviewees had an idea for the need for a future position:

“There should be position, which combine different positions from different departments. Hybrid positions.”
This so-called hybrid position, further developed, could be a valuable idea for instance in enlarging employees’ know-how from different sections of their companies.

In determining what would consumers and customers to be missing if the interviewees’ companies would not exist in the future is very customer oriented, answers highlighting the level of good service, nice sales staff, listening to the customers and willingness to serve. One of the interviewees brought up traditionalism, which leaves a question in the air whether or not this is what customers of the future appreciate.

“Traditional brick & mortar of the city.”

When discussed what the interviewees’ employers would be missing if they went working somewhere else was covered in the chapter 3.4.1 Background and characteristics of interviewees as the descriptions were very attribute related.
5 RESULTS

The following results are reflected with the theoretical framework and previously presented empirical insights. The results are divided in their own sections of discovered organizational structures, processes, routines and procedures, decision rules and disciplines and distinct skills, which are the foundations for company level sensing, seizing and reconfiguring of different capacities (Teece, 2007), which constitute the concept of microfoundations.

5.1 Microfoundations

To discover or create new opportunities, individuals need to possess different cognitive and creative capabilities, which requires they have access to information and also are able to spot, sense and shape different developments (Teece, 2007). The studied group seemed to consider having enough information related to their industry, company they work for and information straight related to their own work and within their work places they had multiple channels where they could share and receive new information. However, one thing that needed further development was the efficiency of information flow in general, or with one’s supervisor or between for instance purchasing department and store. It was highlighted, that if store staff wanted to reach out to supportive departments of the company, one has to know the correct people with influence.

According to Teece (2007), individual have to be able to interpret the information and also to filter it from professional and social contacts to create assumptions for instance on development of technologies or customer needs. The information about customer behaviour and occurring or changing customer demands are well known by the people working in physical stores, however, technological developments emerging within the retail industry in general, were not very clearly articulated. The technological developments which had already been introduced within the companies were, not surprisingly, well known but possible future evolvements that possibly could be utilized within these particular stores, could not be named by the interviewees.
The processes within companies have to support the gathering and filtering of technological, market and competitive information (Teece, 2007) as well as customer requirements, and if these processes are well-functioning invaluable market information is further incorporated (Haapanen et al., 2019). The people interviewed were well aware of customer requirement, markets -particularly related to products of their own expertise as well as current trends, and competitive information. Technological information was known on the level that is already concretised but further developments, for instance technologies utilized in Asian market or the ones introduced in Figure 6, were not sensed or at least named: four out of five interviewees considered that there are no aspects within the industry which would make them to perform their work easier or better, not to mention aspects that could replace some of their work entirely.

Seizing new opportunities demands that there are enough resources in the development and commercialization and it is important for managers to have tacit investment and decision-making skills related for instance technological choices or which markets to target (Teece, 2007). Related to the selecting of company boundaries and for instance training new skills (Figure 7), there seemed to be multiple opportunities for professional development for people working in bigger chain-operated companies, and these opportunities had been utilized and encouraged to utilize also in the future. The independently operating store did not seem to have resources for more development than basic task-related orientation when needed, other wider professional development needed to be done outside working hours which demands worker’s own personal motivation towards one’s field and expertise.

All interviewees possessed motivation to learn new things and constantly develop themselves as well as gain more responsibilities. Also, making new ideas into commercial approaches to attract (new) customers were addressed and changes made into operative ways of working if customer demands were changing. This approach included not only in-store operations but also taking new approaches in marketing. The skills to make decisions and act according to different situations were highlighted, and all the interviewees considered not to have their hands tied when it came to their own responsibility areas. Depending on one’s position and role in the company, correlated with the seizing level: department managers operating rather
strictly within their own area and the one’s having bigger responsibility within their companies, seizing larger entities possibly affecting the whole company performance. Selecting decision-making protocols are very customer centric within the store environments to build loyalty and commitment -customer centricity being face-to-face related rather than the technological innovations presented in Figure 7.

Teece (2007) states, that companies need to maintain dynamic capabilities within the company but also, they need to be able to renew and redesign their routines. Complementarity of product offerings, different systems, routines and structures need to be able to adjust (Teece, 2007) according to internal or external requirements. To perform efficiently resource alignments, coalignment, realignment and redeployment are necessary (Teece, 2007). The ability to reconfigure of capacities in the physical stores, is more dependent on available resources rather than willingness or capability. There is willingness to respond to changes and also willingness to respond as fast as possible. It is highlighted, that it all depends on the resources which leads to an assumption, that existing resources are not fully realigned or redeployed if changes demand -changes are made only if it fits to existing resources. It did not occur in any interview, that if changes or opportunities demanded so, more resources would have been allocated to make that particular change happen.

Companies need sensing, seizing and reconfiguring capabilities to build and maintain their competitive advantage and continuously reinvent themselves. The approach of dynamic capabilities and its microfoundations is, that competitive advantage does not only emphasize different characteristics of people and different processes, but the approach also considers, what it takes for companies to ensure that once opportunities are sensed, can be seized and how and when they need to make transformative decisions. (Teece, 2007). As Felin & Powell (2016) state, the identification of market opportunities emerges with individuals in the market interface and the people working in physical stores are crucial identifiers within the retail industry. However, to conclude this part of the results, it could be stated that the people working in physical stores do possess the capabilities to sense new opportunities but there are challenges in seizing and making changes in the
operations if there are not enough resources. If there is a need or a will, there in all situations not necessarily is a provided way.

5.1.1 Organizational structures, decision rules and disciplines

The structures within an organization define how they can accomplish competitive advantage. Activities and technologies need to be efficiently and effectively coordinated and integrated as well as how competencies and capabilities are embedded by coordinating and combining (Teece et al., 1997) have an effect on the company’s success or the lack there of. There is a requirement of being constantly alert towards the industry, operational environment and technologies and willingness to adopt best possible practices (Felin & Powell, 2016). As stated in the previous chapter, there do emerge alertness towards the industry, the environment the interviewees operate in as well as the willingness to grasp best possible practices, but not all organizations have the resources to always respond. This also raises a question, is there a lack of willingness or is it inability to invest into resources differently.

The organizational structures and how responsibilities were divided within companies, were well defined. All the interviewees knew what were their duties and what were the duties of their superiors or staff. The roles possessed were very multifaceted, which is a typical characteristic within physical stores, and fulfilled the interviewees working days almost entirely leaving little or no time for instance for analysis or planning. All the (possible) “extra” time was mostly given to customer service and sales, which obviously serves these companies’ purpose and existence and tells about the characteristics of the interviewees being customer oriented.

All the companies in question had had organizational changes on some levels during the past few years. Some interviewees had gained more responsibility through official promotion or just due to personal and professional development, one store had changed its entire service concept and minimized working staff due to tightening competition, one had changed responsibilities in different departments, developed or changed procedures, one renewed their communications channels, and one had to reorganize way of working due to one member of staff leaving. Some of the
presented examples also support the statement, that resources are not added but realigned always when possible, which characterizes well the industry’s nature of being efficient and (cost) effective on all levels of operations.

Among the changes in organizational structures, the changes within retail were well defined when it came to changing buying behavior (e.g. consumers moving more from offline to online), tightening competition and realization that “traditional” ways of operating are not enough to provide value for today’s customers. Even though wide changes are recognized and structural changes made within the operating environment -the physical store-, no mentions for future developments to utilize for instance AI or robotics or any other technological solutions, were mentioned. The possible reconfigurations of resources within these organizations are estimated to happen with current human capital and technologies.

In rapidly changing environments, there might occur competencies that have lost their significance or have become easily replicated or imitated. Emulation is performed when companies find alternative ways to achieve same functionalities. (Teece et al., 1997). (Human) competencies and capabilities, however, are usually rather difficult to replicate (Teece et al., 1997), and it could be stated that in these lie the competitive advantage of physical stores, for instance the ability to read customers and adjust one’s behaviour and approach based on different situations.

If in some occasion imitation does occur, it might indicate that a company has good structures for learning and improvement. Comprehending of different processes is crucial factor to process improvement and therefore could be argued, that organization is not able to improve that which it does not understand. (Teece et al., 1997). The examples for instance in structural changes made within interviewees’ organizations, support Teece et. al’s (1997) previous statement as for instance if there are good people skills involved, changes for customer offerings are made, but if future operations are only thought to be done by current resources, new technological innovations could not be thought to be utilized or could be utilized rather late e.g. only after done by competitor.
5.1.2 Processes, routines and procedures

The essence of competencies and capabilities are embedded in organizational processes of one kind or another. A company’s dynamic capabilities and competence are determined by the combination of managerial and organizational processes (how things are performed within a company and what are the routines or patterns of current practices and learning), shaped by its asset positions and paths available to it. (Teece et al. (1997). There were aspects of interviewees’ current roles, that they would like to change which were related to routines. Some interviewees were willing to delegate some of their daily routines to their sales staff as most of them considered not having enough time to do all their tasks. The releasing time from giving some of these tasks for someone else, would free them to do more customer service and lead their teams. Also, one interviewee working for chain-operated store would have liked more free hands to design visual product presentations according to their particular store’s location and target customers rather than performing ready-made instructions. These indicate some lack of creative freedom and need for more human interactions with other workers and customers in current practices.

Human interactions and good people skills were also highlighted, when interviewees described where they considered being best at and also liking the most. Customer interactions, leading the teams and being for their support whenever they needed, visual merchandising within the store, sales, organizing, planning and sparring with other members of the staff are highlighted. However, some “non-human-touch” routine tasks were also liked which were related to purchasing, placing orders and daily delegating.

There seemed to be some contradiction with the answers given with if the interviewees would like to change something within their responsibilities, four out of five had ideas for change (discussed above). However, when asked differently whether or not they had tasks what they were currently doing but did not want to do, four out of five answered “no”. Also, there were things that they would like to do but were not performing at the moment which were wanting to gain more responsibility or wanting to concentrate solely on one’s current appointed responsibilities as some roles were not so well defined but overlapped with some other areas rather than their
It could be concluded, that having the ability to multi-task and concentrate one’s own duties among customer service, does not indicate that there would not be need for clear procedures which could be somewhat changeable in hectic environments.

Investments made in the past and the whole company culture including routines and procedures affect its future performance and has an impact on learning (learning will be discussed more in depth in the next chapter). If many aspects of company’s learning environment are changed at the same time, individual’s ability to get to know cause-effect relationships can be confused as a result. (Teece et al., 1997). This aspect was well recognized by the interviewee, who had the overall responsibility of their company, two large supermarkets, for instance in information sharing that it needs to be shared with careful consideration as there are so many different channels and there lies a risk that if all possible information is being shared with everybody, they might start to suffer from an information overload and the relevant information gets lost. Also, the same interviewee did have multiple ideas for future developments but was holding some back not to implement too many things during a relevantly short period of time and at the same time observing when their market environment and customers could be ready for new changes. As Teece et al. (1997) state, an industry's (technological) opportunities need to be mirrored with company’s path dependencies and it needs to be determined how critical it is to move towards those opportunities.

The ability of the industry to shift their resources away from traditional objectives is important. A company’s experiences in the past set the circumstances to what possibilities management is able to comprehend. (Teece et al., 1997). This could be argued to be one of the main challenges within the retail industry as it has lacked the ability to reallocate their store resources differently than in the past, which affects the thinking of store management. The answers from all the interviewees back up this statement. The historical paths of companies are well known by their managers and workers. Also, introductions of new procedures and technologies in resent years are recognized to have brought more efficiency and easiness to working, and for instance significance of social media in recognizing customer needs and preferences is recognized. However, the future from technological innovations’ perspective and
whether they could change or make routines disappear, are not seen as very likely. All the interviewees considered that their routines have always been somewhat the same and will be the same also in the future. There were couple of notions of routines being refined in the future and considering possibility that new ones will appear as well, but in general it was not considered as diminishing or not to mention, disappearing aspect of work in physical stores.

### 5.1.3 Distinct skills

Teece et al. (1997) consider the learning aspect of the processes to be even more important than integration as it enables tasks to be performed better and faster as well as it enables identification of new opportunities. Learning involves organizational as well as individual skills. Learning processes are social and collective, and through individual or a cooperation of groups leads to understanding of complex problems requiring common rules of communication and coordinated procedures. (Teece et al., 1997). Even though every staff member and manager have their own individual responsibilities, they need to take the whole team into consideration in their way of working and decision-making. The nature of working in physical stores is very group oriented and involves many stakeholders, internal and external. The most important external stakeholders of interviewees included colleagues of other stores of the chains, importers, category managers in back office operations, wholesalers and manufacturers. Also, the entrepreneur interviewee dealt with representatives with different organizations and unions.

Organizational knowledge is created by learning and resides in new patterns of activity or a new logic. The notion of dynamic capabilities as a coordinative management process enables interorganizational learning through cooperation and partnerships. (Teece et al., 1997). When interviewees were asked to analyse the most memorable achievement working as a group, they all described an event from outside their everyday working environment and it included achieving a concrete goal together as a group, which most likely had created new knowledge for the whole company to benefit.
The ability to determine the need to reconfigure the company’s asset structure and to be able to make necessary internal and external transformations is crucially important in quickly changing environments (Teece et al., 1997). To be able to reconfigure and change, Teece et al. (1997) highlight the requirements of being constantly alert towards the industry, operational environment and technologies, and to be willing to adopt best practices. Adopting best practices were for instance analysed in regular department managers’ meetings or in day-to-day conversations with other store workers.

There seems to be a need to work independently apart from team, however, as well. It was considered to be more efficient to make decision and to get more done in general. Also, freedom of thinking on one’s own to create new ideas and not to be affected by other people’s opinions in one’s own pace, was considered to be important. Therefore, a balance between individual and team work was thought to be important as developing one’s skills demands both. There were multiple different ways, how interviewees aimed to develop their personal and professional skills: through literature and other publications; doing freelance work in technological projects for other companies; official trainings and education; and hobbies. Hobbies seemed to have relation to ones’ expertise field in work as well, as the department manager of a sport’s chain was an enthusiastic in sports and the service manager of supermarket’s counter services was keen on cooking in the free time.

During their careers in these particular companies, interviewees considered to have developed in various areas. Gaining more responsibilities had lifted up confidence, made decision-making easier and more rational, developed delegating, organizational and reacting skills. Also, the longer one had been working for the same company, it enhanced the ability to be able to think wider entities outside one’s own responsibility area and build up the capability to see cause-effect relations better. Supervisorial skills had developed over time not only in delegating perspective but also in ability to sometimes tell staff things that they necessarily would not like to hear. Appendix 3 presents various skills, capabilities and characteristics of the interviewees how they described themselves. Also, how discovered skills and microfoundations relate to requirements in retail are discussed in the following chapter.
5.2 Relation between results and requirements in retail

As discussed in the introductory part of the research, the pace of occurred and happening changes within retail is fast and it demands ever faster abilities to react and respond from the people operating within the field, including the ones working in physical stores. The requirements to possess different combinations of skills, multiskills, is demanded. The interviewees possess the ability to recognise the many levels of their hectic working environments and gain skills to concentrate several things at the same time, such as combining other duties and at the same time serving customers. They are used to drop something they are doing and start focusing on something else, if situations demand. However, they might not enjoy it as they did referred to many positive aspects of working alone and not being for instance affected by others’ opinions and considered it to be more effective when not interrupted.

The industry demands ability and readiness for change combined with flexibility. It can be seen in the research, that all the interviewed people were very keen on personal and professional development and (continuous) learning during work and outside working hours. There were no prejudices or hints of negative attitudes towards any changes within the industry except for the fact, that there were not always enough time to do all the duties which demands ability to plan, delegate or share, and prioritize. Being flexible could be seen in attitude towards changing working hours and days -doing the work when needed rather than wanted, and also not having to decide when to have days off or a holiday. It could be still interpreted, that when someone was not able to affect one’s working times, it did not enhance work satisfaction but rather just showed flexibility. The ones, that did have ability to decide for instance their days off, considered having more power to affect their own work. Also, the one’s who had more regular working hours, seemed more content.

To respond the current and future demands of retail, people working in physical stores need to have an excellent knowledge and understanding of the field and their own operational environment. All the interviewees possessed knowledge of their competitive and operational environment and even more about their customers and
their changing needs and behaviour. It was highlighted in several occasions, that attracting current and potential customers and also adding value and therefore creating customer loyalty, was of high importance. The requirement for so called conversational commerce, offline and online, seems to be met in physical stores in face-to-face customer interactions as well as online as the importance for example of social media was recognized as a service channel and sensing consumer needs. To spot different trends among their target groups and sensing demands not only analytical skills but also intuition, which could be stated to be met in interviewees’ analyses of their customers.

The knowledge of operational environment was stronger than the one of the industry as a whole or many (technological) advancements happening for instance in different market areas, e.g. in China or US -at least, they were not brought up in any answers when asked about solutions in the industry, which could make working more efficient or easier. The demand for knowledge related to one’s own particular expertise area were met, such as product knowledge, which is one of the key requirements in the field. The interviewees, especially the one’s being responsible of one particular department, were very well aware of the products they were selling, the trends, new launches, competitive products and customer preferences. They were also able to describe how different consumers select, compare and buy these items and how they need to respond to this behavior. Also, these interviewees’ hobbies during their free time were related to their product or expertise area. There is a requirement in the field for people’s creativeness. In two of occasions, interviewees mentioned attempting attract certain target groups with visual merchandising in shop windows or product displays. However, in one occasion there was a need for designing the displays by themselves rather than by chain’s manual. Based on this one example, it could be stated that in some occasions even though there is need for creativity, possibility to actually be creative in store environment is prevented.

There is a need for individual expertise but also for ability to work as a team. For instance working as team and having ability for intelligent problem solving, requires so called crowdsourcing and ability to combine new information individually and with others. Whether interviewee of the study worked as manager of their own department or of the whole company, the importance of the team is highlighted in
sharing the work loads (discussing together), in decision making (e.g. what to prioritize, selecting external partners), development of processes (discussing effective alternatives) and just being there for one another, as it was mentioned several times that leaders found it important to have discussions with their team and wanted to show that they are available whenever support would be needed by others, this responding to the requirement of having emotional intelligence and empathy. There need to be ability to balance between emotions and logical reasoning, which appears in interviewees notions of being very work oriented, willingness to be efficient and get things done but at the same time having the team well-being as well as customer satisfaction and engagement constantly in the back of their minds.

There is also requirement for critical thinking and questioning. It appeared that the longer the working history and the wider the responsibility area, ability to be critical and have more confidence to question for instance processes, routines and quality of information enhanced. As it was discussed earlier in introduction, there is a need, particularly for managers, to ensure that information flows up and down within organizations. It appears, that there is much information flowing from headquarters (chain-operated companies) to the stores but it was found rather difficult in some occasions to share information from stores to different HQ-departments. It was highlighted, that there is a need for knowing the “right people” and the ones with influential power, if there were for instance some need for developments. The information flowing up and down from different hierarchies did not appear to be very natural or effortless.

People working in stores are very well aware their purpose in their operational environments and their main purpose (based on the interviewees answers) are serving customers, being there for their teams and make profits for their company. All the interviewees were very people centric and commercially thinking individuals. However, the analyticality towards company figures are very traditional and all the figures discussed were either sales or inventory -related. Even though customer centricity is the requirement of the field, there were no mentions of any metrics related for instance customer satisfaction or other store performance than sales figures. A conclusion could be drawn, that even though industry is changing and evolving tremendously, the metrics measured and provided are not correlating with
the change. As there is a need to combine traditional physical store operations with digital commerce, there could be need also to introduce new metrics for stores to analyze their performance.
6 CONCLUSION AND DISCUSSION

The research focused on retail industry and the tasks, structures, processes, routines as well as required and possessed skills of people working in physical retail stores and whether those skills meet the requirements of the field and whether or not they are recognized or utilized by management. The aim was to answer to the following question:

*What skills are possessed by people working in physical retail stores?*

The research problem lied in question that do people who work in physical retail stores possess required skills and capabilities or not, and are they recognized and utilized by management.

The main results of the study show, that there are variations related to information flows. There are multiple channels to gain information and it is shared between teams and their managers but there is still need for improvements for communications between managers and their own supervisors as well as stores and other departments of companies, for instance with purchasing departments. The information stores possess about customers and products is highly valuable for all levels for organizations, however, it seems that there are difficulties to pass that information forward and information flows more from headquarter operations to stores than other way around. Also, there are inefficiencies about information of multiple technological developments happening in the field in general.

There is high motivation towards personal and professional development and willingness to learn new things with people working in the stores. Many changes made in processes and operative ways of working are mostly based on stores’ own customer analyses and communication with their customers. Customer centricity can be seen in stores’ decision-making. Customer communication is more based on face-to-face interactions rather than technological solutions even though the significance of social media is recognized and utilized. Even though many needs for changes are recognized and there is willingness to development, it is highly resources-dependent.
Realignments or redeployments are not fully conducted within store operations if their current resources and technologies in use do not allow this. Resources are firstly allocated as they mainly have before, and then developments are made if there are resources available -they are not reallocated nor created. One critical aspect for the future success of companies is the ability to move resources away from traditional objectives, as stated by Teece et al. (1997), and this seems to be crucial aspect for retail stores. Based on the results, it could be stated that it is not willingness of stores preventing this but rather the history and path dependencies of the whole industry to fully re-organize their operations.

The results show, that there is a need to move away from certain routines and store managers and staff having the need to have more time to be creative, more analytical and have more freedom to balance between team and individual work. Moving away from certain routines would provide more time for customer service and supporting one’s team. The individual work was considered important particularly when it came coming up with new ideas and concepts, analyzing the sales figures more in-depth and creating plans based on them. Having the opportunity to balance one’s individual thinking with team work to discuss one's ideas, could provide preferable ground for creating new knowledge.

Even though there were need to move away from certain routines, there were no indications of considering the routines to be disappearing from store operations. The industry and store environments have such long roots in operating in a certain way, that results indicate that there is an inability to imagine it changing much. It can be learned from the study, that this is a challenge for the field and stores as it is difficult to change something if there is no understanding of it, as Teece et al. (1997) state, that companies previous experiences set the circumstances to which options managers are able to comprehend.

The skills possessed by people working in physical stores are very human-focused combined with continuous commercial thinking. It could be stated, that there are certain types of people that pursue to work in stores in the first place, who are social
and possess good people skills. Possessing certain skills correlate with the time worked for in the field. As a person develops personally and professionally, results indicated that they have more ability to analyse wider entities affecting their whole company, sense customer trends and needs as well as the ones of their teams. Taken away certain daily routines, automation could most certainly give these people more freedom to focus on the mentioned human-focused areas. Given the space to be analytical and create new ideas or concepts individually to be afterwards shared with groups, could enhance customer satisfaction and create more motivation to store staff, as in general based on the results, they are not afraid to seize new opportunities and would like more responsibility.

There are structures in stores and in their supportive operations, which enable good customer service, doing the tasks and routines that are pointed to each responsibility area but there are rather little enabling factors for other things, where people could more versatilise utilize their skills for instance to innovate and be creative. As it is stated in the theoretical analysis by Felin & Powell (2016) that new market opportunities are spotted by people in the market surface and supported by Haapanen et al. (2019), that these individuals have an important role in identifying these opportunities, there should be more room for people working in physical stores to truly sense and then grasp emerging possibilities. The results show, that there are multiple skills possessed by these people to do this, such as ability to analyse customers and their behaviour, product knowledge, good communication skills with internal and external stakeholders, ability to learn and share new knowledge as well as plan, organize and prioritize. However, the structures and processes prevent them to utilize these skills to truly fluently communicate new opportunities forward and be part of creating something completely new.

It can be learned of this study, that there are multiple skills possessed by people working in stores but their utilization in a new untraditional way are remained in the background because of routines and the traditional role descriptions and therefore it could be argued, that the microfoundations of retail companies are not dynamic.
There have been studies conducted in the previous years about dynamic capabilities from the perspective of strategic leaders of companies for example in health technology industry e.g. the master’s thesis by Ranta (2015). Dynamic capabilities have been researched in customer centric industries also from the perspective of corporate directors for instance by Lehmusvaara (2017). However, there lacks a study that fully concentrates on retail industry (no other customer centric industries) and solely limits the research to study physical stores mainly from the perspective of people who actually work in the stores, not the leaders in headquarters. Therefore, it could be stated that this study fulfils a research gap lying in the analyses of dynamic capabilities and their microfoundations.

The results can be generalized in some extent to having represented several areas of retail store industry as there were representatives from fields of fashion (women’s fashion with own collection), beauty (hairdressing and cosmetics), groceries (service counter and ready-packed products) as well as speciality store of sports (equipment and apparel). There are similarities in these peoples’ backgrounds, ambitions, capabilities, skills, personal characteristics and how they are managed.

6.1 Managerial implications of the research

To succeed in the current and future markets, retail managers need to have capacity to allocate their resources in a different way than they have done in the past. There are multiple technological solutions altering how work is done and there has been lack of speed to grasp these opportunities in retail. Even though, there have been many advanced solutions provided by for instance AI and robotics, the work in physical stores done by human resources, are still rather traditional. The purpose of this study is not to generalize that all operators should immediately start utilizing these technological advancements for something, not for all it is even possible or necessary depending on each company’s individual operative strategy, but managers should acknowledge the versatile human potential that they do possess in their stores.
Even if a company would not utilize these advancements, there is a need for start thinking differently where to put more emphasis when duties and roles are designed.

There is a challenge in store environment to meet the requirements of each task in given time. This could be partly due to what is measured in store performance: sales, inventory levels and wastage. When store staff are required to reach certain numerical levels, the emphasis in their performance could be argued to “push” towards a certain way of operating and concentrate primarily or solely on that. If there were some kind of metrics to measure for instance innovative actions, level and amount of new ideas, creative implementations, information gained from customers, support and knowledge given and received between team members, this might lead to different emphasis and ultimately shape where skills would be utilized.

The results also indicate that companies having been able to make their store managers and staff to commit to the company, their professional level among time progresses and they start to focus more on broader entities, see cause-effect-relationships and analyze operations from the whole company perspective. This is an asset for managers and they should focus on how to build long lasting relationships with their staff. Retail stores are well known for their fast turnover in employees. For example, working as a cashier in a grocery store is many young person’s or student’s first job but these people tend to leave the industry as the job is monotonic, there is lack of responsibility and guidance towards different more varied duties. Managers should pay attention to that potential, future assets working right in the customer surface. Companies should also recreate their structures to support their managers’ work -not only in new potential talent, but also with long-term employees with knowledge and position to sense new opportunities. There still tends to be an attitude of “headquarters knows the best” in retail and this should be turned around.

There should be courage to reimagine routine-based work. For example, AI-based solutions can help in rota planning, making orders, in invoice payments and analyze store selections as well as robotics can do the cleaning and stock shelves. These could be done in cooperation with store staff and eventually could move human capital towards more complicated problem-solving and other duties. Kurjenoja (2017) stated, that retail companies need to find employees possessing skills of
customer service and management and having knowledge of the field and their operational environment. It should be stated, that based on this study, these skills already exist in the stores and question rises whether they are just not recognized and are remained in the background of traditional routines. The study made Association of Finnish Work in 2017 stated that 69% out of more than 2000 Finnish employees between ages 17-79 considered that their employers did not recognize their strengths very well, or at all (Made by Finland, 2017) which should encourage retail managements to analytically evaluate their existing store staff before looking elsewhere. To utilize this potential could be in areas such as customer data analyst, social media influencer or service designer. Without completely ignoring current retail store responsibilities, there could be creation of so-called hybrid positions as pointed out by one of the interviewees of this research and this is also supported by Dellot & Wallace-Stephens (2017b) by stating, that automation has rather a task-based than job-based effect.

Even though there seems to be good knowledge of ones’ operational environments and (physically) close competitors, managers should guide all store workers towards thinking, that operational environments are not the physical environments anymore but due to e-commerce it is not even domestic, it is international. There should be constant analysis of customer demands on international level too as people can basically order anything from anywhere today and create solutions to enhance footfall to physical stores -this could be on customer data analyst’s responsibility within store, to combine data of physical and online activities of customers. There are certainly analysts of combining information from online and physical stores’ sales figures but who observes the customers inside the stores better than the ones who already are there.

6.2 Limitations of the research

Due to physical distance with the interviewees and the fact that interviews were conducted via email, embodies restrictions to see behind the answers and sense for instance peoples’ attitudes and feelings more in-depth. To have been able to conduct face-to-face interviews, it would have provided more conversational environment in the interview situation and therefore could have served more shades to the themes
covered. Nevertheless, given the interview circumstances the results could be argued to be reliable not only because all the interviewees possessed long-term professional background but also because after the answers were analyzed, they provided similar answers and descriptions of the interviewees’ characteristics and skills, and also how they are managed, and whether or not the structure within their companies support them or not. Even though the number of interviews could have been larger, these answers provided enough information for this type and level of study.

6.3 Recommendations for future research

For future studies, it could be recommended a larger group of people to be interviewed which would also include sales assistants and professionals from supportive positions working outside of the stores. It would be valuable to find out how people working for example in purchasing department find the level and quality of information flows between them and the stores. Also, it would be interesting to study sales assistants’ experiences on leadership and how they consider their skills to be utilized in different store environments.

It would be also valuable to come back for the information of this research in few years’ time and compare the presented phenomena and results with that current time of future, what has happened, who did survive and develop and why. It would be valuable to compare the same interviewees’ roles and knowledge and how their skills might have evolved and whether they are utilized differently than they are today.
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Korvenranta, H. (2017). *HR-osaston painajainen: Taas uusi yrityskauppa ja uusi organisaatio voimaan heti*. CGI. Available at: https://www.cgi.fi/blogi/hr-osaston-


**Interviews**

Interviewee “A” (2019). Sales and marketing, fashion store. E-mail interview on July 5, 2019.

Interviewee “B” (2019). Sales manager, department store. E-mail interview on July 7, 2019.

Interviewee “C” (2019). Department manager, sports’ store. E-mail interview on July 10, 2019.


Interviewee “E” (2019). Service manager, counter services, supermarket. E-mail interview on July 12, 2019.
Appendix 1 Categorization of interview questions

1. BACKGROUND QUESTIONS

1. BACKGROUND

1.1 Could you tell a brief introduction of yourself, who are you? Also, tell briefly your professional background and current position.
1.2 How would you describe yourself as a person? And as a worker?
1.3 How would your supervisor describe you as a person? And as a worker?
1.4 What would you say are your best traits?
1.5 Are you able to utilize those traits in your work?

2. MANAGERIAL AND ORGANIZATIONAL PROCESSES

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>INTERVIEW QUESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 COORDINATION AND INTEGRATION:</td>
<td>2.1.1 What tasks are on your responsibility in your work place?</td>
</tr>
<tr>
<td>- How efficiently and effectively activities are coordinated</td>
<td>2.1.2 Are they different from other peoples’ tasks in the same work place?</td>
</tr>
<tr>
<td>- How external activities and technologies are coordinated and integrated (affect competence)</td>
<td>2.1.3 If you have time during the day from your duties, what do you do?</td>
</tr>
<tr>
<td>- How competencies and capabilities are embedded by coordinating and combining (even in minor technological changes)</td>
<td>2.1.4 Has there been any changes in your work place during the time you started until now? E.g. Organizational/personal job duties/processual?</td>
</tr>
<tr>
<td>(Teece et al., 1997).</td>
<td>2.1.5 If yes, have they changed the way you do your work?</td>
</tr>
<tr>
<td>2.2 LEARNING:</td>
<td>2.2.1 Do you perform your work individually or does it include team work?</td>
</tr>
<tr>
<td>- Enables tasks to be performed better and faster</td>
<td>2.2.2 What do you like about individual work the best? What about working in team?</td>
</tr>
<tr>
<td>- Enables identification of new opportunities</td>
<td>2.2.3 Do you do cooperation with some people who do not</td>
</tr>
<tr>
<td>- Involves organizational and individual skills</td>
<td></td>
</tr>
<tr>
<td>- Learning processes are social and collective</td>
<td></td>
</tr>
</tbody>
</table>
- Through individual or cooperation of group, leads to understanding of complex problems requiring common rules of communication and coordinated procedures
- Organizational knowledge is created by learning and resides in new patterns of activity or a new logic
- Interorganizational learning through cooperation and partnerships (Teece et al., 1997).

work regularly in the same work place (inside or outside your company)?

2.2.4 Could you describe one event where you have worked as part of a team within your company that has some significance to you.

2.2.5 How do you educate yourself (personally and professionally)? Education of skills related to work, personal skills, hobbies etc.

2.2.6 How information related to everything happening in your company is shared in your work place?

2.2.7 How do you think you have changed/developed as a worker during the time you have worked in your current workplace?

### 2.3 RECONFIGURATION:
- Requirement of constant alertness towards the field of industry and operational environment and technologies
- Willingness to adopt best practices
- The grasp of market opportunities emerges with individuals in the market interface (identification of opportunities) (Felin & Powell, 2016).

2.3.1 What kind of channels of information do you use in work and outside work?

2.3.2 Do these channels share information related to your work?

2.3.3 If you receive new information related to your work, do you utilize or share it somehow?

2.3.4 Has there been some kind of changes in the field (retail) you work in during past few years?

2.3.5 Has those possible changes in the field brought changes in your company and work place?

### 3. PATHS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>INTERVIEW QUESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Significance of company history</td>
<td>3.1 How do you think your employer/company has evolved or changed during its whole existence?</td>
</tr>
<tr>
<td>- Investments made before and company culture with different routines and procedures affect its future performance and have an impact e.g. on learning (as it is a process of experimenting, feedback and evaluation)</td>
<td>3.2 Could you name some examples of those changes that you think are meaningful? (processes, new technologies etc.)</td>
</tr>
<tr>
<td>- Understanding of cause-effect relationships (Teece et al., 1997).</td>
<td>3.3 In almost every work, there are some routine tasks: could you name yours? Have they changed over time and do you think they will change at some point in future?</td>
</tr>
<tr>
<td></td>
<td>3.4 In your every day work, what would you consider are the most important procedures?</td>
</tr>
<tr>
<td></td>
<td>3.5 If some routines and procedures have already changed, why do you think is the reason for that?</td>
</tr>
<tr>
<td></td>
<td>3.6 If all your routine tasks would disappear, what would you</td>
</tr>
</tbody>
</table>
4. POSITIONS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>INTERVIEW QUESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 If you could change something in your current duties, what would it be?</td>
<td></td>
</tr>
<tr>
<td>4.2 If taken into account every task you do, do you think you have enough time for everything?</td>
<td></td>
</tr>
<tr>
<td>4.3 What tasks do you think you perform the best?</td>
<td></td>
</tr>
<tr>
<td>4.4 What tasks do you like the most?</td>
<td></td>
</tr>
<tr>
<td>4.5 Are there some tasks that you would like to do but are not doing at the moment?</td>
<td></td>
</tr>
<tr>
<td>4.6 Are there some tasks that you would not like to do but are doing at the moment?</td>
<td></td>
</tr>
<tr>
<td>4.7 Are there some tasks or duties that you think should be done by someone but no one is doing at the moment?</td>
<td></td>
</tr>
<tr>
<td>4.8 What do you think is the reason (or reasons) that differentiate your company from competitors?</td>
<td></td>
</tr>
</tbody>
</table>

- Ability to shift allocation of resources away from traditional objectives
- Competencies need to be accumulated of routines, skills and complementary assets that are not easily imitated
- Finding of alternative ways to achieve same functionalities
- Understanding of processes (Teece et al., 1997).

5. MICROFOUNDATIONS OF DYNAMIC CAPABILITIES

(Distinct skills, Processes, Procedures, Organizational structures, Decision rules and Disciplines)

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>INTERVIEW QUESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 SENSING:</td>
<td></td>
</tr>
<tr>
<td>5.1.1 What kind of personal attributes would you say help you in your everyday work?</td>
<td></td>
</tr>
<tr>
<td>5.1.2 Do you feel these attributes are utilized in the design of your responsibilities?</td>
<td></td>
</tr>
<tr>
<td>5.1.3 Do you think there are some things that could be developed (or even changed) in your work place?</td>
<td></td>
</tr>
<tr>
<td>5.1.4 If you have suggestions for developments and changes, do you think you can communicate them forward?</td>
<td></td>
</tr>
<tr>
<td>5.1.5 Do you think you have some kind of information that</td>
<td></td>
</tr>
</tbody>
</table>

- Opportunities are discovered and created through cognitive and creative capacities of individuals
- Requires individuals having access to information and ability to recognize, sense and shape developments
- Ability to interpret information and filter it from professional and social contacts to create assumptions (e.g. on evolution of technologies or customer needs)
- The importance of organizational processes in supporting
| the gathering and filtering of technological, market and competitive information (Teece, 2007). | could benefit the whole company? (e.g. information obtained from customers, from social media etc.)  
5.1.6 If yes, how do you share this information? |
|---|---|
| **5.2 SEIZING:**  
- Opportunity preparation: requirement for resources in development and commercialization and maintaining and improving technological competencies and complementary assets  
- Management’s ability to make decisions (e.g. on company business model, technological choices, which markets to target) & requirement of tacit investment skills  
- Significance of impact on employee performance (Teece, 2007). | **5.2.1 Are there possibilities for training and learning new things in your company?**  
**5.2.2 How have you learned to do your job?**  
**5.2.3 Do you feel, that in some areas you would like more training?**  
**5.2.4 How new things are introduced in your work place?**  
**5.2.5 Are there some things (related to your work) that you do not know how to do, but would like to learn?**  
**5.2.6 Are there some issues, that you think would help you to do your work easier and better?** |
| **5.3 RECONFIGURING OF CAPACITIES**  
- Maintaining dynamic capabilities within the company requires leadership skills & ability to renew and redesign of routines  
- Capability in continuous aspirations to build, maintain and adjust complementarity of product offerings, systems, routines and structures  
- Necessity of efficient resource alignment, coalignment, realignment and redeployment (Teece, 2007). | **5.3.1 If there are some changes happening in the industry or in customer demand, how they are being reacted by your company?**  
**5.3.2 Do you feel, that you have freedom to influence how you do your work?**  
**5.3.3 In your work place, how do you share tasks between colleagues?**  
**5.3.4 Do you know what kind of future plans there are within your company? Would you have a suggestion for some future plans, for example how to develop the company?**  
**5.3.5 Have there been some new positions in the company, that did not exist few years ago (completely new work)?**  
**5.3.6 Do you think there should be some new positions in the company, which do not exist yet?**  
**5.3.7 What do you think your customers would be missing, if your company would not exist?**  
**5.3.8 What do you think your specific work place would be missing, if you went working for somewhere else?** |
Appendix 2 Interview form for interviewees in Finnish

HAASTATTELU PRO GRADU-TUTKIMUKSEEN, 
HANNELE TUOHIMAA, 2019.

Vastaathan kysymysten alle, kiitos!

1. TAUSTASI

1.1 Esittelisitkö itsesi lyhyesti, kuka olet? Kertoisitko myös ammatillisen taustasi ja nykyisen tehtäväsi?
1.2 Kuinka kuvailisit itsäsi persoonana? Entä työntekijänä?
1.3 Kuinka esimiehesi kuvailisi sinua persoonana? Entä työntekijänä?
1.4 Mitkä sanoisit olevan sinun parhaat ominaisuutesi?
1.5 Onko sinulla mahdollisuus hyödyntää näitä ominaisuuksia työssäsi?

2. JOHTAMINEN JA ORGANISATORISET PROSESSIT

2.1: KOORDINOINTI JA INTEGROINTI

2.1.1 Mitkä tehtävät ovat vastuullasi työpaikallasi?
2.1.2 Ovatko tehtäväsi erit kuin muilla työpaikallasi?
2.1.3 Jos sinulle jää työpäivän aikana aikaa tehtävistä, mitä teet?
2.1.4 Onko työpaikallasi ollut minkäänlaisia muutoksia sen aikana kun olet työskennellyt siellä? Esim. Organisaatiomuutoksia, muutoksia käytänteissä tai henkilökohtaissä tehtävissä jne.
2.1.5 Jos kyllä, ovatko muutokset muuttaneet kuinka teet työtäsi? Miten?

2.2: OPPIMINEN

2.2.1 Teetkö työtäsi itsenäisesti vai liittyikö siihen tiimityöskentelyä?
2.2.2 Mistä tykkääät itsenäisessä työskentelyssä eniten? Entä tiimityössä?
2.2.3 Teetkö yhteistyötä sellaisten ihmisten kanssa, jotka eivät työskentele säännöllisesti samalla työpaikalla (samanaikaisesti eri yrityksen edustajia/työntekijöitä)?

2.2.4 Kuvailisitko yhden tapauksen, jossa olet työskennellyt osana yrityksesi tiimissä, jolla on ollut sinulle jokin merkitynen erityysryhmä?

2.2.5 Kuinka koulutat/kehität itseäsi ja taitoja sinua henkilökohtaisesti ja ammatillisesti? (taidot, joita tarvitset työssäsi tai henkilökohtaisesti, esim. harrastukset)

2.2.6 Kuinka tiedot, jotka liittyvät yrityksesi toimintaan, jaetaan työpaikallasi?

2.2.7 Kuinka koet muuttuneesi/kehittyneesi työntekijänä sinä aikana kun olet työskennellyt nykyisessä työpaikassasi?

2.3: RECONFIGURATION – UUDET RAKENTEET

2.3.1 Millaisia tiedonsaanti-kanavia käytät työssäsi ja työsi ulkopuolella?

2.3.2 Jakavatko nämä kanavat tietoa, jotka liittyvät sinun työhösi?

2.3.3 Jos saat työhösi liittyvää uutta tietoa, hyödynnätkö tai jaatko sitä jollain tavalla? Miten?

2.3.4 Onko alallaasi ollut jonkinlaisia muutoksia muutamien viimeisten vuosien aikana?

2.3.5 Onko nuo mahdolliset alan muutokset tuoneet muutoksia sinun yrityksellesi ja työpaikallesi?

3. PATHS - POLUT

3.1 Kuinka koet työnantajasi/työpaikkasi kehittyneen ja muuttuneen sen olemassaolon aikana?

3.2 Nimeäisitkö joitain esimerkkejä noista kehityksestä/muutoksista, jotka ovat mielestäsi merkityksellisiä? (esim. Prosessit, uudet teknologi jne.)

3.3 Melkein jokaisessa työssä on joitain rutientehtäviä: nimeäisitkö omasi? Ovatko ne aina olleet samat, ja uskotko niiden olevan myös tulevaisuudessa samat?
3.4 Mitkä käytänteet/toimintatavat koet olevan kaikista tärkeimmät jokapäiväisessä työssäsi?
3.5 Jos jotkin rutinset ja käytänteet/toimintatavat ovat jo muuttuneet, mistä uskot sen johtuvan?
3.6 Jos kaikki rutinsethtäväsi katoisivat, mitä (tehtäviä) tekisit siitä vapautuvalla ajalla työpäivänäsi?

4. **POSITIONS – TOIMET/ASEMAT**

4.1 Jos voisit muuttaa jotain nykyisissä työsi vastuissa/velvollisuusississa, mitä muuttaisit?
4.2 Jos mietit jokaista työtehtäväsi, koetko että sinulla on tarpeeksi aikaa niihin?
4.3 Mitkä työtehtävät koet tekeväsi parhaiten?
4.4 Mistä tehtävistä pidät eniten?
4.5 Onko työpaikallasi olemassa sellaisia tehtäviä, joita haluaisit tehdä mutta et tee tällä hetkellä?
4.6 Onko työpaikallasi olemassa sellaisia tehtäviä, joita et haluaisi tehdä mutta teet tällä hetkellä?
4.7 Koetko, että työpaikallasi on olemassa sellaisia tehtäviä, jotka pitäisi tehdä jonkun toimesta mutta kukaan ei tee tällä hetkellä?
4.8 Millä tavalla/mistä syistä koet yrityksesi/työpaikkasi erottautuvan kilpailijoista?

5. **MICROFOUNDATIONS OF DYNAMIC CAPABILITIES**

(Distinct skills, Processes, Procedures, Organizational structures, Decision rules and Disciplines)

5.1: **SENSING**

5.1.1 Mitkä henkilökohtaiset ominaisuutesi koet, että auttavat sinua jokapäiväisessä työssäsi?
5.1.2 Koetko, että näitä ominaisuuksiasi hyödynnetään kun vastuualueitasi
suunnitellaan (tai on suunniteltu aiemmin)?
5.1.3 Koetko, että työpaikallasi on asioita, joita voisi kehittää (tai muuttaa)?
Mitä ne ovat?
5.1.4 Jos sinulla on kehitys- tai muutosehdotuksia, koetko että voit kertoa
ne eteenpäin työpaikallasi?
5.1.5 Uskotko, että sinulla on jotain sellaista tietoa, joka voisi hyödyttää
koko yritystä? (esim. tietoa asiakkailta, sosiaalisesta mediasta jne.)
5.1.6 Jos kyllä, jaatko/kuinka jaat tätä tietoa eteenpäin?

5.2: SEIZING
5.2.1 Onko yrityksessänne/työpaikallasi mahdollisuksia valmennuksiin ja
uusien asioiden oppimiseen? Millaisia mahdollisuksia nämä ovat?
5.2.2 Kuinka olet oppinut tekemään työsi?
5.2.3 Koetko, että joillain osa-alueilla haluaisit lisää valmennusta/opetusta?
5.2.4 Kuinka uudet asiat esitellään työpaikallasi?
5.2.5 Onko joitain sellaisia työhösi liittyviä asioita, joita et osaa tehdä mutta
haluaisit oppia teknemään?
5.2.6 Onko (alalla) olemassa jotain sellaisia asioita, jotka uskoisit auttavan
sinua tekemään työsi helpommin ja paremmin?

5.3: RECONFIGURING OF CAPACITIES
5.3.1 Jos joitain muutoksia alalla yleisesti tai esimerkiksi muutoksia
asiakkaiden vaatimuksissa tapahtuu, kuinka niihin reagoidaan
yrityksessäsä/työpaikallasi?
5.3.2 Koetko, että sinulla on vapaus vaikuttaa siihen, kuinka teet työsi?
Mitä se näkyy työssäsi?
5.3.3 Kuinka jaatte työtehtävät kollegoiden kesken työpaikallasi?
5.3.4 Tiedätkö, millaisia tulevaisuuden suunnitelmia/hankkeita
yrityksessäsi/työpaikallasi on? Olisiko sinulla joitain ehdotuksia
tulevaisuuden suunnitelmiin, esimerkiksi kuinka yrityksenne toimintaa
voisi kehittää?
5.3.5 Onko yritykseenne/työpaikalleen tullut uusia toimenkuvia, joita ei
ollut olemassa muutama vuosi sitten (kokonaan uutta työtä)?
5.3.6 Koetko, että yrityksessänne pitäisi olla jokin uusi toimenkuva (uusia toimenkuvia), jota ei ole olemassa yrityksessänne vielä?
5.3.7 Mitä uskoisit asiakkaidenne jäävän kaipaamaan jos yrityksenne ei olisi olemassa?
5.3.8 Mitä uskoisit työpaikkasi jäävän kaipaamaan jos sinä menisit työskentelemään jonnekin muualle?

KIITOS PALJON VASTAUKSISTASI JA PANOKSESTASI TUTKIMUUKSEN EDISTÄMISESSÄ!

-Hannele
Appendix 3 Categorization of part 1 of the interviews

<table>
<thead>
<tr>
<th>ADJECTIVES</th>
<th>NOUNS</th>
<th>VERBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conscientious (interviewee A and E)</td>
<td>Small brick&amp;mortar store (A)</td>
<td>Studied among work (A)</td>
</tr>
<tr>
<td>Gutsy (A)</td>
<td>Professional (A, E)</td>
<td>Duties varied based on learning and education (A)</td>
</tr>
<tr>
<td>Reliable (A)</td>
<td>Retail professional (A)</td>
<td>Due to change of profession, I quit my old job (A)</td>
</tr>
<tr>
<td>Approachable (A)</td>
<td>Electric and computer sciences (A)</td>
<td>Learning of new things (A)</td>
</tr>
<tr>
<td>Brave (A)</td>
<td>Production duties, project duties (A)</td>
<td>I like doing and maybe collect it for myself too much (A)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I have too many things going on at the same time, should do one thing at a time (B)</td>
</tr>
<tr>
<td>Ambitious (A)</td>
<td>Sales and marketing (A)</td>
<td>Exceeding oneself (A)</td>
</tr>
<tr>
<td>Hard-working (A, B, C, E)</td>
<td>Physical store (A)</td>
<td>I like responsibility (A)</td>
</tr>
</tbody>
</table>
| Good customer servant  
(A) | Digital marketing (A) | To set goals for myself (A, D) |
| Versatile (in know-how)  
(A, E) | Responsibility (A) | To be on top of things (B) |
<p>| Good in people knowledge (A) | Customer servant (A) | I want my colleagues and I have fun and enjoy being at work (C) |
| Kind/friendly (A, B, E) | Seller (A, C) | Getting along with everybody (C, E) |
| Talkative (B) | Knowledge of human nature (A, D) | Luckily, in some areas, I also get to visualize (C) |
| Good listener (B) | Kindness/friendliness (A) | Always aim to challenge myself and others (D) |
| Flexible (B) | Barber-hairdresser (B) | Having “eye for the game” in different situations (D) |
| Good organizer (B) | Makeup-artist (B) | I throw myself in different situations with all my hear (E) |
| Cheerful (B, C, E) | Sales manager (B) | Ready for everything (E) |</p>
<table>
<thead>
<tr>
<th>Nice (B, E)</th>
<th>Worker/employee (B)</th>
<th>Ability to see and understand different things’ interconnectedness (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productive/efficient (B, C)</td>
<td>Tolerance for pressure (B)</td>
<td>Understanding of key figures, where they come from (or are formed from) and how to read them (E)</td>
</tr>
<tr>
<td>Reactive (B)</td>
<td>Department manager (C)</td>
<td>Seizing tasks fast and doing them (B) Daring to seize any work (E)</td>
</tr>
<tr>
<td>Profitable (B)</td>
<td>Equipments and shoes (C)</td>
<td>-</td>
</tr>
<tr>
<td>Hectic (B)</td>
<td>Sports (C)</td>
<td>-</td>
</tr>
<tr>
<td>Social (C)</td>
<td>Visual merchandising (A, C)</td>
<td>-</td>
</tr>
<tr>
<td>Positive (C)</td>
<td>Store manager, project manager, area manager, chain manager, merchandiser, entrepreneur (D)</td>
<td>-</td>
</tr>
<tr>
<td>Helpful (C, E)</td>
<td>Problem solving ability (D)</td>
<td>-</td>
</tr>
<tr>
<td>Trait</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Open (C)</td>
<td>Situational awareness (D)</td>
<td></td>
</tr>
<tr>
<td>Detriment (D)</td>
<td>Strength of character (D)</td>
<td></td>
</tr>
<tr>
<td>Uncompromising (D)</td>
<td>Limitless self-confidence (D)</td>
<td></td>
</tr>
<tr>
<td>Loyal (D, A, E)</td>
<td>Bachelor of marketing (E)</td>
<td></td>
</tr>
<tr>
<td>Strong leader (D)</td>
<td>Chef, shift manager, service manager/meat mastering (E)</td>
<td></td>
</tr>
<tr>
<td>Committed (E)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Enthusiastic (E)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Responsible (E)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Able to inspire (E)</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

- indicates not applicable or not specified.