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Master in International Marketing Management

MASTER'S THESIS

CHANGE MANAGEMENT AND DIGITAL TRANSFORMATION IN THE BANKING INDUSTRY

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ABSTRACT

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The purpose of this master's thesis is to examine how digital change can be managed in today's growing digital environment specifically in the context of the banking industry. This study aims to find out the critical success factors of digital change management, and possible distinctions in reflection to existing research on change management. In addition, the aim of this study is to identify opportunities and challenges of digital transformation. The empirical research was conducted as a case study by interviewing several managers of a company operating in the banking industry. The results of the research indicate that digital change can be managed by following a six-step digital change management process. The most critical success factors for managing digital change are the creation of organisational readiness, the involvement and empowerment of employees to act on digital change, as well as communication. These success factors are all identified by previous researchers. However, some success factors are not seen vital for digital change, than previous change management literature has stressed, but also new discoveries are made to successfully manage digital change. The study also identifies several opportunities and challenges of digital transformation, for example the opportunity of new services, or on the other hand the challenge of the expansion of the competitor field.

TIIVISTELMÄ

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Pro gradu -tutkielman tarkoitus on selvittää, kuinka digitaalista muutosta voidaan johtaa nykypäivän kasvavassa digitaalisessa ympäristössä, erityisesti pankkialalla. Tämä tutkimus pyrkii selvittämään mitkä ovat tärkeimmät menestystekijät digitaalisessa muutosjohtamisessa, sekä löytämään mahdollisia eroavaisuuksia aikaisempiin muutosjohtamisen tutkimuksiin. Tämän lisäksi, tutkimuksen tavoitteena on tunnistaa digitaalisen transformaation mahdollisuudet ja haasteet. Empiirinen tutkimus toteutettiin tapaustutkimuksena haastattelemalla useampaa johtajaa pankkialan yrityksestä. Tutkimuksen tulokset osoittavat, että digitaalista muutosta voidaan johtaa kuuden vaiheen digitaalisen muutosprosessin avulla. Kaikista kriittisimmät menestystekijät digitaalisessa muutosjohtamisessa ovat valmiuden luominen yrityksessä, kommunikaatio, työntekijöiden osallistaminen, sekä heidän motivoiminen toimia digitaalisen muutoksen mukaisesti. Nämä on tunnistettu myös aiemmissa muutosjohtamisen tutkimuksissa. Tämä tutkimus toi kuitenkin esille, että esimerkiksi digitaalinen visio ei ole olennainen menestystekijä kuten aiemmassa kirjallisuudessa on tunnistettu, mutta muita uusia ominaisuuksia tunnistettiin digitaalisen muutosjohtamisen menestystekijöiksi. Tutkimus myös esittää useita mahdollisuuksia ja haasteita, esimerkiksi mahdollisuuden uusiin palveluihin tai laajentuvan kilpailukentän tuomat haasteet.

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Now as I have finally finished my studies, I have to say I am quite relieved, but at the same I will miss the ordinary life as a student. It has been a memory filled journey with amazing people by my side, and long sleepless study nights. Even though my studies took me longer than I expected, I guess life goes never as planned. I will cherish the memories created in Lappeenranta.

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Helsinki, 02.12.2018
Jannika Kinnunen

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1 INTRODUCTION

1.1 Research background

The concept of change management has been studied as early as 1947 by Kurt Lewin. In addition to Lewin, John P. Kotter has been a great influence on the study of change management by introducing an eight-step change management process in 1995. His change management process is still seen as an excellent tool in managing organisational change. However, today organisations are operating in complex business environments by competing in global markets and facing fast technological escalation (Graetz et al. 2011, 5-6). Organisational change is said to be much more difficult than ever before and failed change implications show that it is not simple and straightforward like traditional approaches seem to be (Graetz et al. 2011; 5, 22).

After Kotter's famously known process, research shifted to more concrete success factors of change management. Yet, the last decades research on success factors has proven Kotter's work still valuable and usable as many success factors are also introduced in his eight-step process. This study combines existing research on the concept of change management with a relatively new phenomenon called digital transformation. The development of digital transformation has started around the 90s with the creation of new channels like homepages continuing to online shops and today the heated conversation of automation and Internet-of-Things (Ilmarinen & Koskela 2015, 28-30). Digital transformation is still an ongoing change, which people and companies are facing with an increasing speed.

Last year the underlying finding of the use of information and communications technology of the Finnish population was that mobile phones are an increasingly popular device for using the Internet and the use purposes are diversifying (Tilastokeskus 2017a). As an example, three out of four people aged between 16 to 89 have a touchscreen mobile phone that is equipped with 3G or 4G Internet. The growth of smartphones commonness is still fast, and the ease of use of smartphones and the increasing amount of versatile applications is reflected in the growing use of Internet. (Tilastokeskus 2017b) The use of smartphones together with mobile Internet connection and distributing applications through iOS/Apple and Android platforms has become the starting point when designing services for customers (Dahlberg & Halén 2016). It is evident that businesses have to answer customers' expectations by providing nowadays also services that are easily served with a mobile phone, meaning for example applications.

Nevertheless, there is not much scientific research on how organisations actually even manage digital change. Therefore, this study aims to examine how especially that type of change is managed by striving to build a process of digital change management mirroring to Lewin's and Kotter's previous change management research.

1.2 Research gap

The two main themes of this study change management and digital transformation have been scientifically researched until now only separately. Change management research dates back over 70 years, and just few studies precisely Lewin's and Kotter's have gained such a success that their studies are still used and seen meaningful today. However, it is questionable how new type of changes like digital transformation fit into Lewin's and Kotter's process models that have been developed in 1947 (Lewin's) and 1995 (Kotter's).

Digital transformation has only been a hot topic since around 2000 (Ilmarinen & Koskela 2015, 28-30). It is a fairly new research topic and an ongoing change, and therefore researchers and authors have not yet even found a common clear definition for digital transformation (e.g. Kane et al. 2015, Parviainen et al. 2017). Research has been rather focusing on general topics such as the impact of digital transformation and its opportunities and challenges on organisations (e.g. Parviainen et al. 2017). Additionally, there is frequent research and literature on changing business models in relationship to digital transformation (e.g. Weill & Woerner 2013, Ilmarinen & Koskela 2015) and creating digital strategies (e.g. Kane et al. 2015, Rauser 2016).

However, research on actual management practices are missing and the process of digital change management or how it differs from traditional change management processes. This has also been identified by other researchers, who agree that there is a lack on research regarding the actual realization of digital transformation, for example on how to even manage digital transformation (Parviainen et al. 2017) and what is the role of managers in digital transformation (Vey et al. 2017). Also as Ilmarinen and Koskela (2015, 229) have identified, digitalisation is above all a question of management, since management defines the success of digitalisation in an organisation.

In general, there is still very little scientific research about digital transformation, let alone in relationship to management. Managing digital transformation has been only researched by non-academic literature like consulting companies (e.g. DeLaCastro & Juillerat 2015). There is an increasing amount of textbooks about digitalisation published in the recent decade, but not that many scientific articles. Also books, rather serve as a guide for companies, but real-life examples and analysis from different industries are missing. Therefore, this study continues to fill in the gap in the research of digital change management specifically in the banking industry.

1.3 Research questions and objectives of the study

The purpose of this study is to find out how companies manage digital change in an ever more digital business world. Under examination is an organisation operating in the banking industry, who has only recently taken action towards digital products and services and incorporated heavily digitalisation in their daily operations. This offers a great possibility to examine the company's digital change management process. There is need to gain more precise understanding on companies digital change management processes and find the best practices and tools for managers facing digital change. Therefore, the main research question is simply said:

How can digital change be managed?

In addition to the main research question, supportive questions are created and answered. The first supportive question is concentrating on the critical success factors for managing digital change. The question also aims to find out if there are some other success factors needed for digital change than previous literature has identified. All in all the goal is to observe similarities and differences to previous theoretical perspectives of change management literature. Thus, the question is following:

> (1) What critical success factors are needed for managing digital change? How do they differ from the selected success factors of change management?

The second supportive question of the study is aiming to expose the opportunities and challenges of digital transformation in the banking industry. It also explains, how possible challenges can be managed and reveals tools for turning challenges into opportunities. Hence, the second supportive question:

> (2) What opportunities and challenges has digital transformation created in the banking industry so far? How can challenges be managed?

1.4 Delimitations

The main delimitation of the study is created by its context. Firstly, this study only focuses on one case company. Secondly, this study is concentrating solely on one industry sector i.e. the banking industry and thirdly, the study is conducted in Finland. Since the study's sample size is small and there is explicit focus on a specific industry, the results cannot be generalized. The lack of generalizability is a known weakness of a case study research method and therefore this studies results are compared with similar literature in order to sharpen generalizability (Eisenhardt 1989). In addition, as the aim of this study is to precisely understand how digital change can been managed, a qualitative case study research is seen appropriate.

The second delimitation stems from the chosen change management frameworks and success factors. Due to limited resources and in order to answer the research questions and objectives, this study explains the most famous and used frameworks of Lewin (1947) and Kotter (1995, 1996), as well as continuously proven success factors of change management. The selection was based on prior research of change management literature. Additionally, this study is delimiting the last step of Lewin's process and likewise the last two steps of Kotter's process, since digital change is an ongoing change.

Lastly, it is seen that the difference between leadership and management is not always distinct when studying change management. For example Kotter (1996, 67-68) states, that vision - third step of his change management framework - is a central component of great leadership. Kotter is seen specifically as one of the top change management researchers, but it is observable that his studies also focus on the leadership discipline. Even though, there is some overlapping with leadership, Kotter's eight-step framework is specifically seen part of change management research. Leadership is not examined further in this study and the focus is precisely on management practices.

1.5 Research strategy and structure of the study

In order to get in-depth understanding on digital change management in the banking industry, a qualitative case study has been conducted. The main data collection method are semi-structured interviews with employees of the case company working specifically in manager positions. The interview questions were formed under several themes and based on the literature review to answer the research questions. The interviews were carried out either in person or by phone and later transcribed and analysed.

The structure of the thesis is following: Firstly, the theoretical section is divided into two separate chapters. The second chapter named change management forms the biggest part of the theory by elaborating on types of change, resistance to change, and processes and success factors of change management. The theory is largely based on literature of Lewin's work as well as John P. Kotter, who is another very much highlighted researcher of change management. Both, Lewin's and Kotter's change management processes are also introduced in this paper and later followed by more concrete success factors of change management.

The second part of the theory is on digital transformation. The chapter discusses the meaning and development of digital transformation as well as the impact it has on today's organisations. It takes a closer look on opportunities and challenges of digital transformation that researchers have identified until now. Such as in figure 2 illustrated, the theoretical framework is formed of change management and digital transformation, which are separately introduced in this study followed by an empirical study on digital change management.

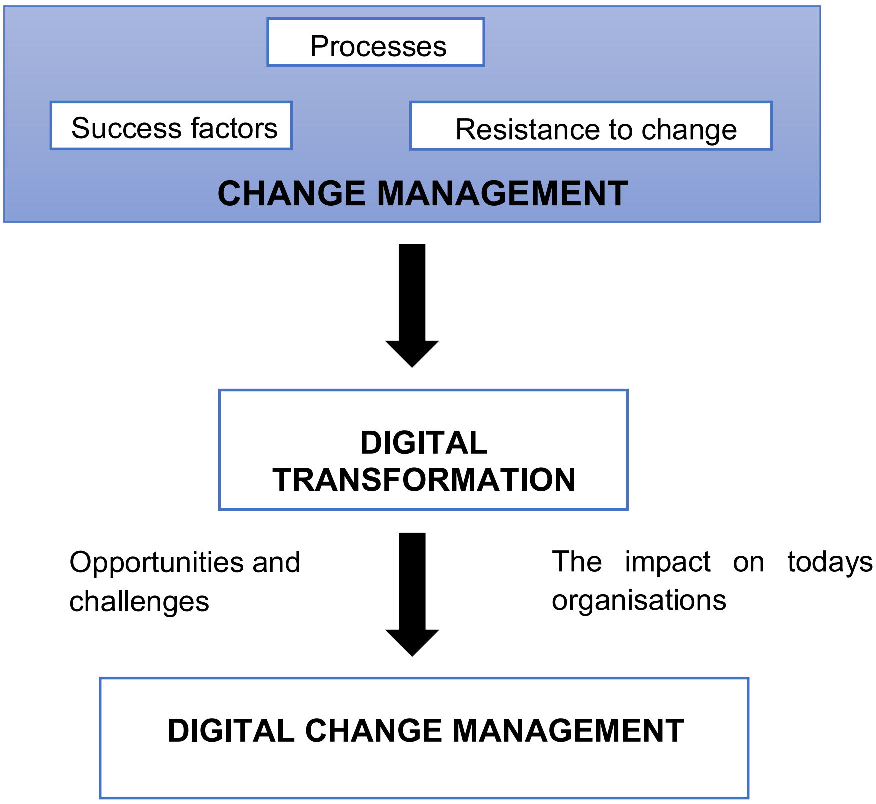

Figure 1. Theoretical framework

The empirical section is initiated by discussing the research methodology, and data collection and analysis. The fourth chapter also includes a short presentation of the case company. Thereafter, the empirical findings and analysis of the case study are presented. In the last chapter the findings are summarised by answering the research questions and both, theoretical contribution and managerial implications are discussed. Lastly, limitations and future research directions are presented.

2 CHANGE MANAGEMENT

2.1 What is change management?

Change is a normal part of organisations business life, and the purpose of change is to make organisations more productive. In fact, to maintain an organisation's competitive success change is very critical, but change does not come without challenges and intensity (Graetz et al. 2011, 2-3). More than 70 percent of organisations change programs fail to achieve the indented result (Boonstra 2004, 1). Only after managers have personally experienced failure, they are able to recognize the role they can play in preventing resistance to change and leading change. In a study of companies implementing major business changes was found that the most common barrier to success was the lack of change management. (Hiatt & Creasey 2003, 2-3). Thus, change should be managed, to be successful in business. But what does change management even mean?

Change management can be defined as "*a process of guidance and adjustment aimed at achieving the goals for change*" (Boonstra 2004, 4). This perspective is linked to theories of planned change and organisational development (Boonstra 2004, 4-5). Another more people oriented interpretation of change management is described by Jeff Hiatt and Timothy J. Creasey, who are editors of the Change Management Learning Center (Hiatt & Creasey 2003, 1). Hiatt and Creasey (2003, 10) define change management as *"managing people in a changing environment so that business changes are successful and the desired business results are realized"*.

It seems that when searching for a clear definition of the term "*change managem*ent" there is no one uniform description, but there is a solid goal to achieve successful change by managing different processes like people. The cause of not being able to find one clear definition of change management may be, because there is also different kind of change (see chapter 1.2). In addition, there is no one best way to manage change and there are a variety of tools and techniques that can be used when managing organisational change (Graetz et al. 2011, 22). In the end, it is vital to assure that the employees of the organisation understand change management, as it is being applied for the specific change project (Hiatt & Creasey 2003, 12).

2.2 Types of organisational change

Change type features "*the essential characteristics that describe the kind and form of change and the qualities that make change what it is*" (Al-Haddad & Kotnour 2015). Organisational change is a complex and multifaceted matter and therefore the most advisable starting point is to gain a better understanding of the variables that frame organisational change (Graetz et al. 2011, 3). There are several researchers and authors identifying types of change based on the level of change or scale of change, or even both (figure 1).

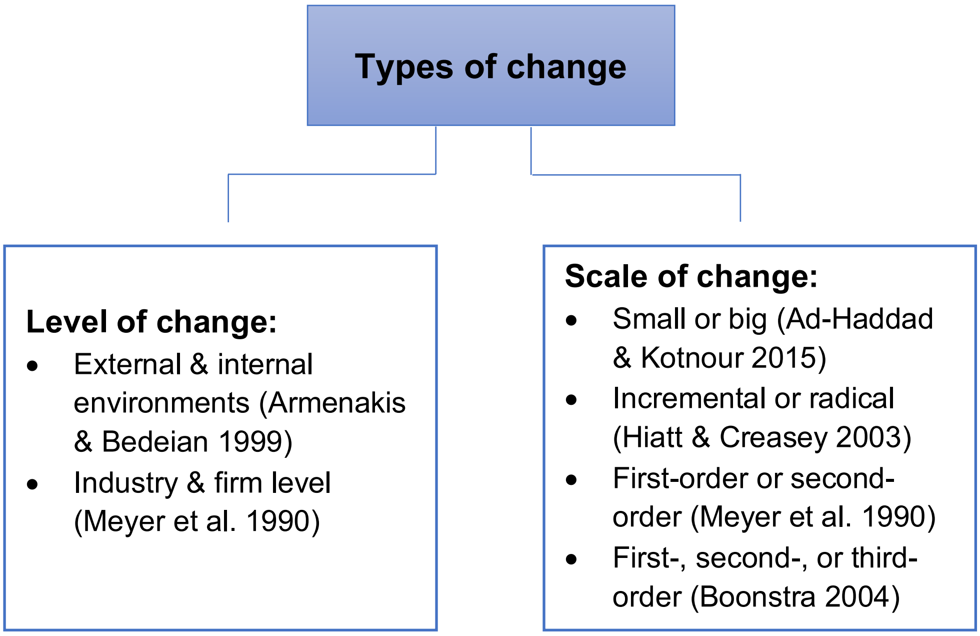

Figure 2. Types of change

Armenakis and Bedeian (1999) examined broadly organisational change theories and researches from the 1990s. They studied among other things contextual issues, which focus on forces or conditions that exist in organisations external environment (e.g. governmental regulations, technological advances) and internal environment (e.g. work specificity required by existing technology). Several studies were taken into account and related to the successfulness of various responses to changes of the internal and external environment. (Armenakis & Bedeian 1999) In addition, to the afore mentioned researchers, Meyer, Brooks and Goes (1990) classified in a longitudinal study in the hospital industry from the 1960s to 1980s that change occurs on firm- or industry level. Organisations and industries change according to their own dynamics, but both level change is inevitable as they induce each other (Meyer et al. 1990).

The second category of change types is change scale, which is "*the degree of change required to reach the desired outcome*" (Al-Haddad & Kotnour 2015). The change scale is identified as small or big (Al-Haddad & Kotnour 2015); incremental or radical (Hiatt & Creasey 2003, 28-29); first-order or second-order change (Meyer et al. 1990); first-, second-, or third-order change (Boonstra 2004, 10-11). Organisational change can vary from small incremental changes to enormous radical changes and thus having a different demand on change management (Hiatt & Creasey 2003, 28-29).

First-order changes or incremental changes are small and deliberate improvements that are usually driven from within the organisation - not by immediate demand for improvements. Second-order changes or radical changes are immediate and dramatic that are often forced on the organisation by an interaction with its environment. (Meyer et al. 1990; Hiatt & Creasey 2003, 28). In addition, to first- and second-order changes, Boonstra (2004, 10-11) identifies three different types of change. According to Boonstra (2004, 10-11), first-order improvement is planned change, second-order change considers the approach of organisational development and third-order change is transformational change. Both, change levels and change scales, are ways of identifying change type. While change levels refer to the organisations external environment or industry level and internal environment or firm-level, change scale expresses the size and degree of change.

2.3 Processes of change management

Previous management textbooks and management journals have commonly highlighted and quoted Kurt Lewin's and John P. Kotter's change processes, and thus these are also introduced in this chapter and later summarized by means of figure 2. Research in change in the areas of psychology and sociology started with Lewin's work in 1946 (Al-Haddad & Kotnour 2015). After that the focus shifted to management and leadership disciplines, in which Kotter's work serves as a popular example (Al-Haddad & Kotnour 2015).

2.3.1 Lewin's process

Kurt Lewin a social scientist, born in 1890, has dominated the theory and practice of change management for over decades. His greatest belief and commitment was to resolve social conflict by facilitating learning and behavioural change. Lewin's work consists of Field Theory, Group Dynamics, Action Research and the Three-step change process, which is his key contribution to organisational change. (Burnes 2004) Lewin's change process is composed of the first step - unfreezing, second step - moving, and third step - freezing (Lewin 1947).

Firstly, Lewin believed that "*the stability of human behaviour was based on a quasi-stationary equilibrium supported by a complex field of driving and restraining forces*" (Burnes 2004). Therefore, the equilibrium should be destabilized so that old behaviour can be unlearnt and new behaviour successfully adopted. This results in the unfreezing of the present level. (Lewin 1947 & Burnes 2004) Schein (1996) also comments that the key to unfreezing is a thorough psychological dynamic process that involves painful unlearning and difficult relearning by restructuring among other things one's thoughts, perceptions and feelings.

The second step of successful change includes the movement to the new level (Lewin 1947). The process of unfreezing creates motivation to learn, and after an individual has become unfrozen, the person is motivated to change. But, the motivation of learning does not necessarily control or predict the direction of learning. For example, if the only new information available is coming from powerful role models (e.g. consultants) then learning will also occur in that direction. Therefore, one key element of change management processes is to consider carefully what kind of role models are made available for learners once they are unfrozen. The best solution for individuals is to avoid identification and encourage the individual to pick solutions that suit him or her, by means of searching for a variety of new information. When it comes to groups, then the entire group should be trained to reveal their norms that support old behaviour and change them. This is also the best tool for inducing personal and relational freezing – the third step of the process. (Schein 1996)

Lewin's (1947) final step of the process is freezing of the new level, by seeking to stabilize the individual or group at a new quasi-stationary equilibrium so that new behaviour is safe from regression (Burnes 2004). The third-step of Lewin's process is considered vital, because there is a need for permanency of the change, in order that planned change remains in the organisation. The permanency of change should be also included in the objective of the whole change process. (Lewin 1947) According to Schein (1996) the main point of freezing is that new behaviour must be congruent with the rest of an individual's behaviour and personality. If that is not the case, it leads to the unlearning of the matter one has learned (Schein 1996). In the end, Lewin (1947) argues that group decision should be the change procedure, because group decision facilitates change, and decision links motivation to action.

2.3.2 Kotter's process

Kotter's article "Leading Change: Why Transformation Efforts Fail" (1995) gained an enormous success right away it was published. In his article, Kotter introduced eight mistakes that organisations usually do when trying to effect change and managers were immediately able to relate. (Kotter 1995 & Kotter 1996, ix) Kotter's article became the base for his popular eight-step change management process.

The first step of Kotter's process stems from organisations not establishing a great enough sense of urgency. Organisations should examine the market and identify possible crises. (Kotter 1995) This is one of the most enormous step of the process as it requires sacrifices, initiative and gaining need for great cooperation. Therefore, visible crises can be helpful in catching employees' attention and lifting urgency levels. (Kotter 1996; 35-36, 45) Those organisations that fail during the first step underestimate the difficulties of producing change and thus also the importance of building a powerful guiding coalition, which is the next step of the process (Kotter 1995).

Forming a powerful guiding coalition involves gathering a group of people who have power to lead the change. The central point is that the group works as a team that is based on trust and common goals. This is especially important in today's rapidly changing business environment, where individuals do not have all information available to make decisions. Only teams can be effective under these new circumstances and are able to process more information, more quickly. (Kotter 1996; 21, 55-65)

The third step consists of creating a vision to help direct the change effort, and developing strategies to achieve that vision (Kotter 1996, 21). As Kotter (1995) stresses, "*in failed transformations, you often find plenty of plans and programs, but no vision*". Even though vision is only one element of a larger change system and part of the leadership discipline (Kotter 1996, 71-72), it is an especially vital factor for later management. Without vision, it is hard to make strategies or logical plans and these are not producing the needed change. In addition, the change vision should be communicated through several channels so that the entire organisation understands its goals and directions (Kotter 1996; 85, 93).

Here after managers should pay attention on empowering people to act on the vision and effect change, which involves e.g. providing employees needed training and confront supervisors who discourage needed change. The reason for empowerment is stressed, as employees usually will not help or cannot help if they feel powerless, and at this point of the process it is important to remove as many barriers to the implementation of the change as possible. (Kotter 1995 & Kotter 1996, 101-115)

After empowering people, Kotter (1995 & 1996, 121-122) states that there is need for planning and creating short-term wins, which should be visible, unambiguous and clearly related to the change effort. As major changes take time, there is need to emphasize short-term results and show proof that all the change effort is paying off (Kotter 1996, 117-119). Once again it may be questionable, what is the role of management at this point, but there is a clear relationship between leadership, management, short-term results and successful transformation. If there is a lack of leadership during change processes, short-term results may be possible, but major long-term change is rarely achieved (Kotter 1996, 128-130).

At this stage of the change process some managers may declare victory, as first performance improvements are visible, but that could end up catastrophically (Kotter 1995). The nature of management processes is usually much shorter, but if considering major change in highly interdependent systems, it takes years not months (Kotter 1996, 143-144). If for example considering digital change in the financial sector, it is still evolving and new change projects are produced such as methods for mobile payment. In addition, it takes time to ensure that all new practices are grounded in the organisations culture (Kotter 1996, 143-144), and organisational change only sticks when it becomes *“the way we do things around here”* (Kotter 1995).

2.3.3 Framework summary

Lewin’s three-step change management process has been seen one of the key model to change, and it is still relevant in today’s world, although it has also faced criticism in the past decades (Burnes 2004). Lewin’s study has a focus on social sciences and he rather takes into account the individual and group level than the organisation as a whole. It is all about the individual’s perception and fact-finding, to individual or group action. Even though Lewin and Kotter have a different perspective to the change process, also Kotter (1996, 55-65) stresses that particularly groups can be effective for gathering and processing information as well making decisions that leads to change.

Additionally, both processes are quite straight forward in following a certain number of steps to reach a successful change. However, Lewin’s three-step change process rather resembles a timeline, whereas Kotter’s eight stages are more concrete actions that should be adopted to an organisation’s change process.

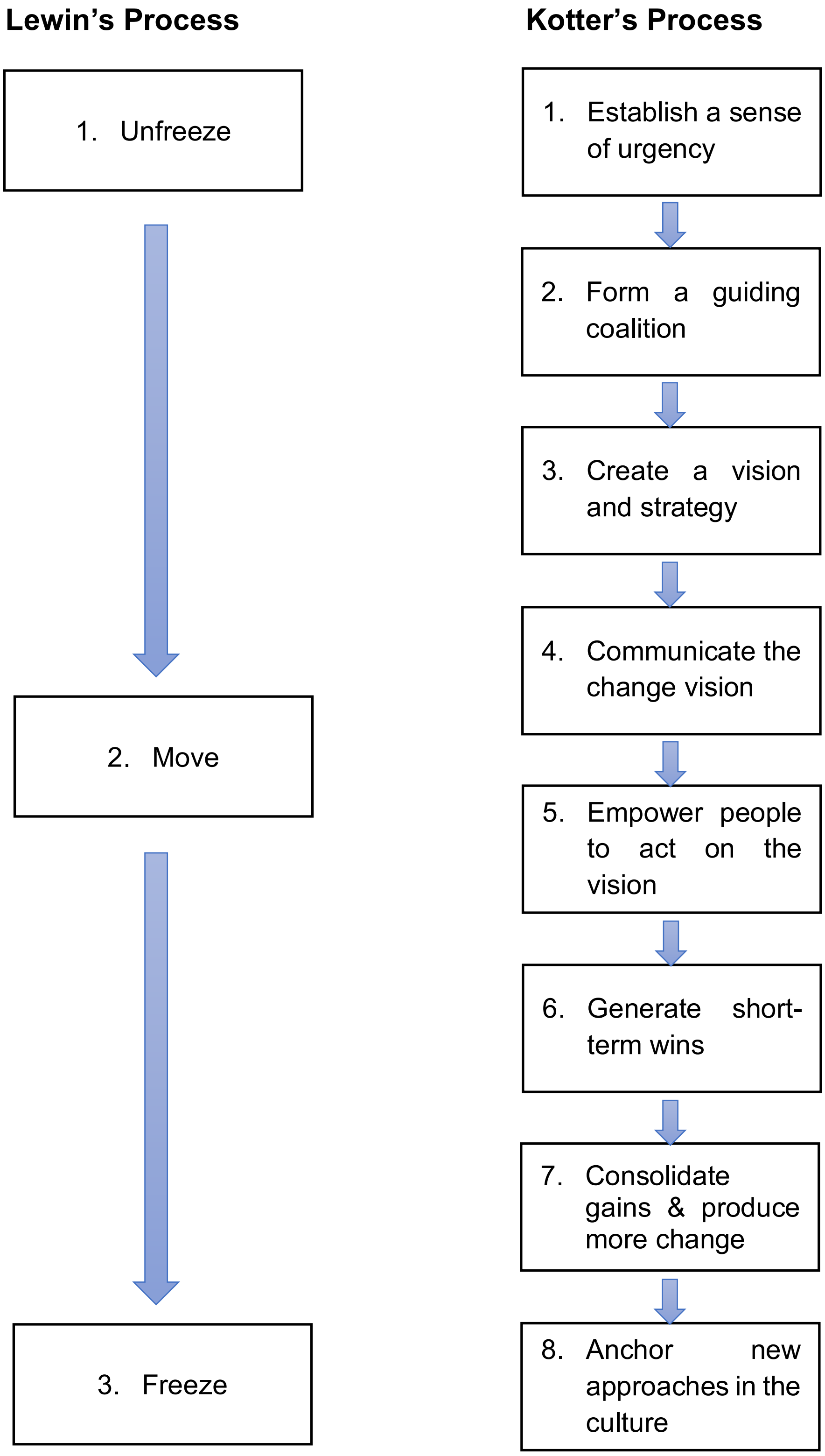

Figure 3. Lewin's and Kotter´s change management processes (based on Lewin (1947) and Kotter (1995 & 1996))

2.4 Resistance to change

Since Lewin's work in 1947, resistance to change has been discussed and the need for managers overcoming it. Such as Graetz, Rimmer, Smith and Lawrence (2011, 4) emphasize that even if strategy, systems and structures of a change process have been overly well introduced, it can all go wrong if the human side of change has not been managed. People's natural tendency is to resist change, and that is why it makes the most troublesome aspect of organisational change (Graetz et al. 2011, 5) and a significant barrier to success (Hiatt and Creasey 2003, 12).

Kotter and Schlesinger (1979) identified various causes for resistance to change as well as strategies to overcome resistance. Their article is ever since used and cited as it also includes most of the recommendations of other authors. The four most common reasons for resisting change are following: (1) Parochial self-interest, (2) Misunderstanding and lack of trust, (3) Different assessments, (4) Low tolerance for change (Kotter & Schlesinger 1979).

Parochial self-interest is the fear of an individual losing something of value, as people rather focus on their own interests and not on those of the entire organisations. Secondly, people resist change when a misunderstanding of the change and its implications occurs, and those misunderstandings are not rapidly clarified. This happens usually if there is lack of trust between employees and managers. Another common reason for people resisting change is the belief of change initiating more costs than benefits for the entire organisation. Lastly, even though change is realized as good, people fear they are not able to develop the new skills and behavior – organisational change requires people to change too much, too quickly. (Kotter & Schlesinger 1979)

Kotter's and Schlesinger's work is an example of the traditional view of resistance to change. The traditional view is classified as the inevitable and natural reaction to any change, where management and employees are opposing parties. (Bennebroek Gravenhorst & Veld 2004, 320-322) In addition to the traditional view of resistance, Bennebroek Gravenhorst and Veld (2004, 321-322) identified also an alternative view, which basic idea says that employees' resistance to change is a reaction to being excluded from the change process. This kind of resistance is also seen as an indication of bad change management. But such resistance can be prevented, by making change a collaborative and interactive effort, and having stakeholders work together, instead of against each other. (Bennebroek Gravenhorst & Veld 2004, 321-322)

The alternative view by Bennebroek Gravenhorst and Veld (2004, 323-324) prevents the build-up of resistance to change in the first place, whereas Kotter and Schlesinger (1979) anyhow presume resistance to change, and it is managers task to overcome resistance by tailoring strategies to the types of resistance they encounter.

2.5 Success factors of change management

Previous change management literature has identified various critical success factors that should be addressed during organisational change (Klein 1996, Kotter 1996, Graetz 2000, Weber & Weber 2001, Chrusciel & Field 2006, Lucey 2008). Critical success factors of change management include hard skills (e.g. planning and analysis) as well as soft skills (e.g. communication and teamwork). In order for successful change to happen, not only organisational change management is needed, but also individual change management. It has a focus on employees to help them through the transition, as in the end employees are the ones that ultimately must implement the change (Hiatt and Creasey 2003, 10).

The following chapter takes a closer look on five critical success factors of change management: having a clear vision and planning, communication, organisational readiness, empowering action of employees by training and implementation teams, and employee participation. In addition, the above discussed change management processes by Lewin and Kotter (chapter 1.3) as well as the concept of resistance to change (chapter 1.4), are linked to the critical success factors.

2.5.1 Vision and planning

Literature has long stated the importance of a clear vision for organisational success during organisational change (Weber & Weber 2001). Clear vision is one of the two most important success factors, in the unfreezing stage of a change process (Lucey 2008). According to consultants, academics and writers on organisational change, the lack of clear executive vision and leadership is the most common reason for transition failure. Therefore, to begin with, change should be led by a person that among other things has a clear vision, a long-term perspective and focuses on people. (Lucey 2008) The importance of leadership that creates a vision of the future is also stressed by Kotter (1996, 71-72) and Graetz (2000). In the beginning of a change process or by others referred to as the unfreezing stage of change, creating a vision helps to direct the change effort, and developing strategies achieve that vision (Kotter 1996, 21).

Furthermore, "*the unfreezing stage involves a lot of organizational activity such as planning, that has little objective outcome but for which management will be held accountable by the rest of the workforce*" (Klein 1996). The importance of planning and analyzing is also named by Chrusciel and Field (2006), as one of the critical success factor in global significant change. The planning and analysis of an organisation is the evaluation of where the organisation is now and where it would like to be before taking any action (Chrusciel & Field 2006). As a result of appropriate planning and analysis is the development and use of a prescribed yet flexible instruction plan, which is a new success factor proposed by Chrusciel's and Field's (2006) study. Their additional proposed success factor of curriculum development is further elaborated in sub-chapter 1.5.4.

2.5.2 Communication

Another much-highlighted success factor of change management is comprehensive communication of the change message to all levels of the organisation (Kotter 1996, 21; Graetz 2000; Chrusciel & Field 2006). Successful transformation occurs in organisations where managers "walk the talk", meaning that a new direction should be communicated by management through behaviour (Kotter 1996, 95-97; Graetz 2000).

Already from the beginning of the change process communication should be considered as a vital success factor, because it helps to increase employee understanding and it pushes towards the acceptance of change (Weber & Weber 2001). Additionally, if an organisation is faced with resistance to change, one of the most common forms to overcome resistance is by educating people about it beforehand. Communication helps people to see the need for change, and it is also ideal to use when resistance is based on inadequate or inaccurate information and analysis. (Kotter & Schlesinger 1979)

Stuart M. Klein (1996) introduces several key principles of organisational communication, for instance the use of face-to-face communication, which is the most effective medium especially in a group context. But, it should be kept in mind that the change message is communicated most effectively when many different channels are used (Klein 1996; Kotter 1996, 93). Furthermore, Klein (1996) states that for any planned change an organisation should follow a management communication strategy, which fits together with the general stages of an organisations change process. For example, if considering Lewin's three-step process, at every step – unfreezing, moving and freezing – there are different communication needs that should be addressed (Klein 1996). On the other hand, Lucey (2008) states that there should be a clear and regular communications strategy prior to the change – i.e. during the unfreezing stage of the change.

According to Klein (1996), the unfreezing stage's primary communication objective is to prepare employees for change. The change should be justified, first steps should be explained, and employees need to be reassured. Later, it is important to report in detail about the change progress. The communication strategy should indicate e.g. how the change will affect employees, their new roles and responsibilities. Lastly, when change is freezed, the success of change should be publicized and celebrated among employees. In addition, the organisation should build full understanding of employees' personal implications to change, because the organisational change is intended to be incorporated in to the future life of the organisation. (Klein 1996)

2.5.3 Organisational readiness

Kotter's (1996, 21) eight-stage process of creating change in an organisation starts with the need to establish a sense of urgency for change. This stems from the fact that 50% of the companies that Kotter has studied failed in that first matter (Kotter 1995). Also, Lucey's (2008) study revealed that one reason for failure in the unfreezing stage of change, is the lack to create a sense of urgency. Organisational readiness is already highlighted in Lewin's 70-year-old three-step change process, saying that exactly at the unfreezing stage, there must be readiness and motivation to change to be generated (Schein 1996).

However, organisational readiness is not only an issue for managers, but also employees are confronted with it. Therefore, it is important to understand that employees' perceptions of organisational readiness to change either facilitates or undermines a successful change effort (Chrusciel & Field 2006). Personal involvement of management is an exemplary tool for increasing the sense of urgency in the workforce, so that the organisation succeeds in achieving their goals (Graetz 2000).

In a research by Weber and Weber (2001) employee perceptions of organisational readiness for change were studied between two times - prior to the start of a change and six months after the change was initiated. The results show that six months after a change was initiated perceptions of organisational readiness for change increased significantly. The results suggest that as employees become more familiar with the change after some time also their change effort increases. (Weber and Weber 2001) Thus, the study stresses the importance of dealing with organisational readiness in the workforce already from the very beginning of a change initiative. But as other research highlights, organisations do not generally spend the time at the start of a change process to assess if their employees are even "change ready" (Lucey 2008).

2.5.4 Empowering action

Researchers suggest that especially training of employees (Kotter 1996, 106-109; Chrusciel & Field 2006) and building teams for implementation (Kotter 1996, 51-66; Hiatt & Creasey 2003, 22-24; Lucey 2008) are powerful tools for empowering employees to act on organisational change.

Training

Chrusciel's and Field's (2006) research discovered the lack of an overall change management plan of action with a defined curriculum. Based on the result of their research, Chrusciel and Field (2006) suggest the need for a comprehensive action plan having a prescribed curriculum, as well as appropriate training for employees to deal specifically with change. On the ground of the developed plan, the organisation can then educate employees about the important change issues dealing with both technical and human aspects.

In relationship to resistance to change, managers can deal with potential resistance by being supportive, which can be in form of simply listening or on the other hand provide training in new needed skills. The strategy of facilitation and support when dealing with resistance to change is suggested, since people resist change if they fear that they will not be able to develop new skills and behavior. (Kotter & Schlesinger 1979) But even if training is provided, it is usually not enough, not the right kind nor done at the right time. Employees are expected to change habits, and thus organisations should think carefully what new behavior, skills, and attitudes are needed for organisational change. (Kotter 1996, 106-109) The level of training has also a critical impact on employee attitudes towards management and the change effort. Overall open and early training helps also in increasing employee understanding and acceptance of the change. (Weber and Weber 2001)

Implementation teams

The number one requirement for successful implementation of organisational change is visible and active executive sponsorship (Hiatt & Creasey 2003, 22). Executive sponsorship (Hiatt & Creasey 2003, 22) or also called guiding coalition (Kotter 1996, 21) refers to employees that have power to lead the change. Whereas Hiatt and Creasey (2003, 22) say that the executive sponsorship can be formed of either one individual or a group of sponsors, Kotter (1996, 51-66) addresses only a group that should work as a team build on trust and common goals. Also, Graetz's (2000) cross-case research identifies a team approach in organisations, and Lucey's (2008) study supports the use of a dedicated and fully resourced implementation team during the change stage.

2.5.5 Employee participation

Nowadays, senior managers have shifted to a more open and participative management style, with the emphasis on cooperation, collaboration and communication (Graetz 2000). Graetz's (2000) cross-case analysis reveals that for example Pilkington involves all its employees more and more in making decisions, and Ford Plastics said to increase opportunities for employees to participate fully in the business. Participation and involvement is also a strategy to overcome resistance of employees, and people who participate will be committed to implementing change (Kotter & Schlesinger 1979). Also, Bennebroek Gravenhorst and Veld (2004) state that resistance occurs when employees are left out from the change process and therefore organisational change should be made a collaborative effort.

But, employee participation is not only as itself a vital success factor, it is also associated with other needed success factors of organisational change. For example, research has identified that employee participation has a positive impact on trust in management in the process of change (Weber & Weber 2001; Morgan & Zeffane 2003). Additionally, Weber and Weber (2001) point out that "*employee participation may lead to additional interactions with management and could provide new opportunities for employees to develop trust in management*". Another associated vital success factor with employee participation is organisational readiness. According to Lucey (2008), without active engagement of all employees already prior to the start of the change, major changes will have a very small chance to succeed. By engaging employees, management ensures that employees are “change ready”, and it is also the key to embedding and sustaining the change (Lucey 2008).

In relationship to employee participation, Chrusciel and Field (2006) highlight in their research the need to deal with individuals’ personal gains of those who are being involved and affected by the change process. There is a need for clear communication addressing the personal gains (Chrusciel & Field 2006), because otherwise people begin to resist change, if they perceive that the change costs them much more than they will gain (Kotter & Schlesinger 1979). Previously literature has also discussed the theme of fairness, but the perception of personal gain suggests the presence of a more personal humanistic and psychological success factor. Individuals search for meaning, and self-gain is not only important for individuals’ personal change transformation, but for the organisations entire change management process. (Chrusciel & Field 2006)

2.5.6 Summary of success factors

All five above discussed success factors of organisational change were identified by Graetz (2000), Weber and Weber (2001), Chrusciel and Field (2006), and Lucey (2008). In addition, more or less all success factors were also discussed by Kotter (1996) in his eight-step change process. Success factors of change management follow usually a timeline of importance, meaning that at some point there are more important success factors than other ones. This is seen e.g. in Klein’s (1996) and Lucey’s (2008) study, where the researchers use Lewin’s three-step change process as a guiding principle for describing critical success factors at the unfreezing, moving and freezing stage. Thus, also in this review, Lewin’s and Kotter’s processes are used to illustrate the need of a specific success factor at a specific stage of the change process. Table 1 summarizes the typical features of each discussed critical success factor.

Table 1. Typical features of the selected critical success factors of change management

Success factor	**Features**
Vision and planning	Having clear executive vision and leadership Planning and analysing where the organisation is now and where it would like to be
Communication	Communicating the change message throughout the organisation Following a management communication strategy
Organisational readiness	Creating and communicating a sense of urgency Employees being change ready
Empowering action	Providing employees training in new skills Building teams for implementation
Employee participation	Having a positive impact on other critical success factors e.g. organisational readiness Addressing employees' personal gains of the change process

In addition to the above discussed critical success factors, researchers identify also other less common success factors: use of symbolic and substantive action in form of e.g. recognition and rewards or short-term wins (Kotter 1996, Graetz 2000, Lucey 2008), as well as evaluation of the outcome and providing feedback (Weber & Weber 2001; Chrusciel & Field 2006; Lucey 2008).

After taking a closer look on change management in respect of processes and success factors, it has become evident that the leadership discipline has been very much present and it cannot be ignored when discussing success factors of change management. This is, because it is not possible to manage change without leading it simultaneously (Kotter 1996, Graetz 2000). According to Kotter (1996, 26), "*successful transformation is 70 to 90 percent leadership and only 10 to 30 percent management*". Also, Graetz (2000) confirms that "*the primary task of management today is the leadership of organisational change*".

3 DIGITAL TRANSFORMATION

3.1 Digitisation, digitalisation and digital transformation

Digital transformation is a mandatory change process, which organisations and individuals face today with a massive speed. It is said to be the Fourth Industrial Revolution that is about to change fundamentally the way we live and work. (Vey et al. 2017) Digital transformation has been defined as "*changes in ways of working, roles, and business offering caused by adoption of digital technologies in an organization, or in the operation environment of the organization*" (Parviainen et al. 2017).

The above mentioned definition seems very alike with Ilmarinen's and Koskela's (2015) explanation of digitalisation. They say that the driver for digitalisation is digitisation. Digitisation means when things, objects or processes are fully or partly digitised, for example books are also now available as e-books, or stores can also be nowadays in form of online stores. But, digitisation as itself is not enough for generating digitalisation. Digitalisation happens when digitisation changes people's behaviour, the dynamic of markets and companies core operations. The power to change digitalisation is getting from technology. However, simply technology does not cause digitalisation, but the different opportunities technology offers to act on. (Ilmarinen & Koskela 2015, 22-23) For clarity reasons, this study uses the terms digital transformation and digitalisation as synonyms.

Digital transformation is considered a fairly new phenomenon and therefore organisations have not yet reached the end state nor definitively defined it (Kane et al. 2015). Also Ilmarinen and Koskela (2015, 22) state that there is no official or even a proper definition for digitalisation. However, digital transformation can be categorized as an ongoing change occurring at several levels: process level, organisation level, business domain level, and society level (Parviainen et al. 2017). Such as classified in figure 1, there are different types of change, either based on the level of change or scale of change, or even both. Thus, digital transformation is a type of organisational change that is based on the level of change, and change happening in the organisations external and internal environment or also called industry- and firm-level.

Moreover, the development of digitalisation can be demonstrated by means of figure 3. Firstly, between 1990 and 2000 new channels were created like homepages, and simultaneously search engines were developed. After that online shops of companies came into existence and the boom of online shops still continues. At that time people were talking about e-business and digitisation, not digitalisation. The concept of digitalisation has been taken into use one decade later. Between 2000 and 2010 global competition has increased significantly and for example Finnish online shops are competing ever more with foreign online shops. Additionally, companies are facing disrupters, who are taking over the markets of existing businesses. Today, it is still under question how digitalisation will evolve, what does it include and how fast things will happen. Automation, robotics and Internet of Things are the biggest subjects of this decade. (Ilmarinen & Koskela 2015, 28-30)

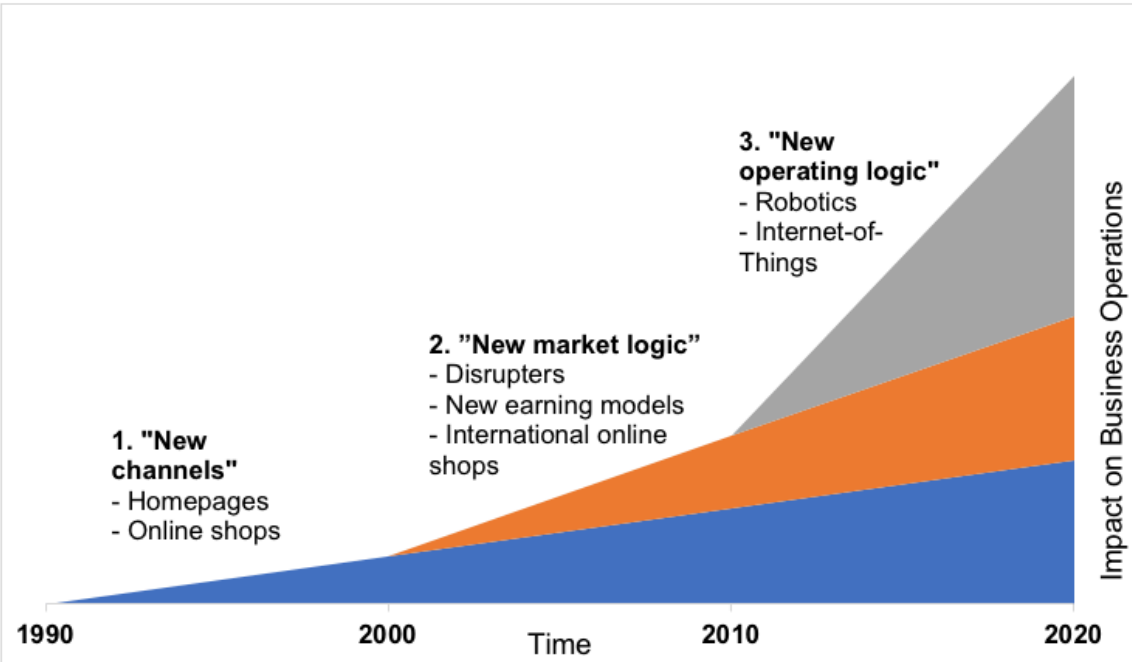

Figure 4. The development of digitalisation (based on Ilmarinen & Koskela 2015, 28)

3.1 Impact of digital transformation

Digital transformation or also called digitalisation offers organisations new opportunities, for example in terms of new products and services, and improved internal efficiency. Moreover, digitalisation causes disruptive change, which creates totally new businesses, but also forces existing organisations to adjust their business models. Organisations also face other challenges by taking advantage of digital transformation.

3.2.1 External opportunities, internal efficiency and disruptive change

Digitalisation impacts the organisation's entire operation environment as well as internal functioning. The impact of digitalisation and the goals of digitalisation to an organisation can be identified by following viewpoints:

- *External opportunities*; new ways of doing business e.g. new services, new customers
- *Internal efficiency*; improved way of working e.g. improved business process efficiency, quality, and consistency
- *Disruptive change*; digitalisation causes complete change e.g. a company's current business may become obsolete, or on the other hand create completely new business. (Parviainen et al. 2017)

Some of the main digitalisation drivers are among other things surviving global competition, technological developments, recognition of new business potential, and adaption to customer needs (Parviainen et al. 2017). Also, Vey, Fandel-Meyer, Zipp and Schneider (2017) state that nowadays customers' behaviour is changing, as their expectations towards businesses, products and services are rapidly increasing. Customers are expecting more individualized products and services, and unique customer experience (Vey et al. 2017). This results in new products and services, as well as advanced offerings to customers – i.e. external opportunities for organisations. As an example, especially the retail industry has discovered that digitalisation transforms the nature of retail offerings by digitalisation of products themselves, extensions of offerings, and new forms of pricing and payment (Hagberg et al. 2016).

Internal efficiency is succeeded as manual steps are eliminated and better accuracy is gained. Digitalisation also enables automation of routine work, which leads to better work satisfaction of employees and them having more time to develop new skills. (Parviainen et al. 2017). In 2015, *MIT Sloan Management Review* in collaboration with Deloitte, focused on more than 4800 business executives, managers and analysts from organisations around the world on how they saw digitalisation in their organisation. The results showed that approximately 80% of the responding organisations strive to improve efficiency and customer experience at the early stages of digitalisation. (Kane et al. 2015)

Furthermore, digitalisation induces disruptive change, which is likely affecting the entire organisation (Parviainen et al. 2017, Vey et al. 2017) as well as the whole operating industry (Kane et al. 2015). Such as the study of *MIT Sloan Management Review* with Deloitte found, 76% of the respondents saw that digital technologies are disrupting their industry on a great or moderate extent (Kane et al. 2015). The best way to view disruption is in relation to business models. For example, Airbnb has been a worldwide challenger to the traditional hotel industry by providing an online platform that allows homeowners to rent out their homes. Airbnb, as a new business and a disrupter, offers new value to customers and an appealing new value proposition. (Rogers 2016; 198-200, 202)

Organisations need to strengthen their digital business models by offering content, customer experience, and platforms that work together in creating a compelling customer value proposition (Weill & Woerner 2013). Since digitalisation causes disruptive change and thereby new flourishing businesses, also existing organisations need to adapt their business models. The real business potential of digitalisation lies in using it to renew existing business models (Hagberg et al. 2016).

3.2.2 Challenges of digital transformation

The impact of digital transformation is not trouble-free, also obstacles stand in the way of digital maturity, which is defined as an *“organisation where digital has transformed processes, talent engagement and business models”* (Kane et al. 2015). The biggest barrier to digital maturity for organisations in the early stages is a lack of a digital strategy, followed by too many competing priorities. Later, security issues and insufficient tech skills become a greater concern for maturing digital organisations. The top three barriers to digital maturity in each stage – early, developing, maturing organisations – are illustrated in table 2.

Table 2. Top barriers by digital maturity stage (based on Kane et al. 2015)

Early	Developing	Maturing
1. Lack of strategy	**1.** Too many priorities	**1.** Too many priorities
2. Too many priorities	**2.** Lack of strategy	**2.** Security concerns
3. Lack of management understanding	**3.** Insufficient tech skills	**3.** Insufficient tech skills

Digital transformation is still an ongoing change. Thus, the impact is not yet fully recognized and creates a challenge itself. After all, researchers are of same opinion that digital transformation is not about updating an organisation’s technology, but about strategy building (Kane et al. 2015; Rogers 2016, 239). Additionally, in time of digital transformation there is a need to create a company culture that fosters innovation (Kane et al. 2015; Rauser 2016; Vey et al. 2017), for example in terms of taking risks, focusing on creativity and knowledge of its employees, as well as creating collaborative work (Kane et al. 2015; Rauser 2016).

4 RESEARCH METHODOLOGY

The research method is chosen based on the form of research questions, the extent of control the researcher has over behavioral events and the degree of focus on contemporary events (Yin 2009, 8). This study aims to find out, *how* digital change can be managed, over which the researcher is having little or no control of behavioral events. Additionally, the focus is on a contemporary event – digital transformation, and thus the case study method is used.

A case study involves the empirical investigation of a particular contemporary phenomenon within its real-life context (Saunders et al. 2009, 588). Yin (2009, 46) distinguishes between single- and multiple-case study designs to address the research questions. In this study a single-case study design is used, as it represents a critical and typical case. A critical case is testing a well-formulated theory and it can confirm, challenge or extend the theory (Yin 2009, 47). Also Saunders, Lewis and Thornhill (2009, 147) argue, a case study strategy can be very worthwhile in exploring and challenging existing theory as well as provide source of new research questions. Here, Kotter's well-known change management process is used to test the management of digital change. The single-case can present a significant contribution to theory building (Yin 2009, 47) and the theory established is often identified as novel, testable and empirically valid (Eisenhardt 1989).

This chapter takes a closer look on how data is collected and analyzed, the validity and reliability of the study and briefly describes the case company. The selection of the case company is based on the researcher's prior knowledge and interest in the banking industry. Additionally, the researcher has been familiar with the case company by working for them prior to conducting this study.

4.1 Data collection

The data collection of case studies may be either qualitative or quantitative, or both, and it usually combines methods such as archives, interviews, questionnaires and observations (Eisenhardt 1989). In this case study, qualitative data is collected through interviews with the case company. The main advantage of using interviews as a research method is flexibility (Tuomi & Sarajärvi 2002, 75). The interviewer has the possibility to repeat questions, correct misunderstandings, and present questions in the researcher's desired order (Tuomi & Sarajärvi 2002, 75). In addition, interviews are targeted and insightful, by focusing directly on case study topics and providing explanations. However, possible problems of interviews are response bias and bias due to poorly articulated questions. (Yin 2009, 102)

Interviews can be categorized by the level of formality and structure into structured interviews, semi-structured interviews, and unstructured interviews or also called in-depth interviews (Saunders et al. 2009, 320). In this study, semi-structured interviews are used, where the researcher has a list of themes and questions to cover, although the order of questions may vary and also new questions may be asked (Saunders et al. 2009; 320, 601).

The semi-structured interview questions are organized, and presented in this specific study under three themes. The first theme focuses on background questions of the interviewee, such as the interviewees educational and occupational background and his or her responsibilities in the case company. The second theme presents interview questions regarding change management in relationship to digital change. The questions of the second theme have been selected by following Kotter's change management process as well as taking into account other success factors presented in previous academic literature. The third theme, is centered on questions concerning opportunities and challenges of digital transformation. All the interview questions are presented in Appendix 1.

The interviews were carried out either in person or by phone, due to geographical distance. The average duration of an interview was 30 minutes and all interviews were conducted in Finnish. The interview questions were send to interviewees on request beforehand. In case of something being unclear or missing from the interview, the interviewee was contacted by e-mail later on. The interviewees were chosen based on their position in the company as well as on their knowledge and expertise on the topic. For the selection of the interviewees, the researcher consulted the company's Chief Administrative Officer. It was seen very important to interview employees specifically in manager positions, in order to get a precise inside of the company's digital change management process. Three out of four interviewed managers are also part of the executive board. All interviewees share great authority on change management in the company and each participant confirmed they work focusing largely on digital change. Table 3 presents the position of each interviewee as well as the date, length and method of each interview.

Table 3. Interview details

Interviewees	**Position**	**Date**	**Length (min)**	**Interview method**
Interviewee 1	Service Manager	12.02.2018	25	In person
Interviewee 2	Financial Manager & Chief Administrative Officer	13.02.2018	32	In person
Interviewee 3	Regional Manager	20.02.2018	25	Phone call
Interviewee 4	Chief Information Officer (CIO)	05.03.2018	40	Phone call

4.2 Data analysis

The collected data was analysed by following deductive content analysis or also called theory-based content analysis. In general, qualitative analysis is either approached from an inductive or deductive perspective (Saunders et al. 2009, 489-490; Tuomi & Sarajärvi 2002, 95-97). Inductive approach is started by firstly collecting data, and afterwards theory or explanation emerges as a result of data collection (Saunders et al. 2009, 490). Deductive approach is on the other hand more structured and formalized, and the data analysed is derived in particular from theory, and following a predetermined framework (Saunders et al. 2009, 491). According to Eskola (2001, 136), qualitative analysis can be categorized more precisely into data-driven analysis, theory-led analysis, and theory-based analysis than only inductive- and deductive analysis. Thus, this study follows a theory-based analysis or deductive analysis.

Furthermore, in this research content analysis was followed, which means the verbal analysis of any written text or document including an interview (Tuomi & Sarajärvi 2002, 105-107). Therefore, all interviews were recorded, and afterwards transcribed. The transcription concluded in a separate file of 34 pages using font size 12 and line spacing 1,5. The qualitative content analysis was precisely approached from a deductive perspective. Deductive content analysis or theory-based content analysis is done by firstly forming an analysis framework (Tuomi & Sarajärvi 2002, 116), which in this study was formed directly of the interview questions. The interview questions follow the change management process identified by previous literature, and opportunities and challenges of digital transformation. After that, different categories are formed, in order to gather facts that belong to the analysis framework i.e. here the change management process, and facts that remain outside the analysis framework (Tuomi & Sarajärvi 2002, 116). The categories were formed of the interviewed managers and their mentioned features of the company's digital change management process. Additionally, similarities and differences of the interviewed managers were evaluated. Microsoft Excel was implemented for the analysis framework and categorization of the interviews.

According to Saunders, Lewis and Thornhill (2009, 490), data can be grouped into three main types of processes: summarizing, categorization, and structuring. All processes can be used on their own or in combination to support the interpretation of the collected data (Saunders et al. 2009, 491). Thus, in this research every interview was also summarized in combination with the categorization of the interviewed managers. Lastly, the gathered data can be quantified, for example by counting how many of the interviewed managers confirms having a digital vision in use in the organisation (Tuomi & Sarajärvi 2002, 117-118).

4.3 Validity and reliability

The quality of any empirical social research including case studies can be judged based on four tests: construct validity, internal validity, external validity and reliability (Yin 2009). The first test, construct validity, can be increased by using multiple sources of evidence, establishing a chain of evidence, and having key informants review the draft case study report (Yin 2009, 41). The first tactic of construct validity is in this study not fulfilled, since only one source of evidence, interviews, is used. Secondly, in order to establish a chain of evidence, citations of the database should be used, the database should reveal the actual evidence, and also indicate the circumstances under which the evidence was collected (Yin 2009, 123). The second tactic is well executed in this study. The data analysis reveals the evidence of the interviews and throughout the analysis citations are used. Also the evidence of data collection is indicated e.g. the time of an interview, and overall the study follows the principal to link the initial research questions with the final conclusions. However, because the case study report is only reviewed by the supervisors of the thesis, the third tactic of construct validity is not carried out.

The second test, internal validity, is a concern for explanatory case studies, meaning to explain why x led to y (Yin 2009, 42). Since this study is not trying to explain a causal relationship, there is no need to consider internal validity. Thirdly, external validity is concerned with the fact, if a study’s findings are analytically generalizable (Yin 2009, 43). The tactic that improves this validity is to use theory in single-case studies (Yin 2009, 41). This is fulfilled in this research by striving to generalize the study’s results to previous change management literature. The comparison with similar literature sharpens generalizability, improves construct definition, and raises theoretical level (Eisenhardt 1989).

Lastly, reliability is measured on the repeatability of the same case study, so that another researcher would result with the same findings and conclusions than the initial researcher. The goal of the test is to minimize errors and biases. The specific tactics to increase reliability are the use of a case study protocol to deal with documentation and the development of a case study database. (Yin 2009; 41, 45)

The case study database is formed of all the interviews with the case company's managers, and the interviews were all recorded and afterwards transcribed. Additionally, validity and reliability is improved by careful preparation before conducting an interview, for example providing interviewees beforehand with a list of interview themes, which was also done in this study (Saunders et al. 2009, 328). All in all, the validity and reliability of the study is desirable with some possible decrease in construct validity.

4.4 Research context

This study is precisely focusing on the banking industry. In the past 60 years the banking industry has undergone many changes regarding the industry's value chains and operating methods as result of society, trading and the change of customer behaviour. Especially the 90s depression was a starting point for many changes in the Finnish banking operations and Finnish banks were in fact pioneers in digital services like online banking and other payment transaction services. (Dahlberg & Halén 2016)

In relation to Dahlberg's and Halén's (2016) statement, Tilastokeskus (2017a) released in their last year study that online banking is the most common way of using the Internet for running errands. In 2017, 82% of the Finnish population aged 16 to 89 used the Internet for online banking. In comparison, making purchases online is not as common as using online banking. Over the past three months, 52% of Finns bought goods or services through the Internet. (Tilastokeskus 2017a) The use of Internet for online banking is not only common among youths as some might expect, but also elderly people use the Internet for online banking. Additionally, there is only a slight difference between the usage of men and women. Figure 1 presents the use of Internet for online banking in age groups, and of men and women.

Even though online banking is still blooming, the banking industry has been lately focusing on the opportunity of smart phones and other digital platforms for example in relationship to mobile banking (Dahlberg & Halén 2016). This is in line with the fact that mobile phones are the most used device for using the Internet

(Tilastokeskus 2017a) and all businesses such as banks have to react to the changes in consumer behaviour and expectations. It is seen that digital transformation is a current and evolving topic in the banking industry and thus, it is an excellent opportunity to study the digital change management process further in the light of the industry.

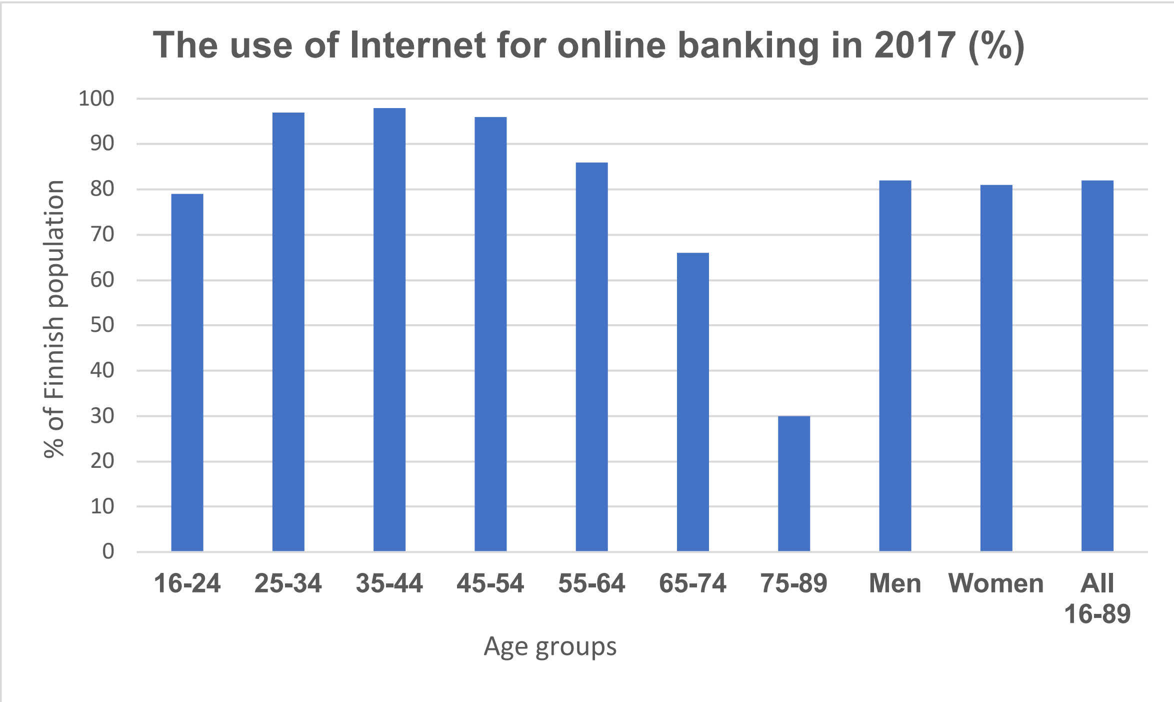

Figure 5. The use of Internet for online banking (based on Tilastokeskus (2017c))

4.4.1 Case company[1]

The studied case company is one of the largest savings bank in Finland. The bank serves private as well as corporate customers in dozens of branches all over Finland. The goal of the bank is to offer the best people-centric customer service in town. The customer is the base line of all operations and the bank aims to be local and close to all customers in a modern way, by providing both physical and digital services.

[1] The chapter is based on the case company's homepage (2018). Due to confidential reasons, the references with the company name are not added.

In the end of 2016, the company announced that they are going to renew their operations, since digitalisation has caused a significant change in customer behavior and in the entire operational environment. Thus, the company is required to carry out concrete actions, to secure their competitive advantage. The need for traditional banking is decreasing, and in the future bank services are offered to customers more and more by following flexible service hours.

In recent years, the company has transferred its customers respected people-centric services towards digital channels, for example by offering a chat and a mobile application. These new digital channels enable customers to contact the banks service advisors wherever the customer is located and have a conversation in real time. According to the bank’s Chief Executive Officer (CEO), the changing operating environment and the new business model also generates new workplaces as well as work assignments, for instance in the acquisition of new customers and as corporate specialists at branches. Additionally, new assignments are created around the digital business model and there is need for skilled workers in IT development projects.

5 EMPIRICAL FINDINGS AND ANALYSIS

This chapter analyses the findings of the case company's interview data. The findings are illustrated with direct quotes of the interviewees in order to justify the analysis done by the researcher. Firstly, the chapter takes a closer look on the case company's digital change management process. Thereafter, the general opportunities and challenges of digital transformation are discussed.

5.1 Digital change management process

The digital change management process of the company includes following elements: creating organisational readiness, participation of employees, integrating digital vision and strategy, communication, and empowering employees to act on digital change. In addition, all mentioned elements are very much linked to the organisation's main motive for digital change. The motive came up throughout the interviews and it is seen as the central focus in the digital change management process of the case company. Thus, the first sub-chapter introduces the case company's motives for digital change.

5.1.1 Motive for digital change

The general motive for digital change is generated by the operating environment, the general trend of the industry and the need for staying competitive. There is an immediate need to respond to what is happening in the environment. More specifically, the managers identify, as the main motive for digital change, the change in customer behavior and customers' expectations to digitalisation. Customers use in their daily life ever more digital channels, and customers also expect flexible service in a digital form. Therefore, the case company has to respond to the identified change in customer behavior and answer to their customers' needs. They need to transform their operations in the light of digitalisation, and rethink their processes and overall existence to stay competitive. The regional manager (2018) of the case company, who has been working in the banking industry over 15 years, clearly states:

> *"First of all, it is sure that everything that can be digitised will be digitised in the future. Customers expect digital channels. … So yes, the motivation can be found in the general trend, and of course customer orientation is surely the biggest driver for us. We need to provide customers with such digital platforms and digital channels, so that is certainly the biggest motivation factor."*

Additionally, there is a need to operate efficiently in terms of, for instance costs and returns. The case company needs to consider, how they can produce in the most cost-efficient way also in the future. Is it either an old-fashioned branch office, or rather produced service in cloud, which allows the company to serve a broader customer base much more cost-efficiently. Such as the company's CIO (2018) identifies:

> *"Of course the costs should also be considered. That's the tough side of this story all the time. That is the driver … if simplified the market sets the price. The costs are the ones, which are in our own hands and we can directly influence them."*

Digital change has an enormous effect on the bank and it is seen as a big constant change with an increasing pace. It will change the company's traditional business operation model and in general the whole banking industry. The interviewees are all curiously following, what the company's core business will be in the future and what else digitalisation has to offer. This is further discussed in relation to the opportunities of digitalisation. There are very innovative solutions that competitors have brought to the market and thus also the case company has been creating needed organisational readiness to digital change.

5.1.2 Organisational readiness

The main motive for digital change in the case company is the change in customer behavior and customers' expectations of flexible digital service. In order to execute digital change, the case company has established organisational readiness, by gathering data and doing research on other international operators in the industry i.e. how do they operate. In addition to researching the operational environment, organisational readiness is tested regularly by executing customer satisfaction surveys. The surveys are providing answers to the company's management on how well the company is able to offer service for their customers right now, and what kind of products and services customers are willing to have in the future. Those questions are also precisely asked in terms of digital services.

> *"Do customers want to be served through video appointments, or by chat? What kind of payment solutions they want compared to cash or card? … Those are being tested continuously. And of course it will give us then feedback to management and staff, that those are our customers' expectations."* (Interviewee 2, 2018)

Customer satisfaction surveys give a good understanding to the whole staff on the kind of service the company needs to provide and the company is able to create readiness towards the needed change. Additionally to evaluating customers opinion, the case company also carries out a separate survey for their employees on a yearly basis. The survey aims to evaluate in turn employees satisfaction on several matters in the organisation – change being part of it.

> *"The staff can estimate, how well in their perspective, for example the bank is taking part in customer behavior change. How we have been able to meet customers' expectations and then also, how well he/she is himself/herself involved in the changes, how he/she is committed to them and how the person's superior."* (Interviewee 2, 2018)

The bank sees the importance of not only preparing the organisation for digital change, but also their employees. Their results on the employee satisfaction survey have been positive and there is a broad understanding among employees that the bank's business operation and procedures have to change. Additionally, organisational readiness has been generated by employing digital oriented people.

However, the managers of the case company have also found conflicting parties in the organisational readiness of the company to digital change. The problem is that even though most of the customers expect flexible digital services, they have also customers that hold on to traditional banking services like cash desk service. The case company faces two different kind of customer expectations. The same kind of division is also seen within employees. Some employees use a lot of digital services themselves as a customer, whereas others do not. People are different, whereas others are very ready to digital change, some employees are a little bit afraid and wonder if digital services are going to replace their work. Employees, who know how to use different kind of digital services like mobile applications are more ready to digital change than employees, who are unfamiliar. Thus, the organisational readiness to digital change of the company is occasionally getting indistinct. The CIO of the company adds (2018):

> *"The age distribution of the staff is of all kinds … A lot of things are coming mobile right now. Well, sensitivity is certainly better, within employees who already know how to use them than for those who are a little unfamiliar with them."*

5.1.3 Leadership and employee participation

After identifying the motives and creating organisational readiness, the Chief Information Officer (CIO) of the company takes the leading charge of digital change. The CIO is part of the executive board and the executive board is operating under the direction of the bank's CEO. In terms of digital change, the CIO and his team have the overall responsibility of the different processes and actions, and showing the direction on what should be done. In addition to the CIO, every manager who has subordinates is entitled to lead digital change. It is a shared responsibility, even though the CIO is seen to carry the overall responsibility. There is no particular group identified to lead digital change in the case company.

There is a mutual understanding that although the CIO leads digital change every employee is involved in the change. The involvement of employees can be no less than giving ideas on how the company could be more involved in digitalisation and suggesting development ideas. Employees are taking time from their daily work day for digital change. According to one of the company's manager (2018), everybody's responsibility processes are changing and it does not make a difference in which team or department an employee works, digital change is seen everywhere and everybody is involved in digital change. Certainly some of the employees are more involved than others, for example the company's customer service team, who are daily working with the company's digital channels and finding solutions to improve the company's digital processes. The service manager (2018) of the case company, who is managing the customer service team of the bank, reassures the employees participation by saying:

> *"Firstly, they participate by generating ideas and giving improvement examples, by drawing processes and doing instructions, and at each week's meeting we are discussing those matters and sharing responsibilities. And we also take time for that … "*

Employees are participating and acting in favor of the change, and although there is no specific group to lead digital change, small groups of employees are formed to execute digital change. The groups consist of development directors, product or service specialists and employees from customer service or bank branches. By having employees from different departments, the case company ensures a wide variety of knowledge and skills. The Financial Manager & Chief Administrative Officer (2018) emphasizes that the development directors have know-how on system solutions, product or service specialists have knowledge on the current processes and instructions and how these should be changed, and the customer service team or employees from branches know the practical challenges. The company chooses different employees from different departments to execute various projects concerning digital change. Lately, they have been for example working on finding solutions to customer identification in digital channels. Employee participation in form of team-building is very much associated with the later chapter of empowering employees to act on digital change.

5.1.4 Integrated vision and strategy

Creating a clear change vision is one of the most important success factors of change management that has been highly stressed by previous researchers (e.g. Kotter 1995 & 1996, Graetz 2000, Lucey 2008). Surprisingly, the case company has not set a separate change vision to guide the company's digital change. The main reason for this is that the company has incorporated digital change in their overall vision and strategy. There is no need identified to have a separate digital change vision, since digitalisation is a part of the company's all-encompassing operating model. The interviewed company managers explain that they compete with personal service experience and that is not going to change in terms of digitalisation. The company sees people-centric service also as the key element in digitalisation, and according to the Financial Manager & Chief Administrative Officer (2018) there is only need for one clear central vision in the company.

> *"Well, we probably do not really have a digital vision, but of course in our vision, if we go to the service promise as it is people-centric service … So it is kind of the leading idea in digitalisation as well. And how we want our projects to be implemented."* (Interviewee 2, 2018)

Furthermore, the digital direction is defined in the company's overall strategy. Such as not having a separate digital vision, the company does not have a separate digital strategy. According to the case company's homepage (2018), the company strategy is to be local and close to the customer both in physical and digital services, and become the best bank in their business segments. The bank's overall strategy confirms that they are willing to serve their customers with the same kind of people-centric service strategy in digital channels than they are serving customers at their bank branches. Digital change or digitalisation is seen as part of the organisation's whole strategy, and not as a separate strategy. The regional manager (2018) of the company highlights:

> *"I myself see that digitalisation cannot be a separate strategy or an own strategy. But, digitalisation overlaps with all of our operating models and*

strategies and belongs to all as its own domain. There is no separate digital strategy, but it is included in all the activities we do."

5.1.5 Communication

Communication, at all levels of the organisation, is another vital success factor highlighted by previous literature. Even though the studied case company is not having a separate digital vision, they stress the need of communicating digital change throughout the process. In general, communication is seen by the managers as a key element during the preparation and implementation of change. The main focus of communication is creating mutual understanding in the workforce. Every employee needs to understand what is changing, why is the organisation executing change and what is the organisation's goal, in order for the whole organisation going into the same direction. The Financial Manager & Chief Administrative Officer (2018) points out that the seeking of common direction and commitment requires a lot of input especially from management and the key being communication.

"It requires communication, going through and discussing issues, and understanding the issues. A vision or mission is distant and it could be understood in many different ways, but it (digital change) has to be discussed with every employee separately. What does it mean in my own work, what can I do so that I can succeed and the organisation can succeed … ". (Interviewee 2, 2018)

The main channels for communicating digital change are face-to-face conversations at weekly team meetings or private conversations between the manager and the employee. Also Skype is used, if not having the possibility to meet face-to-face, for example the regional managers tend to communicate over Skype calls. In general, the conversations with employees on digital change are around the needs of development and how the company is able to improve their own processes and establish their operating models in a different way. The change in customer behavior, which is the main motive of the company for digital change, comes up at all times, since the company has to respond to their customers' demands and thus improve their processes. In addition, the managers review every ongoing digital project and their status on a weekly basis. If there is a need to share information with employees as soon as possible, also e-mail is used as a communication channel.

Communication is also seen as the most vital tool for overcoming resistance to change. In the situation of facing an employee, who shows resistance to change, the case company highlights the need of continuous conversations between the manager and employee. The change should be explained to the employee by giving justifications and deliberately specifying what does it mean to the work of the employee and finding out if for example the employee needs additional training. At its best communication is a powerful tool to overcome resistance to change, but it is also considered as a source of resistance to change. In the event of lack of communication, the service manager (2018) has identified a causal relationship to resistance to change and in particular states that it is extremely important to inform people all along change:

> *"I always say that inform us, even when there is nothing to inform … There is a strong desire for information and if there is no information available, uncertainty increases and different kind of side effects emerge as well as resistance to change."*

5.1.6 Empowering of employees

First, the empowerment of employees to act on digital change is generated by employee participation in form of team-building. Such as discussed in chapter 5.1.3, instead of having a specific group to lead digital change, the case company forms groups of employees from different departments to implement different digital change projects. Simultaneously, it also acts as a tool for empowering employees to act on digital change.

The second tool for empowering employees to act on digital change is to offer training. It involves verbal encouragement and support from managers as well as practical training, for example in the use of digital services. In general when the case company prepares for change, work instructions are made, employees are guided and motivated, and work tools are provided. Written instructions, guidance and having suitable work tools are all positively assisting employees to act on digital change, but the case company also highlights the need for learned skills to implement change. Additionally, training is seen by the managers as a tool for preventing employees resistance to change and overcoming possible uncertainty.

An essential part of employees training is the use of digital services. Managers encourage employees to use themselves digital services in their everyday life, but at least the company's own products and services have to be familiar for employees. It is extremely difficult to guide and encourage customers to use the bank's digital services, if employees are not able to utilize them on their own. Thus, it is shown to employees step-by-step, how the company's digital services e.g. mobile applications and online banking are used. In addition, whenever a new product or service is developed, employees are also partially piloting them, which enables them to be one of the first to experiment the new product or service before it is part of the company's assortment.

> *"It is encouraged to use them (digital services) in various ways. Someone comes and shows how to do it and teaches how to use the services, so that the threshold for use is lower ... and in my opinion the manager has a big role to be able to encourage."* (Interviewee 1, 2018)

According to the regional manager (2018), valuable training is not only received by using the bank's own digital services, but also by other industries services. Other industries have more advanced digital channels and digital technology than the banking sector, and therefore employees are able to learn from digitalisation even more from other players (Interviewee 3, 2018). Using digital services, either the bank's own or others, is considered as an extremely good learning channel and in the end for implementing digital change the company needs educated employees. The company is not only needing financial resources to implement digital change, but also human resources and know-how, which means right kind and right amount of expertise among the workforce. Expertise, showing exemplary activity and progressiveness are all mentioned by managers as success factors for digital change, and these are gained by offering employees training and support.

Furthermore, if following previous literature on change management processes, also recognition and rewards or short-term wins are part of the process. The case company has a general system of compensation and generating short-term wins, but they have not much considered it in terms of employees who participate precisely in the digital change process. Only lately, the customer service team was financially rewarded, since they had set and fulfilled goals in relation to improving digital processes. But, similarly to not having a separate digital vision, the company sees no need in a separate compensation model for the process of digital change. Digital change is seen in the overall operating principle and short-term wins are generated by the results of customer satisfaction surveys. The lack of compensating all employees participating in digital change is an interesting finding, as some managers state that compensations' are indeed a good motivator for acting on digital change and encourage employees taking part of it.

5.2 Opportunities and challenges of digital transformation

This chapter introduces the top three identified opportunities and challenges of digital transformation by the case company's managers until this day. The opportunities and challenges are very much connected, since many opportunities also yield a challenge. Lastly, the chapter reveals, how the company has managed the named challenges as well as pursued opportunities.

5.2.1 Opportunities

Firstly, when thinking about the entire banking industry, digitalisation has brought the general opportunity to offer also other services than only traditional banking services. Digitalisation opens up industry boundaries and many other banks have been seeking for new services that are outside a bank's traditional offering. Such as the Financial Manager & Chief Administrative Officer (2018) says:

> "*It's interesting to see what is the core business of the bank in the future … Company x is providing really innovative solutions such as medical services and electric cars, but in a way what will it be in the future. It's interesting to see. But, it will definitely break the traditional operating model."*

Even though the case company has not brought such services to the market like its competitors, it is not excluded. It is seen that there is a strong potential for growth, either in terms of new, novel, out of the ordinary services, but also by focusing on the selection of digital channels and hereby creating a broader customer base. Thus, secondly, digitalisation has made it possible to serve customers regardless of their location through digital channels. There is necessarily no need for physically going to a bank branch, but customers can also get service for example by phone, chat or video chat. In order to pursue a growing customer base by using digital channels, the regional manager (2018) highlights:

> *"It obviously requires that we have a great deal of control over all the different channels that are available. We know how to use them. Teach our staff and the organisation to use those channels. At this stage, we are now concentrating on the channel selection and around it."*

The case company has to make a careful selection of all worthwhile channels and ensure their control to benefit out of the opportunity. The great opportunity of using digital channels is not only beneficial for customers, but also the bank's business operations are no longer bound to location. For example, it has enabled the organisation a sharper management model, meaning that the organisation is able to manage their bank branch network with a smaller amount of middle managers and by using themselves digital channels in their daily work. It enables e.g. regional managers to be much more present in the daily life of bank branches without physical attendance.

Thirdly, digital transformation has enabled the case company to optimize their internal efficiency, for example in terms of costs and processes. Cost-efficiency is already revealed as one of the company’s general motive to digital change. Such as the CIO (2018) affirmed, the costs should also be considered during digital change, and digitalisation permits itself the possibility to build a cost-efficient operating model. Lastly, one additional interesting opportunity of digitalisation are new alternatives with collaboration partners and networks, for example on how services can be produced and with whom, as well as the possibility to provide the services in an agile and flexible manner to customers. However, the opportunity of collaboration partners shares opinions and it is rather seen as a challenge for the company.

5.2.2 Challenges

It is seen that there are many open and interesting opportunities to pursue for the case company, but also challenges are identified. Some of the identified challenges directly emerge from the above mentioned opportunities, such as the latest mentioned opportunity of collaboration partners and networks. The Financial Manager & Chief Administrative Officer (2018) highlights:

> *“Today, there are many different service providers in between. Someone offers a certain part of the chain and someone else another part … What is an opportunity is also a challenge. When the value chain and production is split up into pieces, how is it managed? There are many different places where problems can arise or turn into challenges, if management is not well under control.”*

As previously mentioned, through digitalisation collaboration partners and in general networks generate new alternatives with whom to work and how services are produced, but simultaneously there is a risk of things getting even more complicated. By having many different intermediaries in the process there is also a need of fluent management, in order to guarantee that in the end the customer is getting the right kind of service at the right time. Also the service manager (2018) experiences collaboration partners as a tricky challenge, since there is definite need for collaboration partners with whom they together build the digital services, but there is always uncertainty if the partners are able to answer the banks aspirations. It seems that working with many different service providers, e.g. in the process of creating a new digital service, is not a choice of the organisation, but rather how the industry works nowadays. The case company relies heavily on their collaboration partners, and in the end it is the bank who is responsible for answering to their customers – not the partners.

Another challenge identified by the case company is the expansion of the competitor field, which is also very much related to the earlier mentioned opportunity of new innovative services. As the industry boundaries are opening up and banks have the opportunity to produce also other services than traditional banking services, it also means that they are facing new competitors.

> *"If we are thinking about the start-up genre, how new innovations and ideas are coming from there … Our problem is that there are such actors, which are coming very close to our business …"* (Interviewee 4, 2018)

Along with digitalisation, new competitors enter the banking industry and they are competing of the same customers than the case company. It is not any longer only other banks and financial organisations that the case company has to keep in mind, but also possible start-ups that enter the market rapidly. Additionally, existing international organisations' are producing ever more e.g. payment solutions such as Apple's Apple Pay. It is seen that also other players cross their industry boundaries and produce new services along their traditional ones. There is an overall battle of customers and revenue, and it arises the question, how to respond to the wide variety of competition.

Lastly, the case company identifies as a challenge, the enormous speed of digitalisation. It is already seen within the field of competition, as well as in terms of rapid change in customer behavior and customers' expectations. There is need to produce continuously new digital channels for customers, and since the case company is facing two types of customer expectations – customers, who value traditional banking service at branches and on the other hand customers, who are willing to have flexible digital services – it is seen as a challenge for them. In addition, the CIO (2018) adds that overall the banking industry is known to be very regulative, and therefore the bank is usually also very slow in its reactions. Digitalisation is not an exception and every idea has to be clearly justified, executed and approved by authorities. It takes time and much effort from the total organisation. Thus, there is also need of enough qualified staff with digital expertise, in order to succeed. The service manager (2018), who has a long professional background in the banking industry and precisely working with digital services and channels, summarizes:

> *"Of course it brings its own challenges … How do we keep up? Is there enough know-how in our organisation? Do we have desirable collaboration partners, who are able to respond to our call and intent?"*

5.2.3 Pursuing opportunities and managing challenges

The interviews with the case company managers reveal that many opportunities of digital transformation also follow a challenge, and these are very much connected. The reason for this might rely on the fact that not all opportunities and challenges have been yet fully discovered and it seems to be unclear how to clearly categorize opportunities and challenges. Is it identified as an opportunity or as a challenge for the company? The case company appears to be very careful and takes also possible pitfalls of opportunities into consideration. For example the company appoints the opportunity of a wide variety of collaboration partners with whom to produce digital services. But, as the process involves many people, there is a challenge of overall management e.g. in terms of fluent open communication and mutual understanding of the goal, and in the end it rather appears to be a challenge than an opportunity. However, there is definitely a desire to pursue opportunities as well as manage challenges, and thus the company admits that it is in their hands to have the ability to manage the process and assure that they have the needed networking skills.

The additionally identified challenges by the case company - the expansion of the competitor field and the rapid speed of digitalisation - are managed e.g. by active market and customer surveillance. The managers have to understand what happens in the environment around the company, since new companies are entering the market rapidly and competing over the same customers and volumes than traditionally only other banks have been competing. In addition to monitoring the market, customer surveillance has been done for example by collecting customer satisfaction surveys, which is also a tool for establishing organisational readiness to digital change. There is need to understand what the company's customers are expecting, and therefore also internal monitoring of existing digital products and services is done. For instance the service manager (2018), who also manages the bank's customer service, follows regularly how much customers are calling the bank outside their current office hours. This is vital information for future digital product and service development in the case company.

Furthermore, another way to manage the challenges of the expanding competitor field and the enormous speed of digitalisation, are the careful selection and development of digital products and services, and ultimately creating an own digital plan of action. The case company considers the key in identifying firstly what their customers expect by e.g. collecting customer satisfaction surveys, and thereafter developing and producing suitable services and products especially for their customers. Whereas other banks might invest a lot in different kind of digital development projects, the case company is not willing to try and produce everything what is available on the market. The ability to find and concentrate on digital matters that are important for the case company's customers is also seen as a success factor in digital change management.

> *"… that we are able to find the things, that we should achieve. You are able to rush all kinds of things, and then you waste your resources. There is need to find the essentials ones, and focus on them, and get them done … It is essential that there is competitive agility in the company to make them happen."* (Interviewee 4, 2018)

According to the company, successful digital change management does not only include internal success factors like fluent communication in the workforce and skilled employees, but also external success factors. In order for digital change to be successfully managed, competitiveness and differentiation from competitors plays a big role. Thus, the company verifies the ability to find and develop new operating models, and right kind of services for the company's customers as a central activity. For the case company it means holding on to their overall strategy, which says to serve their customers with people-centric service and offer the best customer experience in town, also in digital channels. The regional manager (2018) highlights that they have been emphasizing the company's strengths to keep their competitive edge, and avoid competition and being exposed to possible new competitors entering the market.

Lastly, to pursue opportunities like the possibility to offer novel services other than traditional banking services, the case company mentions the law and regulations being a big influencer in the industry. The same does also apply for the opportunity of services and operations not being bound to location. Regulations are showing the direction, and for example last spring when the interviews were collected the banking industry faced collective bargaining, which involved among other things negotiations of shiftwork on weekends. Now, as the technology has been provided, still the regulations have to be developed, so that the case company can be present in digital channels with longer office hours in the future. As of this fall, the case company has prolonged their customer service's office hours and serves customers also on Saturdays.

> *"It (collective bargaining) requires decisions from there, how we are able to offer service in the future. Whatever the result is, it gives us the direction on how we are present in digital channels in the future. Then, of course, the staff's own motivation and personal opportunities to work at different times."* (Interviewee 1, 2018)

But also internal matters, like the employees motivation and skills, are considered to have an impact on pursuing the named opportunities. Employees have to have the skill to use the different digital products and services the company offers, and overall the workforce has to be taken into considerations. Therefore, employee involvement, creating employee readiness to digital change and training are all part of the company’s digital change management process.

6 DISCUSSION AND CONCLUSIONS

The last chapter summarizes the research findings and gives answers to the initial research questions. Additionally, theoretical contributions and managerial implications are discussed. Lastly, limitations are revealed and future research suggestions are given.

6.1 Summary

In the previous chapter the case company's digital change management process is analysed, and the company's identified opportunities and challenges of digital transformation are discussed. The study's aim is to find out how digital change is managed and reflect the findings on previous change management processes and success factors. Thus, this sub-chapter points out the most relevant results by providing answers for the research questions.

Main RQ: How can digital change be managed?

Firstly, before even preparing for digital change and thinking about any actions that should be taken, the digital change management process is started by identifying the central motive for digital change. For example the studied case company lists as motives for digital change among other things cost-efficiency and retaining competitiveness, but the main motive identified, is the change in customer behavior and customers' expectations to digitalisation. The main motive should be the center piece of a company's digital change management process and guiding the company throughout the process, and in all their actions of digital change.

After identifying the company's main motive to digital change, organisational readiness has to be created, by doing research on the environment-, company-, and employee level. Organisational readiness to digital change can be created and evaluated by using following tools and methods:

- Gathering data and doing research on other international operators in the industry,

- Doing customer satisfaction surveys,
- Doing employee satisfaction surveys,
- And additionally, employing digital orientated people.

Customer satisfaction surveys are providing answers to the company's management e.g. on possible digital products and services customers are willing to have, but they also create understanding for employees on the increasing demand of digital services. Employee satisfaction surveys are used for testing specifically employees involvement and commitment in the change.

Thereafter, digital change is performed under the leading charge of the CIO of the company. However, every manager, who has subordinates is entitled to lead digital change, since it is a shared responsibility. But most importantly, digital change is executed in small groups that involves employees from all departments, not directly by the CIO or any other manager. The groups consist of development directors, product or service specialists, and employees from customer service or bank branches. The groups are indented to execute a previously appointed project concerning digital change in the employees field of expertise and know-how.

Moreover, there is no need to create a separate digital change vision or digital strategy in the company. A digital vision is ought to be incorporated in the company's overall vision. The same is associated with a digital strategy, which should be part of the company's overall strategy, and included in all the activities of the company. A digital strategy is not perceived as a separate strategy or an own strategy. The intent is not to change the general vision and strategy of the company as a result of digitalisation, but digitalisation is part of the company's overall operating model.

During the preparation and implementation of change, communication is a key element in the digital change management process. The main purpose of communication is to create mutual understanding and commitment to digital change among the workforce. In addition, communication is the most vital tool for overcoming possible resistance to digital change. The main channels for communicating digital change are face-to-face conversations at weekly team meetings or private conversations between the manager and the employee. Primarily, communication should be executed face-to-face, but also electronic channels can be used like e-mail and Skype.

Lastly, the digital change management process implies the empowerment of employees to act on digital change in form of team-building and training. Team-building is specifically intended to create for the execution of digital change. Additionally, expertise and learned skills are needed for implementing digital change, and thus by offering training employees are empowered to act on digital change. Training may involve verbal encouragement and support from managers, as well as practical training. Figure 6 presents the proposed process of digital change management.

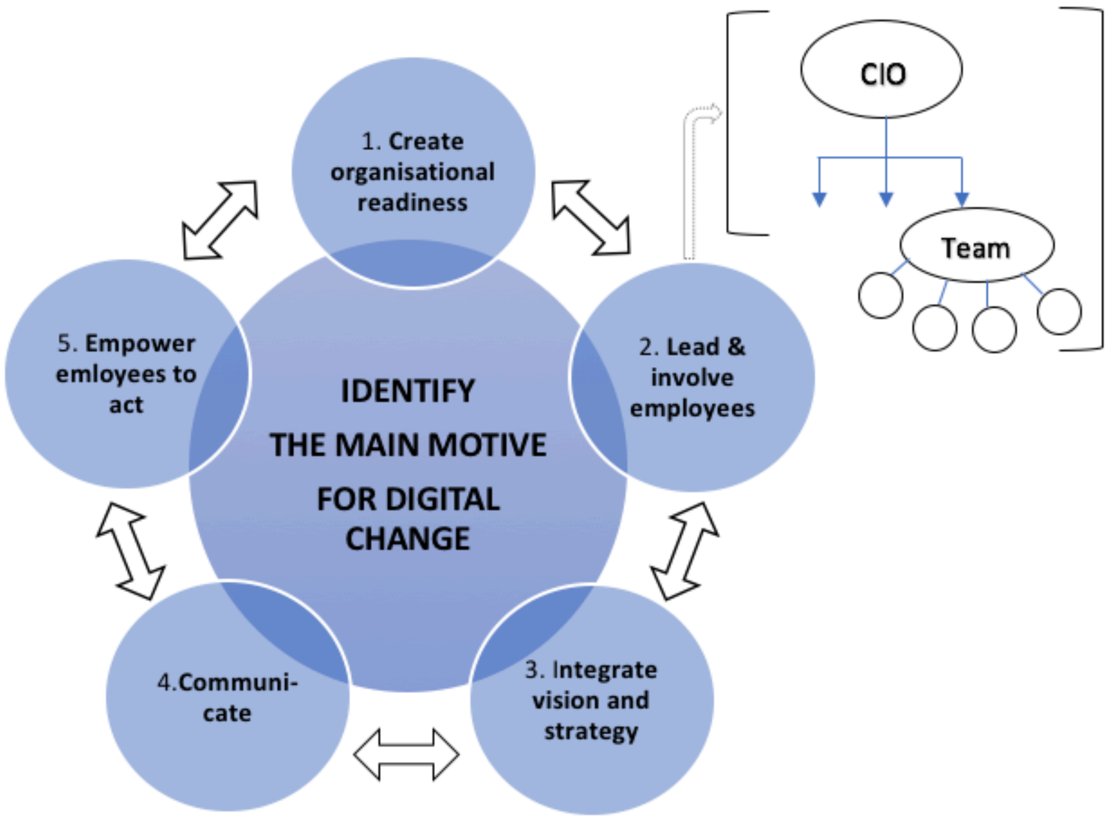

Figure 6. The digital change management process

The digital change management process does not follow a strict process, meaning that one step has to be fulfilled before moving on to the next step, or that there is a definite beginning and end. There is no specific timeline identified and the digital change management process is rather a rotating circle than a linear process.

RQ (1): What critical success factors are needed for managing digital change? How do they differ from the selected success factors of change management?

The critical success factors for managing digital change are organisational readiness to digital change, involvement of employees, communication, and empowerment of employees to act on digital change. These factors are all identified by previous change management literature. The previously studied success factors of change management are summarized in table 1 in the literature review of this study. In addition, this research has found an additional needed success factor to manage digital change – the ability to find and concentrate on digital matters that are important specifically for the company's customers. There is no specific order identified, which success factor is more important than another success factor of digital change management. Figure 7 illustrates the needed success factors of digital change management (in blue and green color) on the basis of the digital change management process.

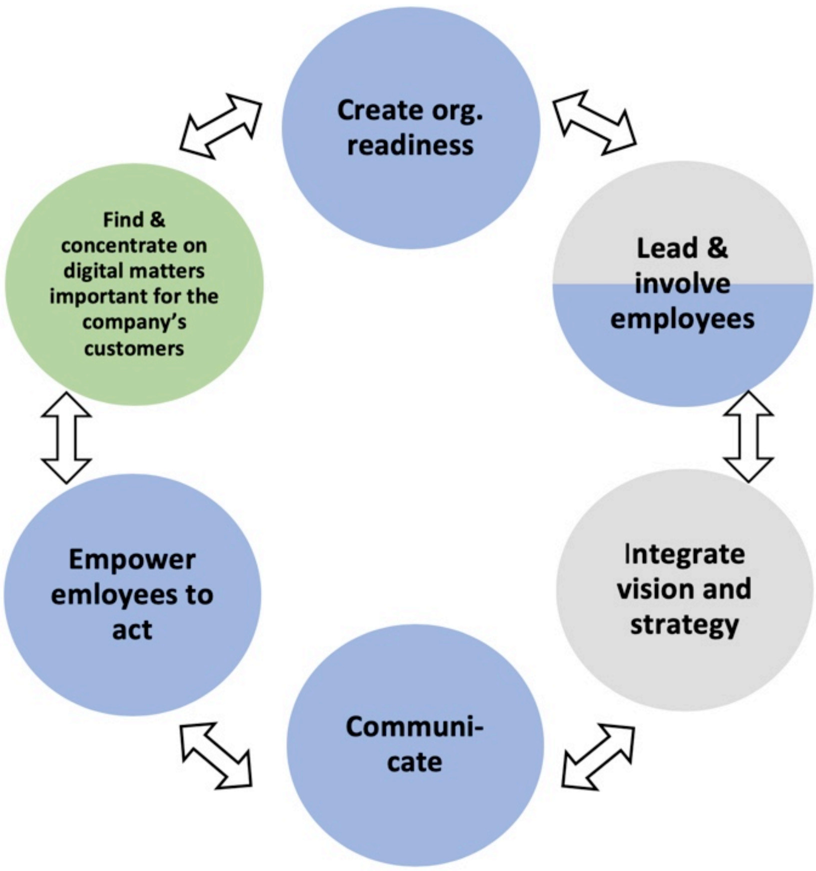

Figure 7. Success factors of digital change management

There are several similarities that can be found from the needed success factors of digital change management in previous change management research. For example in the digital change management process, the involvement of employees is highly taken into account, by deliberately employees executing digital change in small pre-determined groups. Thus, employee involvement is also associated with the success factor of empowering employees to act on digital change by team-building. Previous change management research has highlighted that employee participation is not only as itself an important success factor, but it is also associated with other needed success factors of organisational change (Weber & Weber 2001; Morgan & Zeffane 2003; Lucey 2008), and this statement is also proven in this research. However, there are also several differences between the needed success factors of digital change management and previous change management research:

- According to the digital change management process, the digital vision and strategy should be integrated to the company's overall vision and strategy, not create a separate vision or strategy. Digital vision and strategy are not identified as needed success factors of digital change management, and not highlighted at any point of the process like other success factors (e.g. communication and involvement of employees). Previous change management research on the other hand has stated that vision and planning are vital success factors of change management (e.g. Weber & Weber 2001, Chrusciel and Field 2006). Planning and analyzing are also not identified as separate success factors of digital change management.
- Additionally, leadership is not recognized as a critical success factor in this research. Even though it is part of the digital change management process, it is rather an obligatory part of the process. The company's CIO is indeed appointed as the person carrying the main responsibility of digital change, but employees from all departments execute the change, and thus leadership itself is not seen as a critical success factor of digital change management. Yet, previous change management research has stated that there is need for clear executive vision and leadership (Kotter 1996, 71-72; Graetz 2000; Lucey 2008).

- This research has found a new success factor for managing digital change (colored as green in figure 7). In order to manage digital change successfully, not only internal success factors have to be considered like fluent communication in the workforce and skilled employees, but also external success factors are vital. The new success factor of digital change management suggests to act on the differentiation of competitors, since the competitor field is expanding. Companies should find and develop new operating models, and right kind of services for their customers.

RQ (2): What opportunities and challenges has digital transformation created in the banking industry so far? How can challenges be managed?

The main opportunity of digital transformation in the banking industry is the possibility to offer also other services than only traditional banking services. Digitalisation has opened up the industry boundaries, and there is a strong potential for companies' growth. Growth can be either established with novel services, but also by focusing on the selection of digital channels and hereby creating a broader customer base. Thus, secondly, digital transformation has made it possible to serve customers regardless of their location through digital channels, for example by chat or video chat. But, not only services are no longer bound to location, also the company's internal operations can be optimized. For instance digitalisation has enabled the case company to apply a sharper management model, with less middle managers in between, and using themselves digital channels to run the bank branches. Thirdly, internal efficiency for example in terms of costs and processes, has been identified as a great opportunity of digitalisation in the banking industry.

The main challenges of digital transformation are the expansion of the competitor field and the high speed of digitalisation. As the industry boundaries are opening up, new competitors enter the market, such as start-ups. It is not any longer only other banks and financial organisations that are competing over customers in the industry. The speed of digitalisation forces companies to produce continuously new digital channels for customers. Since the banking industry is known to be very regulative, banks are very slow in their reactions. Yet, the challenges can be managed by firstly doing active market and customer surveillance, e.g. by collecting customer satisfaction surveys. Thereafter, it is recommended that companies' develop and produce suitable services and products, especially for their customers. It is important to emphasize the company's strengths to keep the competitive edge, and avoid competition and being exposed to possible new competitors entering the market.

The third challenge of digital transformation is the company's collaboration partners and networks, which is also considered to some extent as an opportunity. Opportunities and challenges of digital transformation are not all clearly categorizable, and some opportunities also yield a challenge. Collaboration partners and networks offer new alternatives for companies, for example how services can be produced and with whom. But, by having many intermediaries in the process, there is need of fluent management. Fluent management requires communication and commitment of all parties, understanding the company's goal of digital change as well as networking skills. All these requirements are part of the proposed digital change management process, and if digital change is well managed, the benefit of collaboration partners and networks can be utilized. The figure 8 summarizes the opportunities and challenges of digital transformation, and illustrates the possible overlap of opportunities and challenges in between.

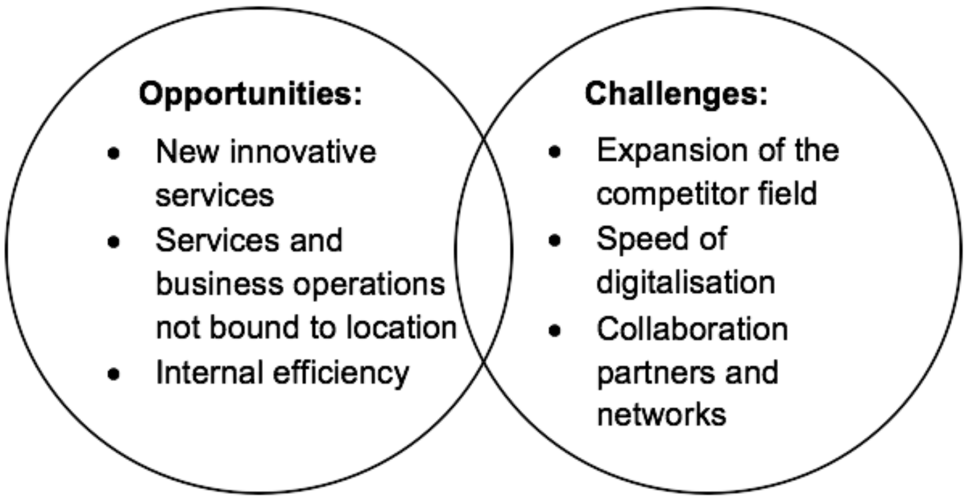

Figure 8. Opportunities and challenges of digital transformation

6.2 Theoretical contributions

The scientific objective of this study was to find out how digital change can be managed, what critical success factors are needed, and mirror the study's findings to previous change management research. In general, the study's findings are in line with existing theory, such as Kotter's (1996) famously known change management process. Organisational readiness, communication, the involvement of employees and their empowerment to act on the change, are all topics that were also identified in the digital change management process. But, also new discoveries were made by finding a different meaning for leadership, as well as vision and strategy than previous research. According to this study, there is no particular group to lead digital change like Kotter (1996) has stated, but several groups are built in order to execute change. Furthermore, the case company has not created a separate vision or strategy for digital change, rather integrated digital change in their overall vision and strategy. Additionally, the process of digital change management excludes recognition and rewards or short-term wins, which has been on the other hand considered by previous literature of change management (e.g. Kotter 1996, Graetz 2000, Lucey 2008).

This study has also demonstrated several opportunities and challenges of digital transformation, which are corresponding to previous researchers (e.g. Parviainen et al. 2017, Kane et al. 2015). The results of this study support earlier findings on the opportunity of new services and internal efficiency (Parviainen et al. 2017), and proposes also a new opportunity of services and business operations not being bound to location. Yet, empirical evidence found differences in challenges of digital transformation and naming especially the expansion of the competitor field and the speed of digitalisation. However, to tackle the challenges, the case company has created an own plan of actions that specifically suits the company, and produced suitable services and products especially for their customers. Nevertheless, these actions then correspond to previous research saying that the biggest barriers to digital maturity is a lack of an overall strategy, and having too many competing priorities (Kane et al. 2015). The case company emphasizes specifically to focus on digital matters that are important for the company's customers.

6.3 Managerial implications

The managerial objective of this study was to provide information for managers on how they can manage digital change, and offer the best practices and tools for facing digital change in their company. Until now, there is no scientific research on digital change management and specifically it’s process, even though companies are facing digital change with a rapid speed. Managers have to have hands-on management practices for digital change, so that they can successfully implement it in the company. Thus, this study is proposing a process framework on digital change management, which serves as a guiding tool for managers especially operating in the banking industry.

The framework, as illustrated in figure 6, proposes six different stages that should be accomplished to manage digital change. However, it is in the hands of the company’s managers, how they follow the process - whether they go back and forth between the different stages or follow the process step by step. Yet, as according to the framework, it is recommended to start by identifying the main motive for digital change before even deciding on any further actions, and also recall the main motive throughout the process. With the help of the proposed process framework, managers are also able to observe the bigger picture, and evaluate every decision in the light of the main motive to digital change. Lastly, and most importantly, the managers should remember that employees are being involved at every stage of the change - either by for example assigning them to be part of a team that executes digital change or as much as communicating the change, so that ultimately everybody acts in the favor of digital change.

Additionally as the research revealed, it might be difficult to clearly identify opportunities and challenges of digital transformation, as many opportunities follow directly a challenge, for instance the broad network and several collaboration partners with whom to work. Therefore, it is recommended that companies specifically focus on allocating opportunities of digital transformation, and things that appear to be a challenge are turned into opportunities rather than seen exclusively as challenges. Furthermore, it all comes back to the proposed framework, since if digital change is managed by executing all the steps of the framework, there should be no fear of not having e.g. networking skills or all parties being committed and understanding the company's goal of digital change. Training and communication are part of the suggested framework, and firstly digital change needs to be successfully managed so that companies can pursue further opportunities of digital transformation.

6.4 Limitations and future research

This study has several limitations, which mainly arrive from the chosen context and data collection method as well as the used theory. The chosen context, precisely one case company operating in the banking industry in Finland, causes the fact of not being able to generalize the study's results. Therefore, further qualitative research using the case study method or at best multiple case study research would improve the understanding of digital change management in companies. For example another bank could be studied in order to get another perspective, and potentially find also other process features to manage digital change in the banking industry.

Additionally, this study is carried out by interviewing top managers of the case company. It was seen important to only interview employees specifically in manager positions, in order to get a precise inside of the company's digital change management process. However, it limits the results to only managers point of view and a study with employees might have given further knowledge to the research. For example a second study could be done by conducting a questionnaire with employees, and testing their view on needed success factors to manage digital change. Also, employees resistance to change was not fully covered in this research, since it requires in particular a study directly with employees, and not only managers. The employees point of view could be an additional future research suggestion, in order to get even deeper inside to digital change management in companies.

Lastly, this study excludes the last step of Lewin's process and likewise the last two steps of Kotter's process, because digital change is still an ongoing change. Thus, it is relevant that the digital change management process is also researched after digital change has continued to evolve. As well, it would be interesting to examine the proposed framework further and obtain later on more information on how digital change has shaped the framework.

LIST OF REFERENCES

Al-Haddad, S. & Kotnour, T. (2015) Integrating the organizational change literature: a model for successful change. *Journal of Organizational Change Management*, 28, 2, 234-262.

Armenakis, A. A. & Bedeian, A. G. (1999) Organizational Change: A Review of Theory and Research in the 1990s. *Journal of Management*, 25, 3, 293-315.

Bennebroek Gravenhorst, K. & Veld, R. i. (2004) Power and Collaboration: Methodologies for Working Together in Change. In: Boonstra, J. J. (ed.) Dynamics of Organizational Change and Learning. Chichester: John Wiley & Sons.

Boonstra, J. J. (2004) Dynamics of Organizational Change and Learning. Chichester: John Wiley & Sons.

Burnes, B. (2004) Kurt Lewin and the Planned Approach to Change: A Re-appraisal. *Journal of Management Studies*, 41, 6, 977-1002.

Chrusciel, D. & Field, D. W. (2006) Success factors in dealing with significant change in an organization. *Business Process Management Journal*, 12, 4, 503-516.

Dahlberg, T. & Halén, M. (2016) Suomalaisten pankkien digitaalinen edelläkävijyys syntyi yhteistyöllä. *Talous ja yhteiskunta*, 44, 2, 40-45.

DeLaCastro, S. & Juillerat, T. (2015) Digital Banking: Time to Rebuild Your Organization [online document]. [Accessed 23 September 2018]. Available https://www.cognizant.com/InsightsWhitepapers/digital-banking-time-to-rebuild-your-organization-part-III-of-III-codex1266.pdf

Eisenhardt, K. M. (1989) Building Theories from Case Study Research. *Academy of Management Review*, 14, 4, 532-550.

Eskola, J. (2001) Laadullisen tutkimuksen juhannustaiat. In: Aaltola, J. & Valli, R. (ed.) Ikkunoita tutkimusmetodeihin 2: Näkökulmia aloittavalle tutkijalle tutkimuksen teoreettisiin lähtökohtiin ja analyysimenetelmiin. Jyväskylä: PS-kustannus.

Graetz, F. (2000) Strategic change leadership. *Management Decision*, 38, 8, 550-564.

Graetz, F., Rimmer M., Smith, A. & Lawrence, A. (2011) Managing Organisational Change. 3rd ed. Milton: John Wiley & Sons Australia.

Hagberg, J., Sundstrom, M. & Egels-Zandén, N. (2016) The digitalization of retailing: an exploratory framework. *International Journal of Retail & Distribution Management*, 44, 7, 694-712.

Hiatt, J. & Creasey, T. J. (2003) Change Management: The People Side of Change. Loveland: Prosci Research.

Ilmarinen, V. & Koskela, K. (2015) Digitalisaatio: Yritysjohdon käsikirja. Helsinki: Talentum.

Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D. & Buckley, N. (2015) Strategy, not Technology, Drives Digital Transformation. MIT Sloan Management Review and Deloitte University Press.

Klein, S. M. (1996) A management communication strategy for change. *Journal of Organizational Change Management*, 9, 2, 32-46.

Kotter, J. P. (1995) Leading Change: Why Transformation Efforts Fail. *Harvard Business Review*, 73, 2, 59-67.

Kotter, J. P. (1996) Leading Change. Boston: Harvard Business School Press.

Kotter, J. P. & Schlesinger, L. A. (1979) Choosing strategies for change. *Harvard Business Review*, 57, 2, 106-114.

Lewin, K. (1947) Frontiers in Group Dynamics: Concept, Method and Reality in Social Science; Social Equilibria and Social Change. *Human Relations*, 1, 1, 5-41.

Lucey, J. J. (2008) Why is the failure rate for organisation change so high? *Management Services*, 52, 4, 10-18.

Matt, C., Hess, T. & Benlian, A. (2015) Digital Transformation Strategies. *Business and Information Systems Engineering*, 57, 5, 339-343.

Meyer, A. D., Brooks, G. R. & Goes, J. B. (1990) Environmental Jolts and Industry Revolutions: Organizational Responses to Discontinuous Change. *Strategic Management Journal*, 11, 5, 93-110.

Morgan, D. E. & Zeffane, R. (2003) Employee involvement, organizational change and trust in management. *International Journal of Human Resource Management*, 14, 1, 55-75.

Parviainen, P., Tihinen, M., Kääriäinen, J. & Teppola, S. (2017) Tackling the digitalization challenge: how to benefit from digitalization in practice. *International Journal of Information Systems and Project Management*, 5, 1, 63-77.

Rauser, A. (2016) Digital Strategy: A Guide to Digital Business Transformation. North Charleston: CreateSpace Independent Publishing Platform.

Rogers, D. L. (2016) The Digital Transformation Playbook: Rethink your business for the digital age. New York: Columbia University Press.

Saunders, M., Lewis, P. & Thornhill, A. (2009) Research Methods for Business Students. 5th ed. Harlow: Pearson Education Limited.

Schein, E. H. (1996) Kurt Lewin's Change Theory in the Field and in the Classroom: Notes Toward a Model of Managed Learning. *Systems Practice*, 9, 1, 27-47.

Tilastokeskus (2017a) Matkapuhelin yhä suositumpi laite internetin käyttöön – käyttötarkoitukset monipuolistuvat [online document]. [Accessed 23 September 2018]. Available https://tilastokeskus.fi/til/sutivi/2017/13/sutivi_2017_13_2017-11-22_tie_001_fi.html

Tilastokeskus (2017b) 2. Internetin käyttö mobiililaitteilla [online document]. [Accessed 23 September 2018]. Available https://tilastokeskus.fi/til/sutivi/2017/13/sutivi_2017_13_2017-11-22_kat_002_fi.html

Tilastokeskus (2017c) Internetin käyttö pankkiasioihin, työn etsimiseen, omien tavaroiden myyntiin ja käytettyjen tavaroiden ostamiseen 2017, %-osuus väestöstä [online document]. [Accessed 23 September 2018]. Available https://tilastokeskus.fi/til/sutivi/2017/13/sutivi_2017_13_2017-11-22_tau_021_fi.html

Tuomi, J. & Sarajärvi, A. (2002) Laadullinen tutkimus ja sisällönanalyysi. 1st – 2nd ed. Helsinki: Tammi.

Vey, K., Fandel-Meyer, T., Zipp, J. S. & Schneider, C. (2017) Learning & Development in Times of Digital Transformation: Facilitating a Culture of Change and Innovation. *International Journal of Advanced Corporate Learning*, 10, 1, 22-32.

Weber, P. S. & Weber, J. E. (2001) Changes in employee perceptions during organizational change. *Leadership & Organization Development Journal*, 22, 6, 291-300.

Weill, P. & Woerner, S. L. (2013) Optimizing Your Digital Business Model. MIT Sloan Management Review, 54, 3, 71-78.

Yin, R. K. (2009) Case Study Research: Design and Methods. 4th ed. United States: SAGE Publications.

APPENDICES

Appendix 1. Interview questions

Background questions

- Introduce yourself shortly (name and position in the company)
- Shortly your educational and professional background
- What are your areas of responsibility in the company?
- How much does your work concentrate on digital change?
- What kind of authority do you have in change management in the company?

Change management

- Change processes are often divided into three stages: preparing the upcoming change (unfreeze) – executing the change (move) – ensuring that the change becomes permanent (freeze). Talk me through, how do you typically manage a change process?
- What are the organisational motives for digital change?
- Have you created organisational readiness for digital change?
- Do you also assess if employees are being change ready?
- Who leads digital change in the organisation? Have you build a group or team of people to lead the change?
- Do you involve your subordinates in the digital change process? In what ways are they involved in the change process?
- Has the organisation set a digital vision?
- Do you communicate the digital change to your subordinates? What channels do you use for communication?
- Do you empower employees to act on the digital change by e.g. providing training in new skills? Or in any other ways?
- Do you generate short-term wins for employees, who are participating in the digital change?

- How do you take into account possible resistance of employees to digital change?
- From a management perspective, what success factors do you consider vital for further implementation of digital change?

Digital transformation

- What opportunities has digital transformation created for the organisation?
- What does it require from a management perspective that these opportunities can be pursued?
- What challenges has digital transformation created for the organisation?
- How has the organisation reacted to the challenges? Has something been done to overcome them?
- Overall, how would you describe digital transformation? What kind and size of change is it?