How to keep the Finance employees employable during the industry disruption?

Case: Company X Finland back office department

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Business Management and Entrepreneurship

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ABSTRACT

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TIIVISTELMÄ

Tämä tutkimus tehtiin rahoitusalan yritykselle X. Opinnäytetyössä selvitettiin mitkä asiat muuttavat back office työtä, mihin suuntaan ja mitä osaamista voidaan yhä hyödyntää sekä millaista osaamista tarvitaan lähitulevaisuudessa. Työn tarkoituksena oli tukea yhtiön strategista henkilöstösuunnittelua, antaa työvälineitä yrityksen esimiehille kommunikoida ja ohjata työntekijöiden osaamisenkehittämistä vastaamaan tulevaisuuden tarpeita ja siten pitää työntekijöitä työmarkkinakelpoisina ja tukea yrityksen strategiaa.

Teoreettisessa viitekehyksessä kuvataan digitaalisuuden vaikutuksia työtehtäviin ja tulevaisuuden osaamistarpeita sekä jatkuvaa kehittymisen tarvetta. Tutkimus on laadullinen tutkimus, jonka tiedonkeruu tehtiin puolistrukturoiduilla teemahaastatteluilla. Ne dokumentoitiin huolellisesti ja tulosten analysoinnissa käytettiin word ja excel taulukointia.

Tutkimustulokset osoittavat, että back office työtä on vähemmän ja se kehittyy asiantuntijatyöksi. Työntekijän tulee sopeutua muuttuvaan toimintaympäristöön sekä kehittää omaa osaamistaan jatkuvasti. Joustavuus on kompetenssi, jonka päälle voidaan rakentaa muita kyvykkyyksiä. Esimiesten tulee tunnistaa potentiaalit, antaa heille kehittymismahdollisuuksia ja luoda heille urapolkuja sekä pitää muut työntekijät motivoituneina hoitamana vielä olemassa olevia työtehtäviä.

Avainsanat Disruptio, osaaminen, kyvykkyydet

Sivut 56 sivua, joista liitteitä 1 sivua

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ABSTRACT

This research was delivered for a case company X, which operates in Finance industry. The purpose of this thesis is to find out how the back office work changes and what competences are still valid and what kind of skills and competences are needed in the near future. This thesis aims to support the company X strategic workforce planning, give tools for the leaders to communicate the change in order to keep the employees employable. This thesis aims to give guidance what kind of competence development should be done to match for the future needs.

The theory part describes the impacts of digitalisation, the future competence needs and the need for continuous learning. This is a qualitative research. Data was collected with semi structured interview. Interviews were carefully documented. For the data analysis both word and excel tables were used.

The research findings shows that there will be less back office work and it changes to specialist work. Employees need to be resilient and learn constantly. On top of right mindset it is possible to build other competences. Leaders need to identify potentials and offer the development possibilities and career steps for them. At the same time they need to keep the other employees motivated to carry out the existing old tasks.

Keywords Disruption, competence, skills

Pages 56 pages including appendices 1 pages

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1 INTRODUCTION

1.1 Background

Nordic Banks are today in a very good condition and they make profit. It is good news but at the same time it can be bad news. They have not felt the same urgency to transform their business to become more digital as their competitors in Europe. In less than ten years traditional universal banks are not operating as today, but more digital banks and utility providers many of them are forced to evaluate the way how they operate. One-third of the Nordic Bank revenues are in danger to disappear if they don´t act. Banks need to become more relevant to their customers. (Engström 2015, 7-8.)

Automation and globalisation have reshaped the labour market. Simple repeating jobs have been automated or outsourced to cheaper countries which has led to the decreased share of middle wage jobs . At the same time the share of both better and less paid jobs have arisen. The technological development creates new work but will also challenge the employees and their competences. (Marttinen 2018, 89.)

1.2 Introducing the case company

The case company X belongs to a bigger global Finance group. It is established late 1950´s and operates mainly in Nordic markets. It has approximately 2000 employees in six different countries. Employees work in sales, development, IT, customer service and back-office or other support functions.

Case company X serves both corporate and household customers. The main services are Co-branded Master Cards, Factoring, Investment Credits e.g. Car higher purchase and leasing.

The case company X has renewed their values and is in the middle of the cultural transformation. Many big IT investments are ongoing, and they will offer more self-services and faster deliveries for their customers. Company language is English and the new development will mainly deliver user interfaces in company language.

This thesis will focus to the work in back office department in Finland. More than 10 % of these employees have worked over 30 years in the company and almost 30 % of the employees have worked less than 3 years in the company.

During 2018 big organisational change was carried out in this unit which meant enormous need to train new skills and competences for the employees who had done the same work several years. The change was made based on the customer needs and experiences. Now they are adjusting their operations again based on the demands from the markets in order to be competitive. (Company X, intranet)

1.3 **Research Questions and Objectives**

The case company X has recognised the rapid change of the industry. Digital services are developed and implemented constantly in the company. Repeating routine tasks in back-office work have diminished. Customers do partly their former work and when contacting they have more complex issues to solve. The case company has a need to understand what is the future of the back office work and what are the needed skills and competences to do profitable business with the existing employees. The focus of this research is in back office work.

The research questions are

- How will the back-office work change in the future?
    - What kind of work will disappear and what new comes in?
- What are the capabilities and skills required in the future in the case company?
    - How to prepare for the future?

The objective of this Thesis is to support the strategic workforce planning of the case company X and find out how to keep the existing back office employees employable and productive. Secondly the research enables the communication of the future change and needed skills and competences in order to make the existing back office employees more proactive and willing to enhance and develop themselves towards the future competence needs.

2 **THEORETICAL FRAMEWORKS**

In the theoretical part the research presents those scientific work, theories and models how the phenomena has earlier been presented. (Kananen 2010, 21.) Theory also ease up the communication between different researchers so that every single basic principles are unnecessary to repeat. (Hirsjärvi et al 2014, 142.)

Technology development and new innovations can ruin the well-functioning business models, in other words it is called disruption. (Gans 2016, 25.) As the development nowadays is fast and forecasting the future direction is difficult, it can almost be impossible to see where disruption

occurs. In a best case it can be used as a power to develop or in the worst case the company can be sleeping and losing their business momentum. (Gans 2016, 62.) Every business model meets their end day at some point. Disruption can be a wakeup call which kicks off the company to act. The starting point should be value creation for the customers even as more profitable business models. Technology should be seen as an enabler for this work together with a great leadership. (Westerman 2014, 92-93.)

Rogers (2016, 4-10) mentions that companies used to launch different kind of marketing campaigns to reach out their customers and offer their standardised products. Nowadays recommendation of peers have become new normal and that is why it is so important to think about company brand and reputation. The industry borderlines have also weakened and competitors might have contradictory business models. Customers evaluate the products continuously and therefore the customer journeys needs to be the starting point in development work. In addition to that companies have plenty of data to use and modern tools to support development work. Time to market has become really fast and this challenges the companies to reshape their business models so that they stay relevant . In order to establish proper customer strategy the company needs to have knowledge and understanding of the customer value, improved marketing activities, digitalisation and customer behaviour.

2.1 **Digitalisation of the business**

Digitalisation, as term , has been used only recent years, but it doesn´t have a proper definition, instead it is often described with examples. Digitizing means converting analogic to digital like paper book to e-book, warehouse to online shop or records to CDs and again to streaming. (Ilmarinen & Koskela 2015, 22.) Changes in customer behaviour has become the most significant driver for digitalisation. Basic reasons for the digitalisation are technological innovations, where the impact can be compared to the electrical gadgets like motors, lighting etc. Simultaneously software, application and data transfer development has been remarkable and become more and more inexpensive. (Ilmarinen & Koskela 2015, 58-60.)

Marttinen (2018, 143-146) says digitalisation can be defined the digitalised technologies have spread out. Digitalisation reduces the need to use paper and increases the electronic communication. In year 2016 Palta, Union of Service industry employers, published their report which indicated 260 000 service industry work places would be impacted by digitalisation and as a result of increased digitalisation 90 000 work places could disappear of change heavily. Constant and fast development requires lifelong learning. Digitalisation increases self-services as customers serve themselves and there is less to do e.g. less physical mail means less work for postmen or financial reports will improve by the

better usage of data analytics. This development is just in the beginning. Ryan Avent, who works as a reporter in the newspaper Economist, has stated that employees in the developed countries are so well educated that, it is hard to enhance the education level without any significant training innovations, consequently digitalisation will also impact to the better educated jobs.

Digital transformation changes the way how the company interacts with their customers. Digital Masters put lots of efforts to understand the customer behaviour and they also design the customer experience outside in. They try to understand what customers do, why they do it and how this can be served from the digital channel. Data and analytics are used enormously. At the same time new digital channels will be introduced, which need to be very user friendly and easy to use. Digital and physical experience needs to be working like a net, seamlessly. (Westerman et. al 2014, 30-34.)

Traditionally customers have been the objects for the marketing and buyers of the products and services. Digitalisation widens their role as they begun to be co-creators of the services and products or acting as a customer advisor for the other customers by providing support and information. They can become developers by providing their ideas to improve or create the product or service. (Ilmarinen et Koskela 2015, 178-179.) Involving the employees to the digital development adds value to the development work as they know the customer behaviour and have practical user experiences. Participating to the development work narrows the gap of using the new technology. It also helps to understand how the work is changing. (Ramstad & Hasu 2019, 19-20.)

Kodak and Fujifilm, two traditional photographing companies, business models where challenged when taking pictures transformed to mobile phones and pictures became digital. Kodak couldn´t shift their business model early enough which caused the death of the company. Fujifim begun to take advantage of their professionalism and transformed their business to new and could last through the disruption. (Westerman et al. 2014, 83.)

Borders Books was established in the beginning of the 1970´s and it was operating with thousands of stores around USA and employed over 25 000 employees. In year 2009 the turnover was over 3 billion USD. Unfortunately their leaders missed the vision and couldn´t believe the future was for e-books which lead them to sell their online business to upcoming Amazon. The other mistake they made was not believing streaming instead they sold CD´s and DVD´s in physical stores which they also kept developing and used lots of money to that development work. The company disappeared as the renewal of the business started too late and the gap between them and the market was too wide. Lessons to learn is that don´t wait too long or you don´t have money to do it. Small companies are often more agile , they are able to innovate and have

courage to take risk. They also use their whole organisation for continuous improvements. (Linker, 14-176.)

Nowadays people share their homes and cars, thanks to the digital technology, which enables new platform business models. Airbnb launched their online marketplace to private persons already in 2008. Technology enables business models for small companies and with smaller investment. Earlier only large hotel chains could operate in accommodation business as it required lots of capital to invest. Today who ever can offer their homes and cottages for accommodations worldwide. (Westerman et al 2014, 80-81.)

The old waterfall development method has come to an end. Today the development needs to be done fast due to the digitalisation which requires agile development. This means the product or the service are not the final versions but they will be launched as a prototype and customers are involved to the testing. That of course is challenging the courage of the company too. (Westerman 2014, 194.) Waterfall method means that all the development phases are carefully planned beforehand. Development work starts from the requirement work and ends to the testing and implementation. Every phase is done systematically in that order. (Holcombe 2008, 4.)

Digitalisation happens in macroeconomic level when people change their behaviour, the structures of the society and markets will change. In Microeconomic level people is an individual and how this person deals with the company. This means the company needs to consider the impact of the digitalisation to their business models, way of operating, competences and how they get income. (Ilmarinen & Koskela 2015, 23)

Lehti et al (2012, 27-29) writes the dual economy with the old system and new technology can last quite a long time. They ponder that impact of digitalisation and internet can be even bigger than the development of electricity. The benefits come mainly by applying the technology to service industry not developing it. Digitalisation can easily scale up which offers advantages.

2.1.1 Automation

Automatos is a Greek word and can be translated as working by itself. Automation means that people are not needed to run the machines. Process automation is suitable for repeating processes and to produce homogeneous quality. Automation levels can vary which means that on the lower level automation people assistance might be needed. In the highest level of automation people might only steer the system or supervise the system. Paradoxical is that the higher the automation level is the role of the human being becomes more crucial in maintenance and service work. The absolute value is not the high level automation instead

it should be driven by need not technology. (Marttinen 2018, 64-66.) Digitalisation changes the nature of automation. Earlier the focus was to automate the back office processes. Nowadays digitalisation is embedded to these processes like using virtual assistants e.g. Anna which is Ikea´s virtual assistant serving customers in their questions. (Ilmarinen et Koskela 2015, 125.)

The first industrial revolution started 1785 when the first mechanical weaving machine was taken into use. The work at that time was simpler and could be split to several pieces and teaching others to do the work was easy. At that time it was not unusual to use child labour as they had many benefits like flexibility and small size. They were used in mines in narrow and shallow areas. (Marttinen 2018, 10-16.)

Henry Ford introduced an assembly line to produce T-Ford. That is the starting point of the second industrial revolution in 19th century. The assembly line improved the production efficiency tremendously as the assembly time of T-Ford decreased from 12,5 hours to 93 minutes. At the same time it meant that ordinary people could afford to buy their own T-Ford as the cost of the car diminished. The management needed to develop along the technology as well. (Marttinen 2018, 25- 27.)

The term technological automation came up with the third technological revolution as the electronics and information technology developed. In year 1947 Ford established automation unit which made also the term more familiar worldwide. Car industry was the first one to use robots in their production in 1960´s. Thirty years later 400 000 industrial robots had been implemented. Car industry is still the frontrunner in the usage of robots. Intel did they breakthrough for the information technology in 1972 by introducing 4 -bit microprocessors. (Marttinen 2018, 38-39.)

Industrial revolution 4.0 has no clear starting point based on a breaking through technology. It is considered to begin in 2011 in Germany Hannover Messe occasion. This also means that the innovations are less tangible compared to the previous. They are e.g. Cloud Services, Big Data, Artificial intelligence (AI) and internet of things (IOT). This revolution has four main principles: Machines are compatible and able to communicate with the people and other machines. Transparent information and capabilities to create virtual models with embedded real information. Machines can present information in visual way and help people in exhausting and demanding tasks. Ability to make decisions and carry out the tasks independently. Automation and robotics have continued to develop, and new rising industries has come in. Nano technology is also one of the marks of the fourth industrial revolution. (Marttinen 2018, 57-59.)

In Finnish labour review Olli Koski (2018, 12-15) presents that the automation is increasing in occupations where it has not been seen earlier. Tasks which have variation and less routine automation will

replace or complete human work in the future and in more repeating routine tasks automation increases strongly. The most promising development areas are :

- Interaction with the physical environment like service robots and automated traffic.
- Natural language development like chatbots, speech verification and automated text.
- Developed problem solving.

This kind of automation will without doubt change finance and service industry. Today automation is not able to place the results to any context or abstract nor can they argue the results.

Marttinen (2018, 94) writes that in Finland automation will affect most to salespersons, secretaries, bank employees and office employees. Less impact will be upon nurses, social workers and advisors. Jobs in manufacturing industry will be more automated compared to the service industry. Research done in 2014 by ETLA (Elinkeinoelämän tutkimuslaitos) researches Mika Pajarinen and Petri Rouvinen conclusion was that one third of the jobs in Finland are under threat of automation during next twenty years. This is of course a big worry, but it doesn´t necessarily mean that people would have less work to do in the future. (Etla, 2014). Some occupations could face radical transformation like financial advisors who could do less manual paperwork and use less time to make analysis and exceptions. Instead they would have more time interact with a customer and advise them. This is based on the McKinsey report where they mention that 60 % of the occupations have at least 30 % automation possibilities. Instead the existing automation could fully automate only 5% of the occupations fully. (Marttinen 2018, 94.)

Dan Gilbert established a mortgage company called Quicken Loans. In 1990´s he had a vision to offer mortgage loans via online which he also did. At that time it was totally new idea. He also wanted to centralise all the processing to one place in order to serve the whole country. The purpose of the centralisation was to increase the operational efficiency. Year 2010 was a really profitable and good year for them, but the company leaders gathered to a meeting to reinvent their business model, because they wanted to have successful years in the future as well. Normally in the companies it would have happen when there is a crisis at hand, but not in this company. These 25 leaders brainstormed how to improve their customer services and embed new technology to their processes to support their business. They have high ambitions to improve their operations and they have been rewarded as a best customer service for primary mortgage origination in USA.(Linker, 74-75).

StatsMonkey, a program, reported very professionally to a newspaper October 2009 what had happened in a Baseball match between Los Angeles Angles and Boston Red Soxit in United States. The text didn´t have

any grammatical errors and it was fluent. This program can transfer data and information to a proper news text. It starts from the game statistics in order to find out the game highlights and most important players after that summarises them into a condense text. Nowadays many media houses uses the improved version Quill by Narrative Science Incorporation. One of the users is Forbes. Kristian Hammond who is one of the founders of Narrative Science has said that by 2026 only 10 % of the articles are written by reporters and the majority is written by the program. This kind of a program could deliver high quality reports to other industries too. Information is gathered from various sources e.g. company data bases, internet pages, sales reports, financial reports etc. even social media could be used. After analysis process it creates a decent report. This is an excellent example about the transformation of the job which normally have required highly educated reporters. Today employers in USA have missed the adequate writing skills whereas the Qill program offers that skill. (Ford 2017, 97-99.) McKinsey (2017, 39-40) says it can be seen what occupations disappear, but what new will be coming is much harder to imaging. Technology also changes the existing occupations. Launching the ATM in USA enabled to open new branches as there was fewer tellers in one Branch during 1991 – 2007. Internet banking and financial crisis in 2008 reversed this development again.

Building up the automation level costs a lot and it takes time to implement it. When the companies consider the investment to automation several items are considered. Payback time should not be too long. Some companies are not in a good economic situation and don´t have full order books, which impacts to the possibilities to improve automation level. Sometimes it is better to invest in people and avoid long union processes and layoffs. On the other hand automation can improve the welfare in the work as the nature of the work changes. (Marttinen 2018, 103 & 107.)

2.1.2 Robotics

Marttinen (2018, 109-110) describes robotics to be automation with lots of high-class intelligence. The other typical feature is that it is close to the human being actions instead of a machine. Painting industry introduced the first robots in Finland 1970´s and later 1980´s they came along in welding industry. During that time 500 robots were working in Finland. In year 2016 new era of robots begun again. . (Marttinen 2018, 109-110.) Robotic Process automation (RPA) is mimicking human actions, interacting with the software applications and full filling the rule-based processes. Financing sector has used RPA to handle enormous data amounts with efficient and reliable processing. Since robots' work 24/7 the capacity will increase, and the deliveries become faster. (Tripathi 2018, 9-14) "OP (Osuuspankki) has hired robots" was the headline in Tivi´s article as they wanted to get more volumes without hiring new people. They had a plan to robotise processes, but soon after they found out that it is more parts of the processes which are reasonable to robotise. 80/20 % rule is fine

here; this means there is still need for employees to work with the manual processes and instead of creating too complex solutions. Robotising should be able to do within couple of weeks. It also gives room to postpone the large IT investments. (Tivi, 2017.)

Digital Workforce was established 2015 in Finland by three experienced IT managers as they found out the employees spend 50% of their time working with their PC´s and because renewal of the IT takes long time and is very expensive. So far, they have robotised over 300 processes in banking. Finance sector has been one of the leading industries to utilise RPA. Robotising has given cost savings, better customer experiences and better competitiveness. Figure 1 shows examples what kind of processes they have been robotising in Banking. (Digital workforce, 2020)

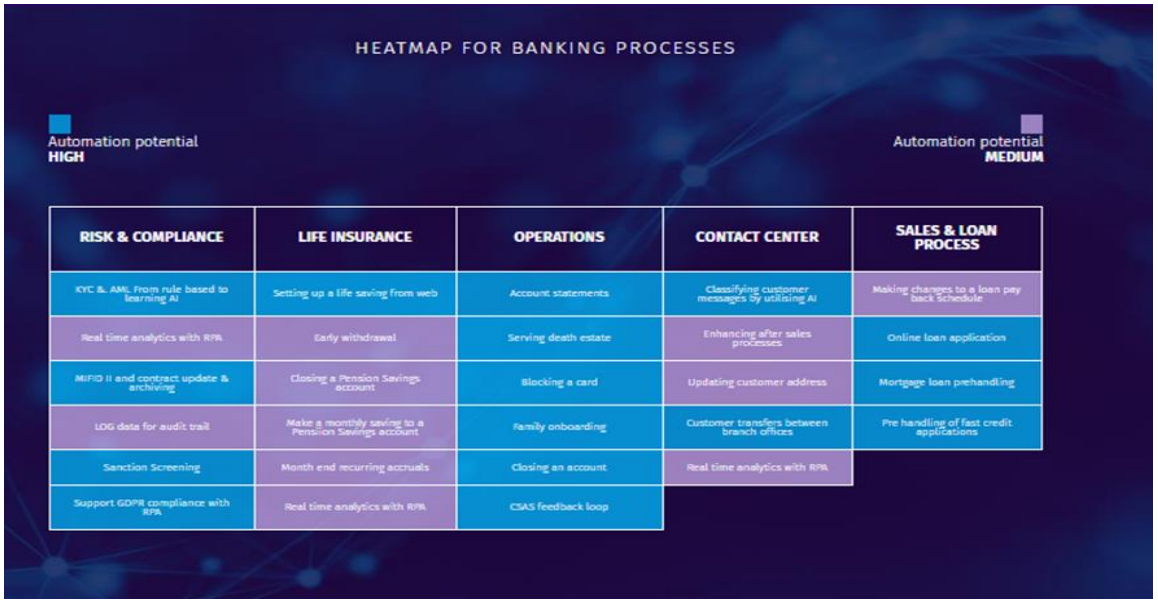

Figure 1. Digial Workforce robotised processes, internet pages 2020

Balas et al (2019, 456) define “Chatbots are a software program that performs cognitive service functions along with the understanding of the natural language”. They say that by 2022 almost 90% of the customer inquiries would be using this channel. Marttinen (2018, 118) writes that customer services will use more virtual assistants similar to Apple Siri and Amazon Alexa. The quality will improve rapidly by the year 2021.

In year 2018 Nordea Bank launched virtual assistant Nora to give investment advise to their customers. Nora asks few simple questions and based on that information recommends from five different options the most suitable one for the customer. Nora´s recommendations are especially for frequent saving and it has been noticed by the customers too. (Nordea, 2018).

Lianna Brinded (2017) wrote in Business Insider how Accenture automated 17 000 jobs without anybody to lose their job. Since robotization and AI is rapid to develop and implement, they did it within 18 months. 100.000 people were employed in back office processing where they now streamlined their processes and improved their productivity.

The biggest industry in western countries, Service sector, will by far meet the most challenging times in the near future. Automation and self-services are already broadly used in banking and finance sector. Alexandros Vardakostas who is the founder of Momentum Machine has been very honest and stated that their targets are not to improve operational efficiency but implement fully automated self-running processes. Most of the vendors mainly tell the positive impacts of robotics and automation. Jobs in service industry will meet lots of changes and they stand in front of the new era. Some jobs will disappear as the robotics will accelerate in many industries. There will be more self-services and new channels to serve the consumers. (Ford 2017, 29-37.) Dr Arndt Pechstein (2020) instead didn´t have such a dystopic picture. He presented e.g. that instead of building a car the companies can think about mobility needs so that the living environment is green and nice to live instead of having hundreds of parking slots, this will be supported by the right kind of technology.

Software tools enable teams to work from different locations and countries. Collaboration is a powerful tool and can combine the experienced team members and younger employees together. Meanwhile old habits can be hard to change and can mean that we still operate in silos. (Economist Intelligence, 2015). It is possible that companies begin to insource work back to the developed countries as the education level is high and employees can easily meet the requirements after robotics take care of the simple routine work. MIT Professor David Mindell has presented the needed future skills would be e.g. making conclusions, collaboration and interpreting the information from pictures and problem solving. He also says that there are jobs like aviators where confidence is always needed. He also believes the jobs are not only for intelligent people. (Marttinen 2018, 126-128.)

In 1960´s President J. Kennedy initiated discussion in the society how unemployment could rise due to the increasing automation. That was not the case after second World War. The same worry popped frequently up ever since as the technology kept on developing. Mid 1990´s economist Jeremy Rifking wrote a book “The End of Work” and created very gloomy future picture how information technology development will take over more jobs. Employees would work more efficiently and have less possibilities to impact to the tools and processes and at the same time their job will be more demanding and challenging. The impacts would be seen in several industries: service, production and agriculture. The Middle wage employees would be losing most. Rifking predicts also that more

jobs will become temporary and employees are required to be more flexible. Another economist Paul Krugman presented the opposite view as he claimed improved efficiency to create new workplaces. (Marttinen 2018, 45-51.)

2.1.3 Big data and machine learning

Information specialists say that most of the available information is unstructured. By this they mean that it is hard to compare or match the information as it is in many different forms. Nowadays information can be easily accessed as it is mainly stored digitally. Development to structure the data and enable machines to handle that data has created enormous possibilities. The difference between human being and a machine is that machines are capable to handle large amount of information in a very short time. The amount of information doubles after every third year, this is called Law of More. Due to the increasing amount of data the willingness to improve data handling has become one of the key topics. Big data serves many different industries e.g. helps even predict crimes as the Police has created algorithms or it is possible to forecast consumer behaviours in retail shops. This can happen even before the consumer herself understands her need. Naturally this kind of information can also be misused. Machines can learn to mix information sources and in a way code their own software. This is called machine learning. It is used e.g. in spam mail filters or Netflix can recommend new movies to watch based on the user behaviour. Google presented their translation tool in internet. Algorithm behind this translation tool analyses and compares billions of web pages which are translated to several languages. Google began their development work from the United Nations web pages which are translated to several languages. This revealed the true potential of machine learning. (Ford 2017, 101- 103.) It is worth noticing that Digital giants, GAFA corporates (Google, Amazon, Facebook, Apple), can predict customer behaviours and even change their behaviour, all this is based on the information they gather from their service users. (Lindgren et al 2019, 15-20.)

It can be said that Big data revolution has started and it will have affects to the knowledge workers. Work which includes clear rules and limits could be automated. in year 2013 Google applied a patent for a software tool which is able to answer mails and social media questions. The answers were personalised according to the information the tool was able to find from social media and mails. Decision making of the top management will be supported by advanced and automated tools. These tools search information from various sources and there is less need for the human judgement and experience. Finally there could be only one manger and an algorithm left to make decisions. A start-up company WorkFusion has created an intelligent software platform to handle very complex projects. Typically their customers are big corporates which have large development projects that demand lots of resources. This software

platform diminishes the need of resources by using automation and crowdsourcing. The system begins to analyse the automation possibilities. Secondly it looks the crowdsourcing possibilities and finally what tasks require company´s own employees. It posts recruitment applications to suitable web pages and also handles the recruitment. When everything is settled the system delegates the project work and it also evaluates the employee performance. The system is also able to ask questions, but it already knows the answers. Evaluation continues throughout the whole project work. The employee performance, efficiency and the work quality is followed up frequently. Tasks are delegated based on the employee skills. If the employee is not able to carry out the delegated job, the system will find more suitable work for her and redelegate the old task. The project management is minimised as the system itself carries out the most managerial task. Naturally this has positive effects to the company costs. (Ford 2017, 107-109.) It is not about the biggest amount of data who would get the best advantage out of it. The business leaders might feel the urgency to react but the first thing to do is to create a Big Data strategy: what does the company want to achieve and how, what are the tools they want to use. (Marr 2015, 231.)

Ford´s (2017, 127-128) opinion is that the automation will accelerate. Today there are still plenty of work which demand high level education, but the transformation of this kind of work to inexpensive countries has become popular. IT specialist work, radiologist work and even lawyers have been hired to India. They have educated specialists to know British or US legislation in order to offer these services. Transfer of knowledge work doesn´t increase the transportation costs as the communication and interaction is electronical. Some economist say that moving of the workplaces is part of world trade. Any how these transitions might be valid for a short-term as the technology develops rapidly.

2.2 **Competence development in digital era**

Dr Arndt Pechstein (2020) presented that people´s natural reaction for change is fear, but the best way to handle it is preparation and collaboration. We live in VUCA world which stands for Volatility, Uncertainty, Complexity and Ambiguity. This means that change is happening, and it happens fast, it is difficult to predict and the number of possibilities to act or react increases. But the information can be interpreted in various ways. The best possible way to adapt to the future development is to show the direction, vision. Get the people to upskill and collaborate and be agile in future business. In other words, this means that companies should not look for the experts but learners. He presented that the linear thinking for development is too slow, instead it happens exponentially and because of that organisations need new ways of thinking. He presented Hybrid Thinking. He advises to learn from the nature, because it has a great adaptability. People need to use more intuition, because fact-based thinking is too slow. People need to connect

and co-create new things and as boundaries are gradually disappearing new ecosystems are also needed. He continues that tools and processes are often the ones the organisations tend to change, but they should change the patterns and behaviours and dig in the beliefs, values and mental models instead.

Viitala (2005, 29) presents the model of Lipman-Blumen and Leavitt as the world around the organisations changes rapidly. The organisations are changing as well, but slower. But the people in the organisations do not change that much. Viitala (2005, 126-127) defines that the knowledge alone doesn´t enable great work result. An employee needs to be able to apply his skills and motivation to work. In practice this means that professional skills consist of knowledge, skills and attitude. Ilmarinen & Koskela (2015, 220-221) say that the competence profile of an employee in digital era looks like a letter T. The horizontal line represents the wide range of digital competences in many areas as the vertical line represents deep special knowledge in one area.

Training has moved from training programmes to more onsite learning by doing. Learning can be divided to individual learning methods, connected to the work e.g. job rotation, taking deputy responsibilities, special assignments, projects, mentoring, tutoring, appraisal interviews and action learning where the theory is taken into own work. Community learning methods e.g. meetings, group work, development projects, experiments, best practices and visits are also used. Training has also transferred more to web (Viitala 2005, 260-283.)

Sebastian Thrun and Peter Norvig from Stanford university announced in 2011 that whoever could enrol free of charge to their Artificial intelligence course. These two professors are really famous in their branch of science. This was a starting point for the massive online courses in other words MOOC. There were over 160 000 students from 190 countries and 23 000 students graduated the course. Soon after this similar kind of complementary training possibilities were offered from web. (Ford 2017, 146-147.) As the automation increases the traditional way has been to offer more training to the employees which allows them to step in to the new more demanding work. In the future workplaces people are working side by side with the machines. The good career plans take into consideration how to increase the ability to work with the technology. It might anyway be a bit problematic as not every employer is willing to invest for the more demanding competences. (Ford 2017, 134-135)

2.2.1 Globalisation

There is no doubt whether globalization is affecting on the future work. Globalisation appear as rapid international business growth, companies transforming to worldwide corporates, increasing international, transport and technology networks, international investments and more efficient

capital markets. The turning point to globalisation was when the closed market, like Eastern-Europe, opened to the world. Globalisation is not a new thing, it started in 1980´s. Some economists are saying that although globalization is making societies, companies and employees work hard, it is also creating welfare. (Kasvio&Nieminen 1999, 13-14.)

Digitalisation has changed business from national to global. The edge to become more global is much lower today, because physical presence is not necessarily demanded. Game industry is a very good example how the technological development has opened new distribution channels and markets. Production can be a global value chain which includes subcontractors and their value chains. (Lindgren et al 2019, 15-20.) Consequently, global competition of the positions gets harder. Companies need to separate from the competitions, operate cost efficiently and make sure the jobs are profitable. So far Finland has been successful how to adapt to the global competition, but old strategies might not meet the requirements any longer and are challenged to try something new. Combining flexibility and safety might be too difficult which then means new ways to adapt to the situation. (Kasvio 2007, 35-37.)

Lehti et al (2012,30-31) presents that digitalisation enable companies to spread around the world their production and value chains. Furthermore, certain areas might specialise to a very narrow area. Among to the goods also services, people, competences and investments move between the countries. Ilmarinen & Koskela (2015, 66-67) write it is easier to establish totally new business model compared to the old ones, who have much more to lose. The new business models are scalable, more cost efficient and they meet the customer experiences. The focus can be very narrow, but from the beginning they aim to global markets.

Technological development is growing exponentially. Robotics and self-service techniques take over the simple routine tasks which also means that more and more jobs will be classified to this category. More intelligent algorithms will be able to take over jobs which require higher education. Carl Benedikt Frey and Michael A. Osborne form Oxford University conducted a survey in year 2013 where they said that almost half of the US labour can lose their jobs and huge amount of professions will be affected by automation during the next two decades. This also means that borderline between technology and Globalisation fades and higher education work will be done abroad. Ford presents that inequality has increased in industrialised countries and at the same time the share of Gross Domestic Product of human labour has decreased. Almost in every European country has polarisation been seen in labour markets. He also continues that it can be called classification, if the Government is unable to make decisions, which could minimise the impacts of the technological development. (Ford, 74-76)

Great Britain has been the most active country to transfer jobs to cheaper countries. Forrester group estimated that by year 2015 1 billion jobs have

been transferred to abroad worldwide. In the OECD assessment 20 % of the work places inside EU would have been outsourced abroad to more inexpensive countries during couple of years. Particularly work which doesn´t have direct customer communication and is not dependent on the location is simple to transform abroad. (Ford 2017, 130-131.) Antti Joensuu strategy manager from the Ministry of the employment and the economy of Finland says that Robots will bring the jobs back to Finland, because they do the routine and simple tasks and people are required to the more demanding work. (Kauppalehti, 2015)

2.2.2 Strategic workforce planning and competences

Strategic Workforce planning means preparing for the future needs in order to be able to run the business with motivated and skilled employees. Focus is also in employee wellbeing so that they can give their best and develop their company. Strategic Workforce planning takes care of the needed workforce amount and structure, secures the right competences in the company to meet the targets. Strategic Workforce planning is a way to create personnel asset and lead them. Nowadays Strategic Workforce planning is no longer only hard mathematics but more planning together with the business, empowering and flexible. Personnel is capital where the constant change is taken into consideration. Strategic Workforce planning starts from the company strategy and targets. Resource based strategy from 1959 believes that the success is dependent on the people competence and experience. This kind of thinking rose it´s head again in 1990´s. Fast cycles in the business create an extra challenge for the planning. It is also presented that the company success is not dependent on the best matching planning but building resiliency in the organisation and build up unique competences inside the organisation. (Viitala 2009, 50-61.) Information based companies the personnel matters should be high on their agenda. This means companies where the product or service consist mostly from knowledge. Most of the employees in this kind of companies are specialists. Company values will probably give the best guidance to the direction of the development. They still might end up to a wrong conclusion but is better than a reactive strategy. (Viitala 2009, 67.)

Viitala (2005, 15-17) presents the most important elements of the competences in the company and how they support the company strategy and Vision. “If you don´t know the direction, it is impossible to define the route.” This means the company first needs to define the strategic competences of the company and prioritise them. The next level after that is to do the same for team and employee level. After that the company needs to carry out competence mapping as is situation towards the needed situation. Competence development activities will be planned towards the company strategy and how they support the strategically important competences. All these activities need to support the as is need and the future needs. In constantly changing environment competence development should always be vital part of the leadership in all levels of

the company. Every employee in the company has responsibility to develop their own competences, but leaders need to enable that. The top management has the ultimate responsibility of competence development possibilities and the organisation is supported by the HR professionals. (Viitala 2005, 23-24)

As the world changes rapidly, it can be justifiable to anchor the company vision to competences instead of the wanted results. This can also means taking risks in the uncertain environment, because it is not possible to know the direction. The other option would be to float, where the company reacts in a short notice to upcoming issues. From the success point of view this is seen a poor option. Neither reactive nor all options open strategy would bring the best results. Company competences can be divided e.g. to company way of working, process knowledge, customer competences and leadership skills. Peters and Waterman presented already in 1980´s that, to find out excellence in some area, will bring competitive advantage to the company. This means where the company is the best compared to the competitors, they should focus to develop that area even further. There is also criticism to this kind of thinking, because it could narrow too much the competences. Strategic competences are the ones which are vital to fulfil the competitive strategy. They are also called core competences. Long and Vickers-Koch have defined the company strategic competences to include three main components: core competences, strategic processes and core capabilities. Competences are skills where, as capabilities are proficiency and abilities. Combining core competences and strategic processes, they build up core capabilities, which are the critical resources and difficult to copy. They are firmly tight to the targets and consist of the full value chain. Figure 2 illustrates Viitala´s model for the individual competences of an employee (Viitala 2005, 61-65.)

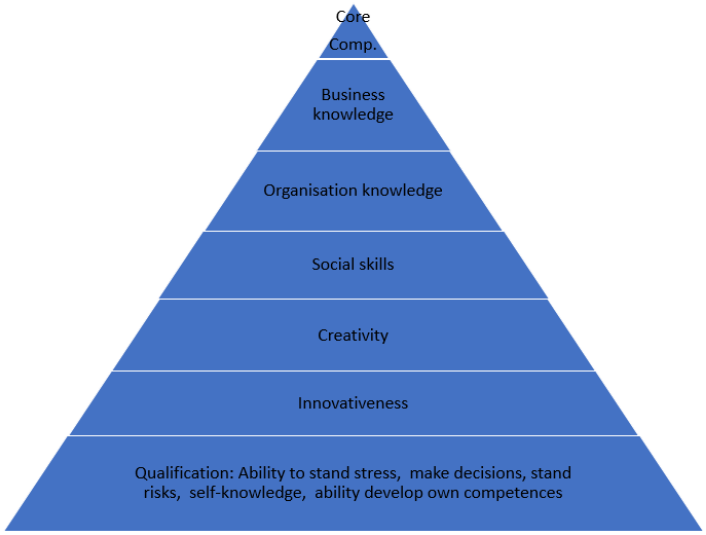

Figure 2. Individual competences (Viitala 2009, 179.)

Talouselämä (2018) interviewed former McKinsey global manager Dominic Barton who said that companies pay too little attention to their employees and their commitments, instead they focus too much money. Companies should find right competences, clarify the working roles and commit the best employees.

Recent years Banks have focused more to the automation and more efficient processes, but human side of the transformation has not got enough attention. They need people who can combine the technology to the business, who can manage complexity, facilitate and inspire others. Workplaces should be open and collaborative. Companies needs either to recruit new skills or reskill their employees. (Srinivas et al, 2019)

2.2.3 Competence development and Lifelong learning

World Economic Forum conducted a survey about the future job and launched the results in January 2016. It showed that several of the most wanted occupations and workplaces were not existing 5 -10 years earlier. This shows how fast the change has been. One estimation was that children starting their school in 2016 only 35 % would be working in an occupation that exists today. (Marttinen 2018, 115.) Labour market undergoes constant change. In Finland yearly approximately 12 % of the workplaces come to an end, but the same number of new workplaces appear. The average turnover in the finish labour market is 25 %. In the Finance industry the average and low wage workplaces have come down since 1990´s and the trend is towards higher salaries. (Kauhanen et al 2015, 11-29) Since 1990 huge number of employees with lower education level have left the labour market. The labour market has changed to more demanding and uncertainty has increased. Education and constantly improving skills become essential. The strategic competitive advantage rest on the best possible usage of the human skills and competences where the danger is the deviation of the labour force to core employees who are better paid professionals and marginal employees. It has become obvious that the education from young age is not holding up for the entire working life instead lifelong learning has become a necessity. Learning takes place in various places and is a combination of learning in trainings, schools, remote and work. It probably is a mix of learning during the working hours but also during the spare time which requires ability to mix work life, family and social life. (Suikkanen et al 2001, 161-166)

Huila et al (2019) writes that the competence development of the personnel is a key to the future success. Companies need to empower, motivate and give responsibilities to the employees in order to enhance their capabilities and skills. The future competitive advantage arises to the organisations which can benefit the technology with the whole team. Corporate vision and strategies must be understandable and repeatedly

communicated so that everyone can understand where the organisation is heading and how. As the work becomes more scattered and situations change rapidly the team must be able to decide independently. At the same time the ability to stand changes is required, which is a skill that can be practised.

“Accelerate reskilling of your employees.” reskilling should start on top of the organisation. Leaders need new leadership skills in order to position their organisation and people in disruptive world. The companies should build on what they have e.g. AT&T launched a training programme “Workforce 2020” to close the technological gap they had. Learning should be way of life and lifelong learning should be the most important skill. And finally learning digital to be digital is the best way to learn. (Shook & Knickherm 2017, 10-11.) People learn from birth to death. Learning should become passion and then a person has motivation to learn constantly. What if question is powerful and enables to use imagination, meaning it is possible to reshape the world by having an ability to imagine things different way. (Thomas, 2012)

As the work changes, some of the competences become outdated which needs to be replaced with new competences. Those employees who don´t utilise technology at all or only little, are in the biggest danger to become marginalized in labour markets. (Varamäki 2019, 75-) Kasriel (2017) writes in World Economic forum article that every fourth employee has outdated skills in working life. Employees should proactively steer their competence development and when taking new career steps possibilities learning constantly on the job should be a key driver. Finanssiala (2020) announced the new collective agreement where one of the significant changes was that so called Kiky (kilpailukyky = competitiveness) hours will still exist in the new agreement, but these 24 hours per year will be used for competence development as the industry is under constant change and new requirements. They also aim together with the other stakeholders e.g. schools to develop a common digital platform which gathers the existing work experience and training under one place but also proposes relevant training for employees or potential employees.

Hiltunen (2019, 131-132) writes that training needs to develop as the work changes. It needs to be more dynamic, digital, personalised and easier to access. People need to be better skilled in media reading, critical thinking, self-knowledge, teamwork and presentation skills, but it is also important to learn totally new competences e.g. coding. She believes that in the future word training would be forgotten instead we will talk about learning. Learning is not measured by degrees but testing the level of learning. Ways to learn can be chosen from a wide international offering. Future learning uses technology varied ways. She also says that learning will continue the whole working life or even after that.

Varamäki (2019, 81) says that learning should be the number one priority in the organisations. Companies should reserve time for learning and

create a culture which embraces learning. Internal career paths need to be developed or even encouraging people to leave and learn new things outside the own organisation. Long careers in the same job can show unprofessionalism as the repetition is not the essential for learning instead reflection is. It is crucial to stop and reflect during the busy days what can be learned and how things can be done better ways. The role of an individual can be a big challenge for the Finns as it requires the change in thinking because the learning must be weekly or daily. In USA 86 % of employed are ready to use their own time to learn in order to stay relevant in the labour markets.

Otala (2018, 15-24) writes that Boston Consulting Group has stated world today to be 35 times more complex compared to the 1960´s. At that time, it was enough to have 4-5 different skills to carry out the tasks, now the need is approximately 20. Employees need to have more intellectual skills and ability to learn which are dependent on the more demanding and widening work. Almost every employee is called specialists and they have more independency and responsibilities, because they know best what they do. The national education system changes too tardy, that the companies have begun to educate the basic skills to meet their needs. Good example is e.g. Valmet Automotive Uusikaupunki factory which needed over 1000 employees who could work with their 300 robots. Estonian Business school have built up their education to go hand in hand with working life to support work life skills in practice. Work in many places is project work, where the employee learns new skills during the project and don't have them in the beginning of the Project. This means way of working needs to be way of learning at the same time. Earlier the companies were offering their products and services supported by efficient processing, nowadays customer centricity and the value customer experiences makes the company to succeed. Meanwhile this stands for less repeating work tasks. Each customer case is unique, and it is not possible to give standard instructions how to carry out the work task. Instead the employee stand uncertainty, be able to search information, combine it to earlier learned issues and use that to solve problem. Experience can support learning, but it is not enough for knowledge. Experience can also mean staying in the comfort zone, but it is a must to leave that zone and learn new skills and try new ways of working. It is crucial that the companies involve their employees to think about the future of their work and their challenges. This can awaken their employees want to learn new skills proactively. It is also important that these skills are taken into use as soon as possible. The best way to survive from the changes is to have ability to learn and adapt to the change.

Otala (2018, 26-38) talks about agile learning. The term has been used more to leaders, but her definition goes throughout the organisation. She has defined it as follows:

- Everyone should be and agile learner in order to meet the continuous changes in working life.

- There are several ways to learn e.g. feedback and experiences or computer aided learning and it can happen stepwise.
- Learning in interaction with other people is more efficient.
- Attitude to grow is needed.
- Right operational environment to support agile learning is a prerequisite.

Manpower published a survey where 33 countries out of 44 reported skilled labour shortage. Finland was one of the countries where the situation had weaken more compared to one year earlier. Office employees and customer service employees are no longer among the 10 most wanted skills as the technology has stepped into these workplaces. At the same time wanted skills and competences change. People want varying work, where they can improve their skills and experiences. They understand that they need to be able to stay in this continuously changing work environment. Their leaders need to understand their potential and competences and support their career development. (Manpower Group, 2020) Todays working life is different compared to 20 years ago. Careers should be thought differently not as climbing up in hierarchy but instead horizontally which allow the person to acquire new learnings all the time. (Varamäki 2019, 155.) Tikka (2016,58-60) says the organisations become flatten as the middle management task are supported by technology and the autonomy of the team and an individual is higher.

The Union of the case company X says to cooperate with the company Group Learning tightly to enhance the employee competence development. They mention that especially different digital skills needs to be developed further. They also say that they encourage all their members actively to learn new skills and competences and update them continuously. They mention that English skills are often a challenge for the employee level. Here they refer to the latest employee survey. (Case company X intranet news, 2020).

The capabilities in the organisation sets the limits to the size of the change in the company. Development of the capabilities enable the changes in strategy. In order to have the change flexibility in the organisation the continuous competence development is fundamental. (Ritakallio & Vuori 2018, 94.)

2.2.4 Future competence needs

Ilmarinen et Koskela (2015, 195-198) writes that digitalisation creates a pressure to act rapidly. Old saying “Time is money” is more relevant than ever. This means e.g. who responds fastest to the customer needs, who delivers fastest, who responds fastest to the customer feedback. In addition to that the organisation and people need to be resilient, developing agile and corporate have an experiment culture. Seppo Laakso (2020) from Kaupunkitutkimus mentioned that occupations from the

middle hierarchy are disappearing. Between years 2010- 2017 Specialist work has increased and office workplaces diminished. Nowadays half of the employed are in specialist type of the occupations. Anne Koivusaari Business unit manager in Manpower group says that cognitive resilience is the number one competence need regardless of the industry. By this she means an ability to develop own competences constantly and adapt to the changes the work life is offering. (MTV uutiset, 2020)

Economist Intelligence conducted a survey for 608 business executives globally. They also did in-depth interviews. Key findings were that work is becoming more complex and there is constant lack of time. Companies will bring in specialist expertise more need based. People can be employed to multiple companies. Human creativity, intuition and judgement is still needed. Technology helps companies move closer to customers, but it also creates a challenge to keep up skills and competences of their employees. "Technology helps companies to be more proactive, predictive, productive and personalised in their approach." Constant changes require fast time to markets, which means more leaned processes, constant learning and agility to change and empowerment to the teams. (Economist Intelligence, 2015)

According to Xavier Mesnard from Conlsuting Group A. T. Kearney the new technologies will revolutionize the production. It will mean better efficiency and more tailored efficient solutions. People need to cooperate and work together with the robots and as a result of that the employees needs to be more resilient and have ability to learn. Instead the experience and professionalism become less important. (Marttinen 2018, 116-117.) In the future people will work less in tasks like collecting data and processing data. It becomes more important to have good social and emotional skills. People also need deduction capabilities and they need to be more creative. (McKinsey 2017, 15.)

Nowadays the pattern seems to be that the jobs lost during the recession used to be better than the ones which born after the recession. Economists Nir Jaimovich and Henry E. Siu published their research from the US labour market in year 2012 where the conclusion was that during recession especially the middle wage jobs disappear and the new ones are more part time jobs and less paid and some new jobs born to the high end which require better education. David Autor from MIT describes the polarisation has impacted following occupations administrative work, sales personnel and workers in factories. Polarisation is in connection to business cycles and can be seen in all industrialised countries. (Ford 2017, 66-67.)

FA Finanssiala (2019,8) conducted a webropol survey during autumn 2018. Employees, leaders, managers and training professionals from schools working in the finance industry were answering to this survey. In total 656 persons answered to the survey and the biggest age group was 45-54 years (34%) and the second biggest age group was 35- 44 years

(30%). The survey offered 35 different skills and competences to choose. The most important skill is self-management, which means ability to adapt to the change, develop own competences and identify own competences. The results of the survey are categorised to five main groups and are presented in the Figure 3.

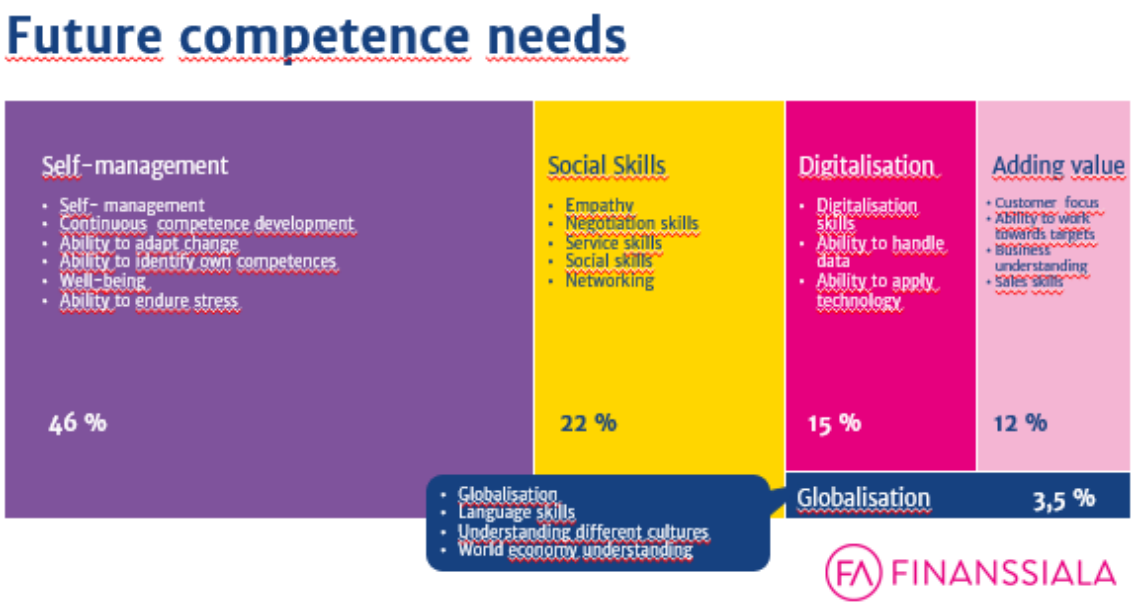

Figure 3. FA Finassiala Töissä finanssialalla 2019

The National Forum for Skills Anticipation's anticipation work has given their first report about the most important skills in 2035. The start-up of the anticipation process was to create a future scenario until 2035. Digitalisation is the major driver of the process as well as the improved cost-efficiency and ecological sustainability. In the future ability to solve problems, self-regulation, learning capabilities, ability to develop own competences and managing of personal competences and ability to evaluate information are most often mentioned as the most needs skills. In addition to that also ability to use digital solutions will increase as well as the service development based on customer journeys and sustainable development. The last two one especially in the service sector. Employees have responsibility to learn continuously and update their skills and competences throughout their career. Learning will be done in various methods e.g. virtual learning, mentoring, learning from peers etc. In this frequently changing environment, it is a necessity to be able to learn new skills fast. (Opetushallitus 2019, 28-34, 42-44.)

Ilmarinen Future Score (2017) testing defines the top 10 skills to be

- interaction skills
- self-knowledge
- empathy and emotional intelligence
- ability identify own competences and develop them

- networking
- resiliency
- cooperation skills
- ability to work in different environments and cultures
- critical thinking and creativity
- self-driven skills

Results are based on the tests carried out by 2400 individual responses.

Kauhanen et al (2015, 60- 66) writes how technology develops the job titles towards specialist type of work where more complex communication is needed. Technology can produce more data for the decision making or support analysing the data. As a result, there is also need for higher educated employees. More complex the work is less possibilities for outsourcing. Following tasks are easy to transfer to cheaper countries e.g. processing employees, office employees and production employees. More difficult tasks to transfer are service employees, sales personnel, specialists and leaders. During the millennium the occupation structure transferred towards of higher formal education, service and abstract thinking. The last one can be seen in the increased amount of specialist, expert and leadership tasks. Kauhanen et al (2015, 86) continues that robots support people and they work side by side completing each other and this kind of combination is more efficient and productive than one alone.

Huila et al (2019) presents the future work to be more specialist work which is carried out with different teams, organisations and communities and often can be done in an entrepreneurship way. Work becomes project work and is no longer tied to a place and time, which requires good self-management. Working in the teams demand good communication skills with different kind of people. In other words routine work is done by technology, people learn from each other and share responsibility in the teams. Remote work can improve our own time. Marttinen (2018, 116) writes the need of data analytic employees is increasing and sales experts who can interpret for the customers how they can benefit and use the new technologies. There would be also more jobs in media, energy and entertainment industries. Social skills, ability to negotiate, emotional intelligence and ability to teach are the skill which have demand.

Dr Arndt Pechstein (2020) quoted Charles Darwin Origin of Species " It is not the most intellectual of the species that survives; it is not the strongest that survives; but the species that survives is the one that is able to adapt to and to adjust best to the changing environment in which it finds itself." We need to build up purpose driven organisations and empower people. Be agile where it is relevant and keep the old where it is needed. He continued that new technology is common, but new thinking is rare. Lehti et al (2012, 116) states that those who have predicted work to end have been wrong more than 300 years. People are

needed especially to invent, use intuition, secure moral and ethical issues and solve unpredictable problems.

2.2.5 Emotional Intelligence

Goleman (2001, 38-45) writes about Super Bowl Sunday when a flight from Detroit to New York was delayed two hours. The passengers were irritated, especially a group of businessmen. Finally, when the plane landed, a technical problem occurred, and the plane needed to stop 30 meters away from the gate. The passengers popped up. How could the airhostess announce that they should sit down, and then the plane could roll to the gate? She didn´t say with strict voice that according to the regulations you need to sit down and wait, instead she said with a kind gentle voice, but who has already stand up? Everyone in the plane started to laugh and they sat down. This is the difference between sense and heart, or more officially cognitive like analytical skills and emotional intelligence. Computers could have announced the information, but without this emotional intelligence. Emotional intelligence (EI) consist of five components, which indicates how well we cope with ourselves. Table 1 presents those components.

TABLE 1.

Self-awareness	Recognising own emotions, understanding own limits and strengths, self-confidence about own value and competence
Self-regulation	Controlling negative feelings, honesty and ethics, ownership, resiliency, innovativeness
Motivation	Willingness to develop and perform better, commitment, optimistic and gumption
Social skill	Collaboration and cooperation, taking care of relationships, ability to stand changes, communication skills, ability to inspire others
Empathy	Caring others and their feelings, service minded, diversity and ability to understand the emotions in the group

Teams with high EI (Emotional intelligence) end up to the same performance level as the teams with lower EI, but they started their projects more effective. Especially customer service teams with high EI receive better performance ratings from their managers and peers. Employees with higher EI are more satisfied than the other team members, they felt the communication to be better and be better supported than the other team members. Researchers concluded that EI based knowledge and skills can be developed. (Beck 2006, 199 & 202.)

People communicate to each other in words but also without saying them. Through our non- verbal communication, we express different emotions.

According to a research by Professor Albert Mehrabian only 7% is verbal, 38 % tone of voice and 55 % body language. (Hasson 2017, 19.) It can be quite hard to manage the changing situations, which rises fear, worries, anxiety and uncertainty. Emotional intelligence encourages people to accept uncertainty and give opportunities to new ideas. (Hasson 2017, 69.) Heide Abelli says in World Economic Forum article that soft skills, which sounds a weak name, are the needed ones. Instead they should be called power skills. Anyone can learn the powers skills regardless their personality. Jeremy Auber calls them durable skills like creativity, time management and adaptability. The constant change requires good collaboration and creative thinking. Companies need to have a culture for continuous improvements. Employees with strong human skills and technical expertise is a great combination. (Fisher, 2019.)

3 METHODOLOGY OF THE STUDY AND RESEARCH MATERIAL

3.1 Research approach

Kananen (2010, 41) writes the qualitative research is often used when there is only little information about the phenomena. Cases where information, theory or research doesn´t exist or only few is available about the phenomena are the most suitable for the qualitative research or there is a need to understand the phenomena thoroughly or new theories of hypothesis will be created. Saldana (2011, 4) defines qualitative research is meant for a research to dig deeper in social life cases and there is not existing any quantitative information for research purposes instead the needed material can be documents, notes or even photos and videos. Kananen (2014, 18) specifies the most typical cases when to use qualitative research as following: qualitative research happens in its natural environment and the data is collected from the people operating in this environment. These people and the researcher interacts in order to collect the data for the research. The purpose of the research is to get a holistic view for the research topic.

Hirsjärvi et al (2014, 161) defines that the qualitative research typically describes the real life and the reality is diverse. The purpose is to research the object comprehensively. The researcher is led by own values, because they guide the researcher to interpret the phenomena she researches. Normally qualitative research aims to find or reveal facts instead to verify claims. Tuomi & Sarajärvi (2013, 67) say that it is extremely justifiable to define each and every time what the researcher is doing. It is not only about the technical execution but ethical issues as well. Tuomi & Sarajärvi (2013, 18) mention that theory in qualitative research creates the theoretical framework, but in larger scale theory is also needed in methodology, research ethic and in an overall research entirety.

Eriksson et Koistinen (2014, 4-5) define that the case study researches one or more cases, where the aim is to define, analyse and conclude the case. Therefore, the limitations and arguments for the case needs to be done extremely well. Case study is a right method when one or more below mentioned items fulfil:

- What, how and why – questions need to be answered
- The researcher has only little control for the cases
- There is only little empiric research material available
- The case is todays phenomena

Case study is often contextual which means that the researcher tries to understand the case as p of the certain environment. The researcher needs to define how wide the context should be in order to understand the case. (Eriksson et Koistinen 2014, 7.) Good case studies can answer the question: "What can we learn from this case?" (Eriksson et Koistinen 2014, 26.)

This case study searches answers to following questions

- How will the back-office work change in the future?
    - What kind of work will disappear and what new comes in?
- What are the capabilities and skills required in the future in the case company?
    - How to prepare for the future?

This research topic is very current to the case company X as they have plenty of automation and digitalisation development ongoing. They have used some time Agile and Service design methods in their development work, which has forced the whole organisation to learn new ways to operate. They have recognised that the work will change especially in this organisation where they employ lot of people. As a responsible employer they want to act proactively and understand what they need to do and how they should do it. Qualitative Case study is a perfect research strategy to answer these questions as this happens in real life and the data is gathered for their own organisation.

Researcher has very much own interest to this topic as she works in this organisation. She works in a leading role and is able to impact and make needed decisions to survive competitive and act as a responsible employer.

3.2 **Data collection method**

Hirsjärvi et al (2014, 205-206) say that interview is a good data collection method and often chosen if human being is a subject for the research and

this method enables them to present ideas and issues freely. The researcher has no clear answer about the direction of the answers and during the interview it is possible to see visual elements of the interviewee. Interview makes it possible to ask further questions, especially if the researcher wants the questions go even deeper. It is a good method to research difficult matters, although this point of view has also been challenged, because survey could be done anonymously. The preparations must be done properly and in the worst case the interviewee feels the situation uncomfortable and lets that impact to the answers.

Tuomi & Sarajärvi (2013, 73) say that the benefit of the interview is the flexibility. The interviewer can repeat the question, clarify possible misunderstandings and have a dialogue with the person providing information. The main purpose of the interview is to collect as much data as possible. It is also good to give the questions well in time before the interview. Ethically it is important to tell what the interview is about, on the other hand people don't promise an interview without knowing these matters. Hirsjärvi et al (2014, 208) write that typical for the semi structured interview is that the theme of the questions is known in the beginning but the order or the precise format can vary. Semi structured interview responds very well to the qualitative research.

The semi structured interview was selected to be the data collection method as it makes it possible to ask further questions during the interview in order to make sure the researcher has understood and picked up the right items and made relevant conclusions e.g. survey could have left room for wrong interpreting. It didn´t either guide the interviewees to any kind of ready proposed solutions, but with open questions let them to say their ideas and opinions freely. The amount of interviews was also reasonable to give enough research material, but allowed high quality data collection and analysing methods.

The interviews of this research were carried out during week 11 2020 and week 17 2020. The original plan was to carry out all the interviews during weeks 11 and 12, but the plan was postponed due to the Corona situation which required development of the exceptional work plans in the organisation in the beginning of the Pandemic. All the meetings were carried out as Teams meetings which were recorded. Video was not used due to the company recommendations for the heavy load of the remote connections. Based to the company policy people were working remotely why a physical meeting was not an option. One interview took about one hour.

In total seven persons were interviewed. All of them got a meeting invitation to their work Outlook calendar some days before the interview. The purpose of the interview was opened in an invitation and in the beginning of the interview. All open questions were presented in an invitation beforehand. Appendix 1 presents the interview questions. In the invitation was also clearly mentioned that the interview will be

recorded. The interviews were transcribed for 20 pages. Recordings will be deleted after the this theses has been approved and all participants will be informed about this. Their acceptance to participate to the research work based on their acceptance notification of the meeting coming directly from the Outlook calendar invitation.

The interviewees represented different levels in the organisation from strategic leaders to employee positions. Everyone had own experiences about the back office work except one who is working in the people organisation and is taking more holistic view. The interviewees were chosen based on their status in the organisation and their leaders recommendations. Leaders average age was +50 and working experience varied from 23 to 37 years. Employees represented the younger generation, as the average age was 27 and total working experience from 2,5 to 6 years. Most of the interviewees had worked less than 5 years in the case company X. One person made an exception as his whole working career is from this company.

3.3 **Data analysis**

Theory based analysis is based on a certain theory, model or thinking model by respected authorities. This means the research material is guided by already existing framework. In theory-based analysis the conclusion logic is often bind to the deductive conclusion. (Tuomi & Sarajärvi 2013, 97- 98.) In theory based analysis the first step is to create an analysis structure, which don´t have to be too firm. In deductive analysis the information is classified to categories which are defined by the theory and information is gathered from the empiric material (Tuomi & Sarajärvi 2013, 113-115.)

Kananen (2010, 60-61) writes that in qualitative research the research material can be huge and it is necessary to find the relevant information from a large amount of data. That is why it needs to be condensed in order to see the big picture. Kananen (2014, 102-105) continues that after transcribing the material needs to be coded and segmented.

Researcher studied several books which guided how to handle qualitative research material and chose a method where the tools were already existing and didn´t require any other investments. In this research the interviews were transcribed into a word document. The original document duplicated and after that this new one was segmented e.g. automation supports company growth (segmentation mark) and using Word insert table function converted a table where all the information was first coded and then classified e.g. automation is a code and classification is efficiency also references were marked. As the table handling is more efficient in excel the word table was copied into an excel table after that sort and filter function was used to the data analysing. In

addition to that all other notes the researcher had made during and after the interviews were included to the analysing part.

4 RESULTS AND ANALYSIS

4.1 Change in back-office work within 2-5 years

First question asked how the back-office work would change in 2-5 years, what would disappear and what new would come in? Every one of the interviewees mentioned automation to be the most significant issue changing the back office work. They also mentioned that this kind of development will even accelerate. Most of them mentioned separately also RPA and AI to become more and more important in the process automation. Even tough in AI some wondered how fast it would be in wide usage. Two of them said that automation is first seen so that physical papers will disappear and they even mentioned that they really hope it will happen fast. They mentioned that e-signing is the biggest enabler to get rid of the paper. The other benefit of e-documents would mean that manual checking would disappear.

> When the papers are in the system we don´t have to check afterwards that the credit decision and the documentation match.(#3)

> Technology develops our ability to change fast and seamless will not go away. It will intensify.(#7)

> Technological development will accelerate: automation, digitalization, RPA, AI and machine learning.(#6)

For every one of them it seemed to be quite clear that the processes will become more straight through processes (STP) even though only couple of them mentioned it expressing it with this word. They described it e.g. there will be less processing work to do and processes become faster.

> The normal processing work will disappear as sad as it is for the employees.(#4)

> The normal back-office work where the papers are moved and the information is keyed in the system, it doesn´t exist any longer.(#5)

> Monotonic checking, saving and using a simple data will disappear. (#6)

Five out of seven said that the work will be more difficult and two of them even mentioned the future work to be more exception handling and working together with the robot.

> It will be more handling of exceptions than full processes. There will still be need for people for back-office related work but not all the transactions but rather to follow that things have gone through and handle the more difficult cases and handle the exceptions in the processes and make sure that processes are actually kept up to date.(#1)

> There will always be some errors and handling the exceptions.(#5)

All except one mentioned the back-office work will become specialist work and the one said that back-office work becomes close to specialist work. Most of them said that the back-office employees need to understand the end-to-end processes and be able to develop them by using the customer journeys as starting point to the development. As the routine kind of back-office work is disappearing also the new back-office or whatever it will be called can be seen as a career path.

> Honestly when this is done, there will be career movement to move in the back office, maybe we call it something else then.(#1)

> It is no longer enough to be in charge of one process, but have wider responsibility as a specialist.(#2)

> The traditional back-office employee no longer exist, but it is more specialist work to develop processes, adapting to new legislation and improving risk handling.(#5)

> Service design and digital journeys in development will increase. (#6)

Repeating issues in the interviews were the need to understand the technology and full processes as employees work side by side with the technology, run the robot and even do some adjustments for them. As the processes become faster and employees handle exceptions back-office employees have more often dialogue with the customers as in the old kind of back-office work.

> I see that the importance of customer service is increasing. (#3)

> Customers are serving themselves, but customer services have always its own importance. (#5)

The case company uses already today an outsourced partner to do back office work in another European country. Many of the interviewees saw this cooperation would still exist, but it would also mean that the teams will become more global than today. Today they operate in country based teams.

The person doing back office work could equally well be situating in another country and working with the team.

> I think that we should see, maybe this is a wish from me, but I also believe we see more mixed teams.(#1)
>
> I see there will be new global teams. (#4)
>
> We become more global.(#7)

Some mentioned that there is a need to develop and implement fast or the company will be out of the competition. That of course brings new demands for the employees to balance between the daily work and the new development.

It can be said that the interviewees considered the technological development to be the biggest reason why the back office work is changing. Automated or robotized processes will take care of the repeating process work. There will be less manual processing, but there is always a need for a human being. The work will become more demanding specialist work and requires more independency when handling the exceptions and more difficult customer cases. As a consequence less people are needed to take care of the tasks and most likely work will be done in global teams. Figure 4 wraps up the findings and categorizes them to four main groups: Technological development, Process changes, Competence changes and Globalization.

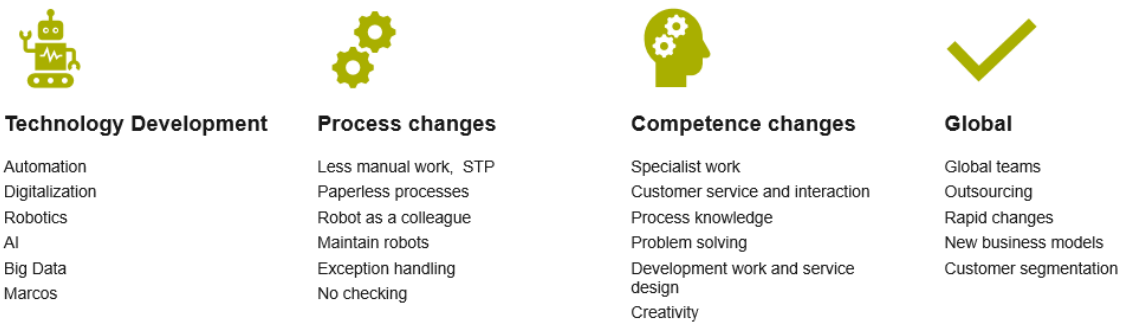

Figure 4. Wrapping up the findings

4.2 **Needed skills after the change**

Second question handled about the skills what would be needed after the change. The frequent theme was resiliency. Many begun their sentence by saying that the employee needs to be able to be resilient and adapt to the continuously changing work environment. Almost everyone said that the right mind set is a prerequisite which needs to be in place and then on top of it is possible to build new skills and competences. Employees need to recognise their own competences and be willing and able to develop them continuously. Couple said that their need to be more self-driven what they do.

> You need to be able to accept that things change in one hour, or daily and you need to accept that it is not possible to predict everything beforehand. (#4)

It is a normal requirement that employees know the processes and products extremely well as they are also involved to the development work. Some even mentioned in the future back office work the knowledge level is the same as the super users are in today's organisation.

> Understanding the process, the products at the level at least as now, probably even more and adding some more technical related skills. (#1)

> People in front line , they will be even more customer interaction, connected to more self-service connected to more sales. That means the back office people will be more second line experts, because there will be less system related work in the frontline. (#1)

Because the work is more complex, working in a team is seen a skill what is needed in the future work too, cooperation and communication with the team members were seen very important.

> Team working with more complex matters require good skills to work and interact in teams. (#3)

> Will it be specialist who do their thing or .. we need to have some kind of interpersonal skill that go through change processes, solve conflicts e.g. or complex situations that occur. But I don´t think it will be less than today. (#7)

Some single skills were also mentioned like project management skills, lean and process implementation skills.

As a summary can be noted that right mindset is a prerequisite. Figure 5 shows mindset to be a foundation and on top of it is possible to build other competences In practice this means resilient way of handling the new and

varying situations. On top of that it is possible to build new competences although basic IT skills and English language should be on an adequate level already. As the work develops to more demanding and constantly new competences e.g. continuous learning are required. As a result the back office work become to more specialist level work.

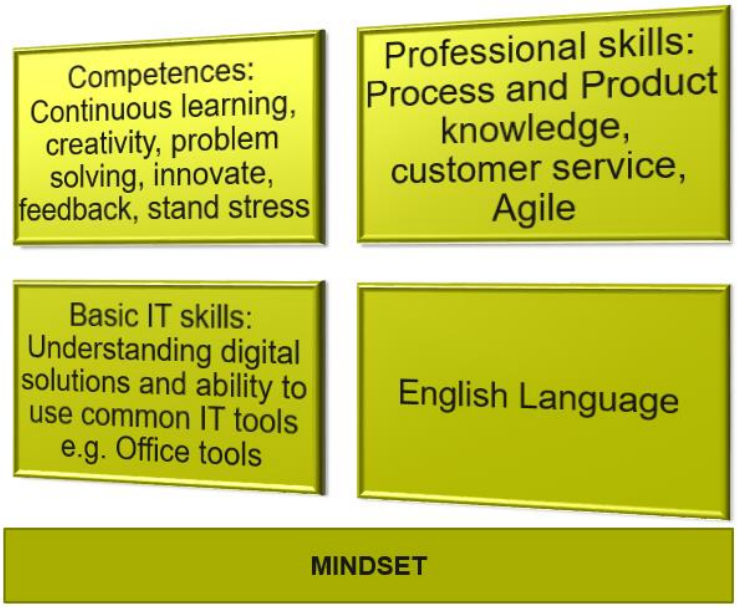

Figure 5. Categorizing the competences and skills

4.3 The most important skills and competences

Almost every one of the interviewees had difficulties to answer what would be the most important skills and competences after the change as they felt they already answered this in the previous question. It didn´t seem to have so much difference for them.

Most of them mentioned that different kind of technical skills are more important to have than compared to the existing back office work. They said it is a prerequisite that employees have basic IT skills on how to use the systems efficiently and on top of that more demanding new skills which some even mentioned they need to be as high as the super users are in the existing organisation. Most of them said that employees need to be able to use the digital services in order to understand them and they need to have better knowledge of them than they have today.

> Technical skills, understand what to do in the system, understand the legacy system and the old and the new. Almost on the super user level. (#1)

> We definitely do robots and…robots as macros will also definitely be there. (#1)

> Employees need to have understanding how to use basic It. In addition to that comes other technical skills depending on the job. (#3)

> We have robotics, general it knowledge since we all operate in more digital environment we all need to have general awareness of it. (#7)

The company X is on its way to become more global, which could be seen in the interviews. Most of the interviewees said that English skills has to be on a good level in order to work with the global colleagues, but some didn´t even mentioned it before asking, as they felt it needs to be on a good level already today.

> The new applications will be in English and as we have already seen that we have employees in another country. (#2)

> Employees who don´t have good English skills, needs to improve it. (#3)

> Language skills are part of globalisation and is a prerequisite. Whatever job you do, you cannot escape English language. (#6)

Almost everyone mentioned resiliency and good attitude to be skills which are needed even more in the future work. There will no longer be long term forecasting instead of working in an agile way which requires skills to adapt continuously changing and not perfect environment as MVP (minimum viable products) are implemented. The employees need to stand more uncertainty and short term view . This doesn´t anyway mean the company Vision wouldn´t exist. They also mentioned that employees need to be able to continuously develop their own skills and competences and be more independent on developing them. Ability to innovate and develop not only own competences but own work was also mentioned.

> You might not any longer get a two week training and readymade work instructions instead you need to be ready to develop yourself and the instructions by yourself. (#4)

> In order to keep employed it is important to stay along, be ready to personal development, ability and willingness to changes what doesn´t first feel nice. (#5)

> Then also understanding of Agile work is needed and how to drive projects. (#3)

> Constant ability to innovate, how to make own work even better. Developing own work not developing own competences. (#2)

Good communication skills and working with colleagues, who might also be external consultants, are skills which are mentioned crucial in order to be able to solve the more complex cases.

An employee needs to have a right kind of a mindset as a starting point. On top of that it is possible to build up new and more demanding competences. The basic assumption is that basic knowledge of common IT tools are on an adequate level and communication in English goes smoothly. Figure 6 reinforces the importance of the right kind of a mindset.

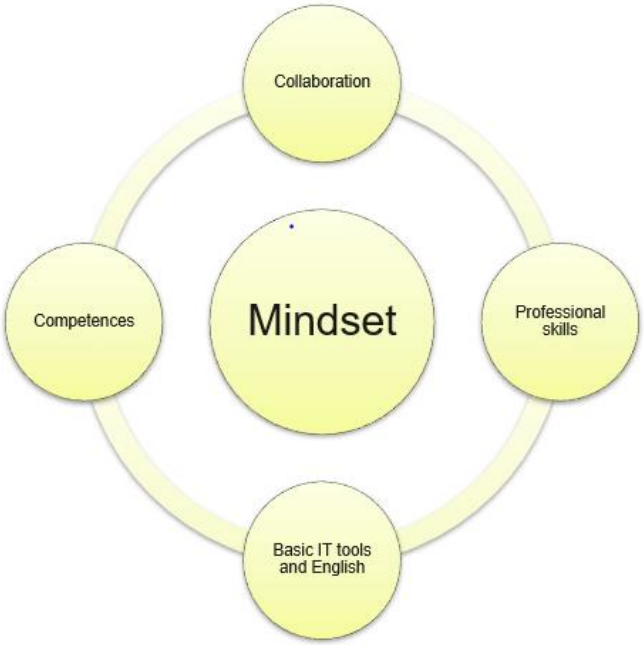

Figure 6. Mindset a core competence

4.4 **Required competences supporting case company strategy**

Company X strategy aims to achieve benefits in five different areas. They aim to profitable growth especially together with the existing partners supported with good data analytics. They try to improve their operational excellency constantly where the technology is the most important driver to enhance the efficiency and keep the services attractive to the customers. Figure 7 summarizes the case company X strategic areas. They also see strong corporate culture and leadership, which enables capabilities to be the drivers to success. (Company X intranet pages, 2020)

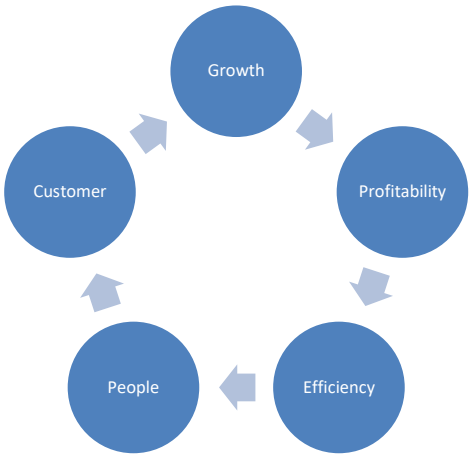

Figure 7. Company X strategic areas (company intranet 2020)

The fourth questions handled company strategy and how the skills and competences they had already mentioned would support the company strategy. Almost every one of the interviewees mentioned customer centricity as a skill which is needed more in the whole organisation. They saw the work in back office becomes more customer centric. In practise this would mean employees in back office kind of work will have more interaction with the customers e.g. when solving the exception cases or it would mean the overall understanding about the whole value chain and what is the purpose of this part of the work to the entire customer experience.

Many also mentioned that the development work begins from the customer journey or customer need point of view. One mentioned the short customer wait time which is possible to achieve supported by the automation.

> These people in back office will be more customer centric, they are and they should be even more customer understanding "I am not just doing this and understand what it means in the process". (#1)
>
> There is a need to have short customer wait time.(#2)
>
> We need to think the customer when we start to develop new technology. (#3)

Every one of the interviewees were very familiar with the target to enhance the back office work continuously and create processes which should be as efficient as possible. Every one of them also mentioned efficiency several times during the interviews, not only under this strategy question. All of them said that the process work needs to become more

efficient and there will be less people working in this kind of tasks in the near future.

> We still have become more efficient, of course there are some economic benefits of this, there will be fewer in back office. (#1)

> When we can free up people and costs from the manual work, we can build something new too. (#5)

> Efficiency in automation and multiple skilled people are in a key role. (#6)

> Customer centric, less technical excellence and more operational efficiency. I see these skills pointing directly supporting operational efficiency. (#7)

Different kind of tools how to improve the efficiency came up too. Some mentioned that automation is a must to have because it enables the company to meet the customer expectations. Couple of them indicated very clearly that the paperless processes are the biggest and the most tangible areas where the efficiency improvements are met. Some said that self-services will change the processes as the customers work themselves and there is no need for a back office handling. Growth goes well hand in hand with customer expectations. When customers are happy it has a positive impact to the growth target too. More efficient way of working also makes the company more profitable and frees up the capacity to do development work which is required for the future success.

Nearly all mentioned the need to have career steps in the organization. The career steps will motivate and encourage the employees to continuously develop themselves and give them a reason to stay. Continuous learning was also mentioned to be the success driver for the company. Some of them said that as the work becomes more demanding there is a need to reward good work. One mentioned that the future back office, whatever it is, could be seen as a new career step.

> Honestly when this is done, there will be career movement to move in the back office, maybe we call it something else then. (#1)

> As the work environment changes and there are more demands to the employee, there is also a need to reward the success differently. (#2)

> With all these competences (automation, multiple skills and self-management) skills, we can fulfil our strategy. (#6)

One of the interviewed talked quite a lot about how important it is to tell what the company strategy and vision is and cascade them to the personal targets in order to fulfill the company strategic targets.

4.5 **Developing the required competences**

The last part of the interview handled about how the skills and competences should be build up in the organisation. This question showed the biggest differences between the answers and some discussions were rather long as the interviewed person really got excited about the topic.

Almost everybody rose a problem how challenging it is to balance between the daily work and organising learning possibilities. One even wondered that perhaps it would be possible to invest this when automation frees up time. Most of them mentioned the need to plan early enough the future needs, but some mentioned that it is a bit late already now.

> One challenge we have that we are almost always behind. They are needed to do some process work, the trick is to create some room for training and taking new task e.g. robots. There we need some help from automation. (#1)

Many of the interviewees mentioned that leaders should be active to create development plans together with their employees and have a continuous dialogue how they are proceeding. Some said that it is not always clear what is expected and those expectations needs to be interpreted so that an employee can visualise the possible career steps too. Some employees might even have challenges with their mindset and it would be good if leaders could help the employee to realise the future needs. One said that the right kind of learning environment is a must and it will include good follow up dialogue to ensure the learning. Leaders role is remarkable both in planning and creating the development opportunities.

> The leader see the overview and how things are progressing and I don´t think we are always as present as we should have. (#7)

One talked about the rewards and said that the employees should sometimes see the success also as a reward.

Most of the interviewed mentioned also that the leaders need to be selective and develop the most potential employees and offer them the career possibilities in the organisation. The same interviewees also said that anyhow there is a need to recruit new talents and get new competences in fast.

> Then we also need to be quite selective. Few people, we will pay more attention, and find these ones through APR process, they need to be found We need to identify them, tell them about this and give them the needed training. (#1)

> I would say that we should recruit new employees more actively and employ people who have experiences to build new processes and develop them. (#5)

The interviewees felt that there are enough tools in the organisation to develop people. It is more how and when to use them. One person said that feedback is a strong tool for developing competences and leaders should conduct very honest dialogues with their employees. Some said that it is important that the leaders offer different kind of new tasks to different employees in the organisation. They also mentioned that allowing to participate into project work is a very good way of developing the competences. Some mentioned that there are already existing good e-learning tools and they should be used many ways. One mentioned that the company has bought the licenses to Udemy tool which could be used more often.

> I think the tools are there we also have great mentoring tools. It is more about the dialogue, process planned and going. We really do have good tools. (#7)

Question asking how much own time should be used, caused mainly confusion for most of the interviewees. It seemed to be an item to plan individually and depending on how far the competences are from the already required ones will affect to that. One mentioned as an example that if English skills are on too low level, that should be trained first during own time and after improvements it would be possible to plan some work time to the training too.

Leaders have a remarkable role in developing their employees. They need to plan early enough what competences are needed and whom to develop to match the needs. They should also consider the need to recruit the missing competences. Figure 8 shows the early need to plan carefully and potential two ways either to recruit missing competences or develop potentials. Leaders have a role to make sure the employees have the learning possibilities and follow up systematically how the learning proceeds and the new competences are taken into use.

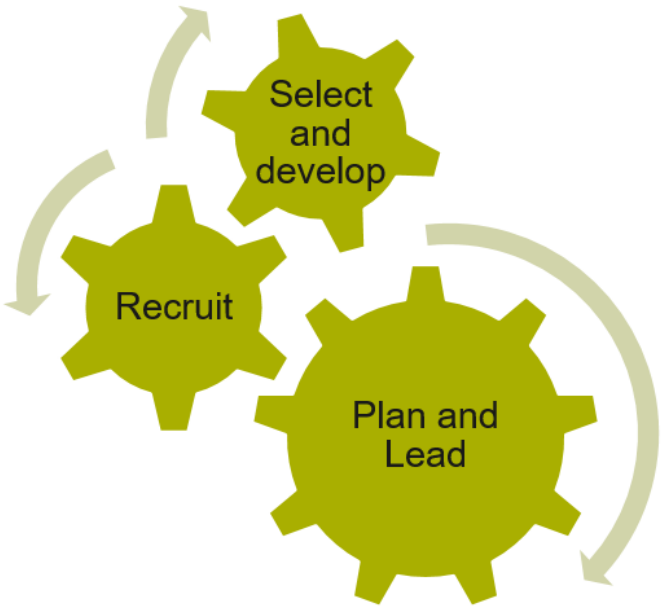

Figure 8. Leaders role in competence development

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Although digitalisation and automation development continues strongly, it doesn´t mean the end for the human work. This has been the case through out the history. It goes for the case company X back office work too. There will be less manual work and in becomes specialist work.

Technological development is enormous in finance industry and challenges the case company X to act and develop fast. In some cases they might already be a bit late. Development will be done in an Agile way which means new tools and services are implemented more often compared to the old waterfall method. This also means more prototypes and testing even with the customers as it is acceptable to present prototypes for the customers. This kind of development tests the back office employees to stand constantly changing work environment.

At the same time it is not possible to communicate stable yearly plan for the employees instead it is the Vision, direction, where the company is heading and the strategy how it will be done. People need to understand what does this mean for them. They should be discussed and repeated continuously so that everybody understands the purpose and the impacts to their daily life in the company.

Customers expect easy to use self-services and accept that they also participate in producing the services. They value the independency from

the time limitations and also expect the services are delivered instantly. These expectations inevitably change the way to work in the case company X . More self-services are offered for the customers and processes become more straight through processes and there is less need for an employee to deliver any value in processing. Although the human touch is needed especially when things don´t go as planned. This kind of exception cases are not possible to handle by robot or an automated system. These problems are solved by the employee and work could also require communication with a customer which might not have been the case earlier when the work was more repeating processing work.

Employees in back office will work side by side with Robots. They might maintain and even develop them. The back office work turns to a process and product specialist work. These employees have deep understanding how technology operates and their knowledge can be used in development work. The new back office work is a new career and demands lots of own judgement and decision making. It is no longer a processing work which can be repeated and follow readymade instructions. This work is a new career step and employees working in the new back office will become very valued employees in the organisation who are supporting different parts of the organisation with their subject matter expertise.

These back office employees work in global teams and will have colleagues in all those countries the case company X operates. This also means that the leader might not be in the same country where the employee works. It is a prerequisite that employees are able to use fluently the basic IT tools e.g. Office tools and other company specific basic tools. As the team operates from various countries it tests their communication and collaboration skills. They need to be able to innovate, make decisions and negotiate with their colleagues and stakeholders. No doubt the English language is used daily.

In order to work in the new kind of a back office, employees need to accept constant changes and ambiguous environment. At the same time this means continuous learning and self-leadership in order to stay relevant. It is important to ask and give feedback as it is a strong development tool and use the existing learning possibilities the company offers. Employees need to be resilient and stand constant changes and uncertainty. Without a right mindset it is not possible to develop and meet the future competence needs.

The case company X strategy will be supported very well, if they build up career steps for their employees, train the employees continuously and hire the missing competences early enough. In practise this means high quality customer services and support for the customers in the cases where it is relevant. For the case company X it brings the wanted growth with reasonable cost level. These activities allow new career steps to their employees.

Leaders play a key role when transferring from the old back office work to the new back office work. They need to understand where the case company is heading and translate that to their employees and keep continuous dialogue about the direction. On their shoulders are the planning activities whom to train and what to train. They need to balance between daily operations and competence development activities. They also need to have courage to recognise if any significant competences are lacking and initiate the needed actions e.g. recruitments.

Strategic workforce planning should be the starting point. Company X management needs to recognise the strategic competences and processes and find out the gab of the existing situation. They need to consider what kind of competences they already have in the company, what they need to have and should they recruit new employees to fill the gap of the competence need or train existing employees. They need to consider carefully the strategy who to train and how to train. To cover the training needs the case company X seemed to have the needed facilities in place. It is more to give enough room for the personnel development activities beside the daily operations.

They should make the career steps visible and create new career steps in order to keep and motivate the employees to carry out constant learning. Strategic workforce planning should also include plans for employee wellbeing.

5.2 **Recommendations**

5.2.1 Create the story

The case company X have Vision and strategy, which they should interpret to a narrative which tells where they want to go, why the go to that direction and what does it mean in practice for the back office employee. Although the reality might not be so nice to hear it should be told honestly. That is how the responsible employer acts and also the employees appreciate.

Some companies have already “Chief story telling officers” which underlines the importance of the new way of impacting to the people. The former way to tell the vision very technically and fact based don’t necessarily reach the employees, especially the new generation employees and leaders, who understand the world differently. The impact of the storytelling becomes more important and it is nowadays even taught at schools. Company CEO and other top level managers should take this role as a natural part of their position and other duties.

The story should be part of the communication in all levels. It is necessary that leaders, who drive the change, have understood the message and

are committed to it. People sense the changes very different ways so it is essential to listen what employees tell and accept that there are also negative feelings towards the change. The normal communication methods should be used for this dialogue e.g. one to one meetings, team meetings, unit meetings, coffee corners, leader visits and so on.

5.2.2 Make Strategic workforce plan

The case company X have existing models to carry out development discussions regularly and follow up the progress. They also have tools to evaluate the potentials and talents. These tools should be used in the strategic workforce planning. This research presented that it is a prerequisite to do selection between the employees. Employees who have right mindset towards personal development and changes are more motivated to learn new. In addition to that it should be evaluated how far the existing competences are from the wanted competences.

It is crucial anyway to pay attention to keep every employee motivated, especially when there is still some time to run old way to operate and new way to operate side by side. In personal development discussion the role should be discussed and find a way to underline the importance of this employee too e.g. they have a role to keep operations running when their colleague is studying something new. All kinds of natural reasons like retirements should be taken into consideration too. It can be said that change is a team work.

At the same time there are these, often young, hungry employees waiting for new development possibilities. Their motivation should be kept on the right level by offering them challenging tasks.

5.2.3 Map the competences and follow up development

The research shows how important the basic IT tool knowledge, English language skills and digital capabilities are. These knowledge levels could be mapped in the organisation for a common data base. This mapping can naturally include with other competences too.

In practise this would mean that a common e.g. excel data base will be created. Team leaders are responsible to fill in the data. The data should base to employee self-evaluation and leader evaluation. If there are different opinions after a proper dialogue, leader evaluation should be filled in to the data base. It is necessary to set clear deadlines when and how to carry out the mapping. One leader could be nominated to be a driver who would be in charge of creating the tool and evaluation criteria and presenting the follow up results to the management team. The goal setting target and as is competences could be presented as radar chart. Figure 9 gives an idea about the possible radar chart to illustrate the existing situation compared to the target situation.

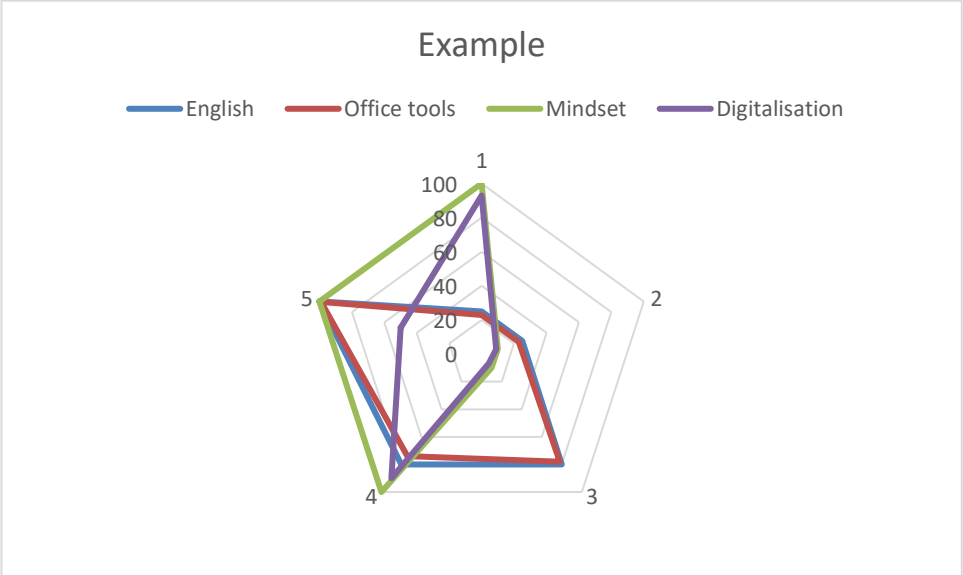

Figure 9. Example about possible radar chart

In addition to that e.g. Access data base could be used to bring in more intelligence to follow up the progress of the development plans. The follow up could be presented on different levels and exceptions could be presented by traffic lights e.g. according to development plan green, development plan delayed one week yellow and development plan delayed two weeks red. Figure 10 illustrates the levels how the information of the progress could be presented and how traffic lights would illustrate by one click if that level is developing according the set time schedule. This kind of a tool would make the development progress visual and make it easy to follow up the exceptions and plan necessary activities to catch up the delays. The unit level progress could be presented for the employees on the TV screens which already exist in the organisation.

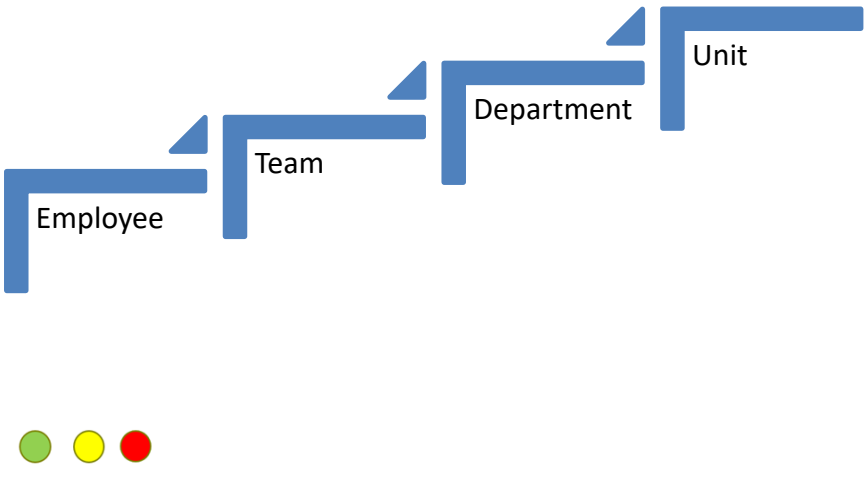

Figure 10. Levels 1-4 knowledge data base and follow up

5.2.4 Co-create

For the employee it is much easier to commit to the change if they are involved to create it. As team leaders have a significant role transforming the organisation competences from the old work to new needed ones, they could be invited to a workshop to create the narrative and plan concrete from > to examples. Employees could be invited to make a team level action plan how the training plan (based on the individual plans) will be conducted.

5.2.5 Team work

Team members might not any longer work in a same location and come from the same culture. Some employees are already used to work in this kind of an environment as some work has been outsourced earlier. They could be nominated to a team ambassadors who encourage the other employees to develop and enjoy the new working environment. Everybody could learn to ask frequently feedback about their collaboration and communication, which would enable them to develop to a multicultural team.

5.2.6 Leaders role

This thesis doesn´t research leadership, but no doubt they have a key role in the future success. Leaders play a key role in balancing between the daily work and preparing employees to the new back office work. Their targets should include KPI´s which support both activities, otherwise the daily operations seem to over run in most of the cases. If they feel succeeding when developing their employees towards new world and career steps they would be more motivated to secure great learning environment.

5.2.7 Celebrate the success

The management should clearly state where they want to be and when. This kind of a big ultimate goal can feel too difficult to reach so it should be split into smaller and more understandable milestones. These milestones needs to be very concrete in order to feel success.

Learning should be also fun, because that is the best way to really learn new things and use them in real working life. When the team and other levels of the organisation have reached out their targets it could be celebrated. Maybe it is only coffee and cake in a team or lunch together with the team mates, it creates a feeling that we work here together for a common goal regardless what roles each team members have, some is learning new the other one is enabling learning by working with the daily tasks.

Unit level could organise a yearly party to celebrate the achieved targets and perhaps grant some diplomas to express the satisfaction of the achievement. During the corona times virtual parties have become more common. Perhaps it could be one way of combining the new global teams together to celebrate.

5.3 **Reliability of the research**

Reliability means that it is possible to repeat the research and same kind of results will be achieved again. Validity can be defined so that the right kind of topics have been researched. As both of these terms are part of natural science they are more suitable to measure in quantitative research but they can be applied to the qualitative research too. The reliability can be improved by good documentation and argumentation in each and every phases of the research. All the methods needs to be selected before the work begins and keeping a diary helps to remember all the activities what is happening in this work. (Kananen 2010, 69.) Every research work aims to avoid false information and mistakes, it is necessary to evaluate the liability of every single research. (Tuomi & Sarajärvi 2013, 134.)

Hirsjärvi et al (2014, 231-233) writes that validity means that measurement or the research method measures exactly right things. In a survey the person answering to it , might interpret the question in another way than the researcher meant. When analysing them the researcher might make wrong conclusions. The results of a qualitative research becomes more valid if the researcher describes thoroughly how the research was carried out in every phases.

The process to write and finalise this research has been a great learning process presenting the importance and validity of the theoretical framework. The theory part supported well the findings from the interviews. This journey has taken several months, which also increased the amount of theoretical material and deepened the understanding. The order of this research has supervised and evaluated this research too. This research process followed the phases Tuomi et Sarajärvi (2013, 151) present in the figure 11.

Figure 11. Qualitative research steps Tuomi et Sarajärvi

The amount of interviews was relatively small, but the answers were very much in line, which supports the reliability of this research. The interviewees presented the different levels in the organisation which

increases the reliability of the answers as they spoke about same kind of items regardless of their position.

As the interviews were semi structured interviews it was always possible to ask more open questions and ask the interviewee to describe more what she means. All material was documented immediately after the interviews, so the researcher could also document what reactions and feelings could be heard during the interviews also some quotes are presented. Chapter three describes how the material was documented and analysed and they follow the proper research instructions and guidelines. The conclusions were made based on the theory as it was also the repeating theme in the interviews.

Referring follows the HAMK guidelines which are based on the good scientific practices also other HAMK guidelines are followed. This thesis answers the research questions and delivers the objectives what was set to this research. In other words the research is valid. Qualitative research always leaves some room for interpretation, but the researcher has tried to be as objective as possible and not made any unnecessary conclusions.

REFERENCES

Aoun, J. E. (2017). *Robot-proof: Higher education in the age of artificial intelligence*. Retrieved 8 March 2019 from https://ebookcentral-proquest-com.ezproxy.hamk.fi

Balas, V. E., Kumar, R., & Srivastava, R. (Eds.). (2019). *Recent trends and advances in artificial intelligence and internet of things*. Retrieved 8 March 2019 from https://ebookcentral-proquest-com.ezproxy.hamk.fi

Beck, J. H. (Ed.). (2006). *Emotional intelligence in everyday life*. Retrieved 8 March 2019 from https://ebookcentral-proquest-com.ezproxy.hamk.fi

Bisneskirjasto Almatalent Retrieved 10 February 2020 from https://bisneskirjasto-almatalent-fi.ezproxy.hamk.fi/teos/IACBGXCTEB#kohta:3((20)DIGITALISAATIO((20)SUOMESSA((20)(:3.3((20)VERKKOKAUPPA((20)VALTAA((20)ALAA((20)/piste:b532

Brinded, L. (2017). *Automation killed 17,000 roles at a huge tech and services firm — but no one actually lost their job.* Retrieved 11 March 2020 from https://www.businessinsider.com/accentures-richard-lumb-davos-interview-robots-jobs-skills-leadership-training-2017-1?r=UK&IR=T&IR=T

Christensen, C (2013), *The Innovators Dilemma*. Massachusetts: Harvard Business Shcool Publishing

Case Company intranet page. *Tiiviimpää yhteistyötä suurien muutoksien aikana.* Retrieved 28 April 2020.

Daugherty, P. R., & Wilson, H. J. (2018). *Human + machine: Reimagining work in the age of ai*. Retrieved 25 January 2019 from https://ebookcentral-proquest-com.ezproxy.hamk.fi

Deloitte (2015). Banking on the Future. Vision 2020. Retrieved 16 May 2019 from https://www2.deloitte.com/content/dam/Deloitte/in/Documents/financial-services/in-fs-deloitte-banking-colloquium-thoughtpaper-cii.pdf

Digitalworkforce. Retrieved 10 March 202 from https://digitalworkforce.com/fi/alykas-automaatio/rpa-ohjelmistorobotiikka-pankit/

Engström J, Berg Åkerhelm M. (2015). *Accenture Strategy, Digital disruption in Nordic retail banking*, retrieved 18 March 2019 from https://www.accenture.com/t20150924T055551__w__/se-en/_acnmedia/Accenture/Conversion-

Assets/DotCom/Documents/Global/PDF/Strategy_7/Accenture-Digital-Disruption-Nordic-Retail-Banking-Study.pdf

Ennakointikammari (2020). Retrieved 1 March 2020 from https://ennakointikamari.fi/mista-osaajat-ja-miten-heista-pidetaan-kiinni/

Eriksson, P., Koistinen, K. (2014). *Monenlainen tapaustutkimus.* Retrieved 30 November 2019 from https://helda.helsinki.fi/bitstream/handle/10138/153032/Tutkimuksia%20ja%20selvityksi%c3%a4_11_2014_%20Monenlainen%20tapaustutkimus_Eriksson_Koistinen.pdf?sequence=1&isAllowed=y

Etla (2014). Computerization Threatens One Third of Finnish Employment. Retrieved 11. February 2020 from https://pdfs.semanticscholar.org/be44/35e1bb104666c94b899ec35caae241a5ac44.pdf

EY (2013). *Building the Bank of 2030 and beyond*. Retriefed 25 January 2018 from http://www.ey.com/Publication/vwLUAssets/EY_-_Building_the_bank_of_2030_and_beyond/$FILE/EY-Building-the-bank-of-2030-and-beyond.pdf

Finanssiala ry 2019 Julkaisut ja tutkimukset 2019 Töissä finanssialalla 2019 Retrieved 13. November 2019 from https://www.finanssiala.fi/materiaalit/FA_T%C3%B6iss%C3%A4_finanssialalla_2019.pdf

Finanssiala ry (2020) Uutismajakka. Retrieved 15 May 2020 from https://www.finanssiala.fi/uutismajakka/Sivut/Kiky-katosi-osaamisen-kehittamista-tilalle.aspx

Ford, M (2017). *Robottienkukoistus*. Tallinna: Raamatutrukikoda
Hesselbein F, Goldsmith M, Beckhard R (1996). Leader of the Future. USA: The Drucker Foundation

Fisher, A. (2019). *These are the most important skills you need to be successful in the modern workplace.* https://www.weforum.org/agenda/2019/05/soft-skills-are-hard-to-measure-and-in-demand-can-they-be-taught

Hasson, G. (2017). *Emotional intelligence pocketbook : Little exercises for an intuitive life*. Retrieved from https://ebookcentral-proquest-com.ezproxy.hamk.fi

Helsingin Sanomat (2017) Retrieved 14 January 2018 from https://www.hs.fi/talous/art-2000005424772.html

Helsingin Sanomat (2017) Retrieved 14 January 2018 from

https://www.hs.fi/talous/art-2000005423492.html

Hesselbein F., Goldsmith M., Beckhard R. (1996). *Leader of the Future*. USA: The Drucker Foundation

Hiltunen, E. (2012). *Matkaopastulevaisuuteen*. Liettua: Balto print

Hiltunen, E. (2019). *Tulossa huomenna.* Viro: Printbest

Huila, I., Tukiainen, M., Hakola, I. (2019). *Tiimiäly*. Jyväskylä: Tuuma Kustannus

Ilmarinen (2017). *Katoa tai uudistu*. Retrieved 23.2.2020 from https://www.ilmarinen.fi/uutishuone/arkisto/2017/uudistu-tai-katoa/

Ilmarinen, V., Koskela, K. (2015). *Digitalisaatio Yritysjohdon käsikirja*. Liettua: Balto Print

Kananen, J. (2010). *Opinnäytetyön kirjoittamisen käytännön opas*. Tampere: Juvenes Print

Kananen, J. (2014). Laadullinen tutkimus opinnäytetyönä. Miten kirjoitan kvalitatiivisen opinnäytetyön vaihe vaiheelta. Juvenes Print

Kasriel, S. (2017) Skill, re-skill and re-skill again. How to keep up with the future of work. Retrieved 27 February 2020 from https://www.weforum.org/agenda/2017/07/skill-reskill-prepare-for-future-of-work

Kasvio, A. & Nieminen, A. (1999). *Kilpailu työstä.* Tampere: Tampere University Press.

Kasvio, A. & Tjäder J. (2007). *Artikkelikokoelma, Työ murroksessa.* Keuruu: Otavan kirjapaino

Kauhanen, A., Maliranta M., Rouvinen, P., Vihriälä, V. (2015) *Työn murros - riittääkö dynamiikka?* Helsinki: Taloustieto Oy

Kauppalehti 6.10.2015. Retrieved 4 March 2020 from https://www.kauppalehti.fi/uutiset/robotit-tuovat-tyot-takaisin-suomeen/d2f66b78-629d-3718-8f38-10a64bc39504

Knott, N., Lheritier, M., Lindsay, H. (2018). *An adaptive workforce for a world of constant change.* Retrieved 27.2.2020 from https://financialservices.accenture.com/rs/368-RMC-681/images/accenture-adaptive-workforce-pov.pdf

Lehti, M., Rouvinen, P., Ylä-Anttila, P. (2012) *Suuri hämmennys. Työ ja tuotanto digitaalisessa murroksessa.* Helsinki: Unigrafia Oy

Länsisalmi H (2013). *Uudista liiketoimintaa*. Sanoma Pro Oy

McKinsey Global Institute (2017) Jobs lost, jobs gained: workforce transitions in a time of automation. Retrieved 10 March 2020 from https://www.mckinsey.com/~/media/mckinsey/featured%20insights/Future%20of%20Organizations/What%20the%20future%20of%20work%20will%20mean%20for%20jobs%20skills%20and%20wages/MGI-Jobs-Lost-Jobs-Gained-Report-December-6-2017.ashx

Manpower Group (2020). *Talent shortage survey - tutkimus 2020*. Retrieved 28 February 2020 from https://tietopankki.manpower.fi/hubfs/Osaajapulatutkimus/2019/Ratkaisuja%20osaajapulaan%202020%20digi.pdf?hsLang=fi&utm_campaign=ManpowerGroup%20Views&utm_source=hs_email&utm_medium=email&utm_content=83968617&_hsenc=p2ANqtz-9rJCZpPzhcBMrPZFOKqfxhRsBReQTrKVEiNLlS39MvrnbOui2i3NBAlBQP_hsawCOhP76lGwF8fqw7coXVrMU7M4Pon2s8FaFoJDfllH7xB26cjVU&_hsmi=83968617

Marr, B. (2015). *Big data : Using smart big data, analytics and metrics to make better decisions and improve performance*. Retrieved 7 May 2020 from https://ebookcentral-proquest-com.ezproxy.hamk.fi

Marttinen, J (2018), *Palvelukseen halutaan robotti.* Tallinna: Raamatutrukikoja

MTV uutiset (2020) Retrieved 6 February 2020 from https://www.mtvuutiset.fi/artikkeli/asiantuntijat-neuvovat-ala-tee-naita-virheita-tyonhaussa/7710716?utm_campaign=ManpowerGroup%20Views&utm_source=hs_email&utm_medium=email&utm_content=83968617&_hsenc=p2ANqtz-9rJCZpPzhcBMrPZFOKqfxhRsBReQTrKVEiNLlS39MvrnbOui2i3NBAlBQP_hsawCOhP76lGwF8fqw7coXVrMU7M4Pon2s8FaFoJDfllH7xB26cjVU&_hsmi=83968617#gs.y4ku7r

Nordea (2018). Digitaalinen sijoitusneuvoja Nora on löytänyt asiakkaansa. Retrieved 10 March 2020 from https://www.nordea.com/fi/media/uutiset-ja-lehdistotiedotteet/2018-09-11-digitaalinen-sijoitusneuvoja-nora-on-loytanyt-asiakkaansa.html

Otala, L., (2018), *Ketterä oppiminen: Keino menestyä jatkuvassa muutoksessa.* Retrieved 17. February 2020 from https://kauppakamaritieto-fi.ezproxy.hamk.fi/ammattikirjasto/teos/kettera_oppiminen#kohta:1((20)Ty((f6)el((e4)m((e4)((20)edellytt((e4)((e4)((20)ketter((e4)((e4)((20)oppimista(:Ty((f6)ss((e4)((20)tarvitaan((20)vankkaa((20)osaamista((20)ja((20)ketter((e4)((e4)((20)oppimista

Opetushallitus 2019 *Raportit ja selvitykset 2019-3.* Retrieved 3.2.2020 from https://www.oph.fi/sites/default/files/documents/osaaminen_2035.pdf

Pechstein, A. (2020). *Hybrid Thinking. Success strategies for the 21st Century.* Alumni Key note 27 February 2020, Aalto EE

PWC (2014) *Retail Banking 2030 Evolution or Revolution*. Retrieved 25 January 2018 from https://www.pwc.com/gx/en/banking-capital-markets/banking-2020/assets/pwc-retail-banking-2020-evolution-or-revolution.pdf

Ramstad, E. Hasu M. (2019) *Älykkäät palvelut ja työntekijän rooli niiden kehittämisessä*. Retrieved 19 May 2020 from http://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161299/TEM_oppaat_3_2018_WorkUp_Tulevaisuuden_tyo_22012019_Web.pdf?sequence=1&isAllowed=y

Ritakallio, T., Vuori, T. (2018), *Elävä strategia*. Retrieved 13.2.2020 from https://bisneskirjasto-almatalent-fi.ezproxy.hamk.fi/teos/IADBFXDTEB#kohta:El((e4)v((e4)((20)strategia/piste:t2

Rogers, D. (2016). *The digital transformation playbook : Rethink your business for the digital age*. Retrieved 7 May 2020 from https://ebookcentral-proquest-com.ezproxy.hamk.fi

Räisänen, H. (2018) Ministry of Economic Affairs and Employment *Työpoliittinen aikakausikirja.* Helsinki: Grano Oy

Saldana, J. (2011). *Fundamentals of qualitative research*. Retrieved 18 May 2020 from https://ebookcentral-proquest-com.ezproxy.hamk.fi

Shook, E., Knickrehm, M. (2017) *Harnessing Revolution. Cretaing the future workforce.* Retrieved 10 Mach 2020 from https://www.accenture.com/_acnmedia/pdf-40/accenture-strategy-harnessing-revolution-pov.pdf

Srinivas, V., Ramsay, T., et al (2019). *2020 Banking and capital markets outlook. Fortifying the core for the next wave of disruption.* Retrieved 17 February 2020 from https://www2.deloitte.com/global/en/insights/industry/financial-services/financial-services-industry-outlooks/banking-industry-outlook.html

Suikkanen, A., Linnakangas, R., Martti, S., Karjalainen, A. (2001). *Siirtymien palkkatyö.* Helsinki: Hakapaino

Susskind, R., & Susskind, D. (2016). *The future of the professions : How technology will transform the work of human experts*. Retrieved 18 February 2018 from https://ebookcentral-proquest-com.ezproxy.hamk.fi

Talouselämä (2018) Retrieved 16.12.2019 from https://www.talouselama.fi/uutiset/yritysjohtajat-eivat-vielakaan-ymmarra-panostaa-tarpeeksi-osaajien-loytamiseen-ja-heista-kiinni-pitamiseen-ihmisiin-ei-suhtauduta-samanlaisella-voimalla-kuin-rahaan/4e9b622c-885c-3793-964b-d0c0e43c0377

Thomas, D. (2012) *New culture of learning.* Retrieved 27.2.2020 from https://www.youtube.com/watch?v=lM80GXlyX0U

Tikka, T. (2016). *Kun kone ottaa ohjat.* Retrieved 10 March 2020 from https://www.eva.fi/wp-content/uploads/2016/09/Robotit-t%c3%b6ihin.pdf

Tivi (2017). *OP otti robotteja töihin*. Retrieved 10 March 2020 from https://www.tivi.fi/uutiset/op-otti-robotteja-toihin-antaa-lisaa-aikaa-hoitaa-jarjestelmavelan/281e91a5-9d49-3e22-b0f6-f78c63adfbac

Tripathi, A. M. (2018). *Learning robotic process automation : Create software robots and automate business processes with the leading rpa tool - uipath*. Retrieved 7 May 2020 from https://ebookcentral-proquest-com.ezproxy.hamk.fi

Tuomi, J., Sarajärvi, A. (2013). *Laadullinen tutkimus ja sisältöanalyysi.* Vantaa: Hansaprint Oy

Varamäki, A. (2019). *Future Proof tulevaisuuden työkirja*. Jyväskylä: Docendo.

Viitala, R. (2005), Johda osaamista! Osaamisen johtaminen teoriasta käytäntöön. Keuruu: Otavan Kirjapaino Oy

Viitala, R. (2009). Henkilöstöjohtaminen strateginen kilpailutekijä. Helsinki: Edita Prima Oy

Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital : Turning technology into business transformation*. Retrieved 14 October 2019 from https://ebookcentral-proquest-com.ezproxy.hamk.fi

World Economic Forum (2015). The Future of Financial Services. How disruptive innovations are reshaping the way financial services are structured, provisioned and consumed. Reterieved 25 February 2019 from http://www3.weforum.org/docs/WEF_The_future__of_financial_services.pdf

APPENDIX 1

Interview questions:

Reminder: The focus is in the work done by an employee in the Back-office department (No leadership, specialist or other positions).

1. Describe your own words how you think the Back-office work will change within 2-5 years?

    a. What will disappear?
    b. What new will come in?

2. What skills and competences are still needed after the change?

3. What skills and competences become more and more important to have?

4. How are these skills and competences, you mentioned, supporting the case company strategy?

5. How should these new skills and competences be grown to the organization?