Enhance the chance of successful digital transformation

by

Julia Ahlquist & Sólveig Dögg Birgisdóttir

June 2020

Master's Programme in Management

Abstract

Digital transformation is becoming imperative for organizations to stay competitive in the society we live in today. When transforming organizations, corporate culture has been proved to be an influential factor. The aim of this study is to provide knowledge regarding how organizations can invest in inner changes, as in culture and leadership, to enhance their chances of successful digital transformation. The study is based on literature as well as a case study, from one organization. The case study consists of seven interviews with employees from different departments and with various responsibilities within the organization. The analysis of the study resulted in three frameworks. The first demonstrates four important components when changing the culture in an organization, in the context of digital transformation. The second presents a structure for a leadership development program, aiming to provide managers with knowledge and tools to lead the changes. The third framework is a measuring tool, aimed at evaluating the progress of cultural change.

Keywords: Digital transformation, digitalization, fourth industrial revolution, corporate culture, digital culture, change management, leadership.

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1   Introduction

The following chapter aims to present an introductory background to the subject of the study. Thereafter, the problem area of the subject will be presented, leading to the research question. The chapter will end by stating the purpose, as well as outlining the structure of the study.

1.1   Background

In 2005, the number of people connected to the internet was 1,1 billion (Statista, 2020). In 2019, that number increased to 4,131 billion (Statista, 2020). Brynjolfsson and McAfee (2014) argue that we are now at the beginning of a new era they call the second machine age, also known as the fourth industrial revolution. They state that the way the steam engine evolved to replace human muscle power, computers are now doing the same for the human mind. Schwab (2017) agrees with Brynjolfsson and McAfee (2014), and claims there are three reasons why the current developments are not part of the third industrial revolution, but rather a new one. First, the advances are developing exponentially, rather than linear. Second, new technology has such major effects on all parts of society that it does not only change what we do, and how we do it, but also "who we are" (p. 3). Lastly, these changes are disrupting whole systems, industries, as well as societies.

Rautenbach, de Kock and Jooste (2019, n.p.) state that the fourth industrial revolution will "fundamentally change society, the economy, industries, human engagement, and the way in which we conduct business". In regards to businesses, Schwab (2017) states that there are four main areas that will be affected by this revolution. These are (1) Changes in customer expectations, (2) Increased asset productivity, due to use of big data, (3) New kinds of partnerships and collaborations, and (4) Changes within operating models, adapting to digital models. This aligns with the findings of Westerman, Calméjane, Bonnet, Ferraris and McAfee (2011), as well as Nahrkhalaji, Shafiee, Shafiee and Hvam (2018), stating that the three areas where businesses mainly transform are within customer experience, operational processes and business models. In order for organizations to survive the current disruptive environment, and adjust to the digital economy, they have to go through digital transformation (Rautenbach, de Kock & Jooste, 2019).

Digital transformation is a widely discussed concept, both in the academic field, and between practitioners. Nwankpa and Roumani (2016) describe digital transformation as changes within an organization where the driving forces are digital technologies. These changes include transitions to using technologies such as "big data, analytics, cloud, mobile and social media platforms" (Nwankpa & Roumani, 2016, p. 2). Rautenbach, de Kock and Jooste (2019) adds technologies such as Internet of Things (IoT), autonomous robots, cybersecurity, and augmented reality. Libert, Beck and Wind (2016) mention that there is a difference between going through digital transformation and doing a digital upgrade. They state that a digital upgrade is when the organization is doing the same as previously, but uses digital technologies to enhance efficiency and effectiveness. For example, "increasing your marketing spend for

digital channels or upgrading internal communication systems" (Libert, Beck & Wind, 2016, p. 3). However, digital transformation is when an organization utilizes digital technologies at a larger scale, to transform whole business models, as well as the business's value creation (Libert, Beck & Wind, 2016). Westerman et al. (2011) also argue that in order to succeed with digital transformation, the organization should not only implement new technologies, but rather use it to transform the way they conduct business.

1.2 Problem Area

The increased use of digital technology in the world creates opportunities and positive changes for many organizations (Abrell, Pihlajamaa, Kanto, Brocke, Uebernickel, 2016; Nahrkhalaji et al. 2018; Nwankpa & Roumani, 2016; Rautenbach, de Kock & Jooste, 2019; Sahu, Deng & Molla, 2018; Savic, 2019; Vey, Fendel-Meyer, Zipp & Schneider, 2017; Von Leipzig, Gamp, Manz, Schottle, Ohlhausen, Oosthuizen & Leipzig, 2017; Westerman et al. 2011). However, organizations seem to encounter various challenges when initiating digital transformation (Heavin & Power, 2018; Nahrkhalaji et al. 2018; Rautenbach, de Kock & Jooste, 2019; Westerman et al. 2011). A survey conducted by Baculard, Colombani, Flam, Lancry, and Spaulding (2017) indicates that only five percent of organizations meet their expectations when going through digital transformation and another study states that the rate of failure of digital transformation is up to 84 percent (Libert, Beck & Wind, 2016). The challenges that hinder organizations to fully benefit from their digital transformation can occur at every stage of the transformation, including the initiation stage, execution, and coordination stage (Westerman et al. 2011). Moreover, it affects different divisions in the organization and can be connected to corporate culture, organizational structure, information and knowledge sharing, and lack of competencies (Rautenbach, de Kock & Jooste, 2019).

The organization's ability to manage the challenges they encounter and implement a successful digital transformation is embedded in the people working in the organization (Kavanaugh, 2020; Westerman et al. 2011). A survey conducted by Kane, Palmer, Phillips, Kiron and Buckley (2015) indicates that factors that drive success in digital transformation are, for example investing in inner changes of the organization, as in leadership and culture. However, it appears that organizations tend to place more focus on the external environmental changes, including the supply chain and the customer. This kind of prioritization can lead to an unsuccessful digital transformation (Baculard et al. 2017; Westerman, Bonnet & McAfee, 2014). Organizational culture works as an overall dimension in the transformation process because of the effects it has on the organization's strategy in the transformation process (Rautenbach, de Kock, & Jooste, 2019).

A study conducted by Graham, Harvey, Popadak and Rajgopal (2016), reveals that 79 percent of executives believe that corporate culture is one of the most critical value creators in their organizations, and 91 percent of them say that culture is important. Despite that, many organizations do not invest enough in organizational culture and underestimate the importance of fostering a culture that contributes to successful digital transformation (Arendt, 2008;

Graham, Harvey, Popadak & Rajgopal, 2017). The challenges that can arise because of that, may include resistance towards the change (Westerman et al. 2011), and inadequate engagement among employees (Kavanaugh, 2020). However, Baculard et al. (2017) state that if organizations invest in inner changes, and develop a culture that empowers acceleration and learning as well as change the way people work, it can help organizations reach their goals and gain competitive advantage. To strengthen their arguments, scholars have affirmed the relationship between corporate culture and organizational performance (Flamholtz, 2001; Ogbonna & Harris, 2000), as well as the effects culture can have on the organization's competitive advantage (Flamholtz & Randle, 2012, Sadri & Lees, 2001).

Westerman, Bonnet and McAfee (2014) state that digital transformation is driven from the top-down, and in order for a successful outcome, leadership is essential. Challenges may therefore arise due to lack of leadership (Hafsi & Assar, 2016). Common challenges in the transformation related to leadership include lack of eagerness to change, deficiency in communicating the vision, and issues regarding coordination of roles and responsibilities (Fitzgerald, Kruschwitz, Bonnet & Welch, 2014; Hafsi & Assar, 2016; Westerman et al. 2011). These challenges may be rooted in the organizational culture and can result in resistance towards the change (Hafsi & Assar, 2016). Managers have a significant impact on the organizational culture and are in a position to align the culture with the organization's strategy (Groysberg, Lee, Price & Cheng, 2018). Furthermore, Westerman et al. (2011) and Nahrkhalaji et al. (2018) state that management plays a crucial role during digital transformation, and that it is as much a management and people issue, as it is a technological one.

1.3   Research Question

Even though there are several studies examining digital transformation and the various effects it has on different parts of an organization, the area of study is still novel (Morakanyane, Grace, & O'Reilly, 2017; Osmundsen, Iden & Bygstad, 2018). When reviewing existing research, an indication of the connection between corporate culture and successful digital transformation becomes apparent. Cultural success factors for digital transformation are discussed in various studies (e.g. Burchardt & Maisch 2019; Harraf, Wanasika, Hartl & Hess, 2017; Kavanaugh, 2020; Kane, 2019; Oertig & Kels, 2014, cited in Vey et al. 2017; Tate, & Talbott, 2015; Westerman, Bonnet & McAfee, 2014), as well as cultural challenges related to digital transformation (e.g. Hafsi & Assar, 2016; Mosadeghrad and Ansarian, 2014; Nahrkhalaji et al. 2018; Rautenbach, de Kock & Jooste, 2019).

However, the authors of this study see a gap in regards to how organizations can invest in changing the culture, in order to increase their chances of a successful digital transformation. Several scholars mention the cultural aspect and the role leaders play in digital transformation. These studies mainly focus on what kind of culture thrives in the digital environment (Harraf, Wanasika, Tate & Talbott, 2015; Hartl & Hess, 2017; Kane, 2019; Oertig & Kels, 2014, cited in Vey et al. 2017) and how leaders should lead the digital transformation (Abbatiello et al. 2017; El Sawy et al. 2016; Westerman, Bonnet & McAfee, 2014). However, academic literature

answering the question of how organizations can change the corporate culture, in the context of digital transformation, was scarce. Whereas, scholars have written about how to implement cultural changes in general to organizations, but when it comes to digital transformation, no academic literature was found regarding what kind of cultural change initiatives organizations can implement to attain the desired culture for successful digital transformation. This led the authors of this study to the following research question:

How can organizations change their corporate culture to
enhance the chances of succeeding with digital transformation?

1.4   Purpose

The purpose of this study is to provide organizations with guidelines on how to change the corporate culture when going through digital transformation. The intent is to provide managers with knowledge and tools they can use to increase their chances of successful digital transformation. The study contributes to research with knowledge and understanding within the areas of digital transformation, corporate culture, change management, and leadership. The product of the study consists of three frameworks. The first framework demonstrates four important components of the cultural change process. The second framework proposes a structure of a leadership development program, and the third one suggests measurements to evaluate the progress of the cultural change.

1.5   Outline of the Thesis

The study is divided into six chapters. The first chapter includes an introduction to the research subject, research question, and purpose for the study. Chapter two contains an overview of relevant theories and literature regarding digital transformation, corporate culture, change management, and leadership. The methodology chapter follows with an outline of the research design, selection process, and collection of data, as well as validity, reliability, ethical considerations, and limitations to the study. Thereafter, the empirical findings are presented, structured into four categories, corresponding to the sub-chapters in the literature review. The data analysis is also structured according to these sub-chapters. The chapter discusses the empirical findings in relation to the literature review, and presents the result of the study. Lastly, the conclusion of the study is presented, along with research contributions and suggestions for further research.

2 Literature Review

In the following literature review, relevant theories and models for this study will be presented. The chapter begins by presenting the background of the concept digital transformation. Thereafter, a review of corporate culture, followed by change management theories and models. Lastly, the concept of leadership will be discussed in relation to digitalization and digital transformation.

2.1 Digital transformation

Legner, Eymann, Hess, Matt, Böhmann, Drews, and Ahlemann (2017) separate digital technology developments into three waves (See Figure 1). The first wave was the transfer from paper to computer, called digitization, resulting in automation to a higher degree. The second wave, digitalization, was the emergence of the internet, which laid the foundation for fast global communication. The internet resulted in new ways of creating value, as well as conducting business. Digitalization is not only a technical challenge, but also socio-technical (Stockhinger & Teubner, 2018). At the moment, we are in the third wave. This includes the implementation and integration of new technologies, such as Social, Mobile, Analytics, and Cloud (SMAC), and the exponential increase of processing power, resulting in the rise of completely new business models. Legner et al. (2017) also argue that there has been a power shift during the current wave. It is now the user who is in control with higher demands and expectations than ever before. This aligns with multiple authors stating that one of the biggest drivers for organizations to transform is the change in customer expectations (Osmundsen, Iden & Bygstad, 2018; Schwab, 2017; Vey et al. 2017; Wersteman et al. 2011). In order to fulfill these growing customer demands, organizations have to implement digital transformation, integrating various digital technologies across the whole value chain (Aral & Weill, 2007; Brynjolfsson & Hitt, 2000; Mithas, Krishnan & Fornell, 2005; Nwankpa & Roumani, 2016; Sahu, Deng & Molla, 2018).
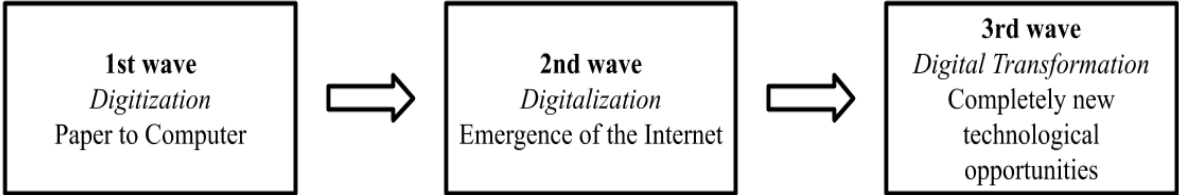
Figure 1: Three waves of technology development

2.1.1 Concept definition

When reading through the existing literature about digital transformation, it becomes evident that there is no universal definition. Most authors have similar components in their definitions, but there is not one definite. Vial (2019) conducted a study compiling the best available knowledge within the field, with the purpose of bringing clarity to the subject. After examining the definitions used in the literature, Vial (2019, p. 121) constructed the following definition of

digital transformation: "a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies". Morakanyane, Grace and O'Reilly (2017) conducted a similar literature review study, and their work resulted in this definition: "an evolutionary process that leverages digital capabilities and technologies to enable business models, operational processes and customer experiences to create value". The latter definition will be used in this study. Table 1 provides a more detailed description of the definition.

Table 1: Digital transformation definition (Morakanyane, Grace & O'Reilly, 2017)

Keyword	Simple Definition
Evolutionary Process	A gradual and ongoing series of activities that brings radical change over a period of time.
Digital Capabilities	Technology skills possesses or required by employees, customers and other stakeholders in different areas that can enable the organization to thrive in digital environment.
Business models, operational processes and customer experiences	Different areas of the organization which are bound to transform due to the digital transformation process.
Value Creation	Organization wide effects and benefits realized as a result of the digital transformation effort, realized by both the organization and the customer.

2.1.2   Digital transformation opportunities

The opportunities digitalization and digital transformation bring to organizations are immense (Nahrkhalaji et al. 2018; Nwankpa & Roumani, 2016; Rautenbach, de Kock, Jooste, 2019; Sahu, Deng & Molla, 2018; Savic, 2019; Vey et al. 2017; Von Leipzig et al. 2017; Westerman et al. 2011). Digital transformation allows businesses to "take advantage of the pervasive digital connection of people, data, information and knowledge" (Nwankpa & Roumani, 2016, p. 5). Nwankpa and Roumani's (2016) study shows that digital transformation has a positive impact on innovation and business performance. Furthermore, Vey et al. (2017) state that the emerging digital business models allow a more rapid growth rate. By implementing digital transformation, an organization can create significant value through new "business models, organizational processes, products and services, and customer engagement" (Sahu, Deng & Molla, 2018, n.p).

2.1.3 Digital Maturity

Digital maturity is a frequently mentioned concept within digital transformation literature (e.g. Kane, Palmer, Nguyen-Phillips, Kiron & Buckley, 2017; Pennarola, 2019; Rossmann, 2018; Salviotti, Gaur, & Remane, Hanelt, Wiesboeck & Kolbe, 2017). Westerman, Tannou, Bonnet, Ferraris and McAfee (2012) created a model, the Digital Mastery Model, which contains four stages of digital maturity, based on two parameters: digital capabilities and leadership capabilities. The model (See Figure 2) describes how well an organization is managing digitalization and digital transformation, where becoming digital master is the goal. Beginners are organizations that do not want to rush digital advancements and rather apply a "wait-and-see strategy" (Westerman, Bonnet & McAfee, 2014, p. 15). They have not developed either their digital capabilities or leadership capabilities enough to be competitive in the current market. Conservative organizations, although they possess the right leadership capabilities, they are only implementing carefully thought out investments, resulting in slow development. Conservative organizations are driven by rules and control, rather than progress. Fashionistas on the other hand, are organizations that quickly invest in newly developed technology but their insufficient leadership capabilities makes it difficult to turn the investments into performance. When an organization is at the stage of digital mastery, they "use digital technologies to drive significantly higher levels of profit, productivity, and performance" (Westerman, Bonnet & McAfee, 2014, p. 3). Westerman, Bonnet and McAfee (2014) argue that digital masters are more successful than their competitors, as shown in Figure 3.
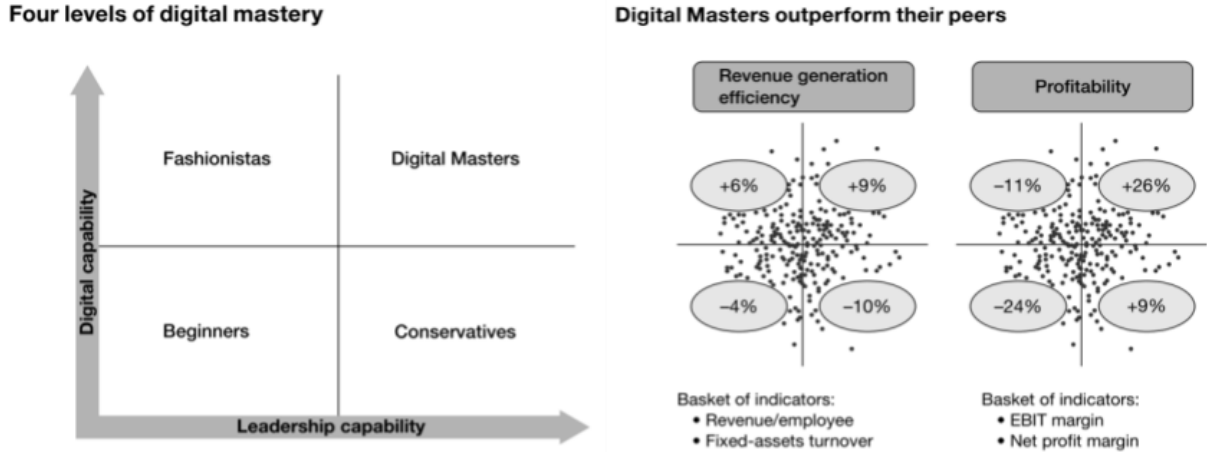

Figure 2: Digital Maturity Model (Westerman, Bonnet & McAfee, 2014)

Figure 3: Digital Maturity Revenue and Profitability (Westerman, Bonnet & McAfee, 2014)

2.2   Corporate culture

Culture can be described as learned behavior that is shared among individuals. These individuals share the same values and can be distinguished from members of other cultures (Hoftede, Hofstede & Minkov, 2010). Culture is found in every layer of society, including religion, ethnicity, gender and inside corporations (Hoftede, Hofstede & Minkov, 2010). However, corporate culture is somewhat different from other cultures because when people begin working, they encounter already formed values (Hoftede, Hofstede & Minkov, 2010). Therefore, the foundation of corporate culture are the values developed by the people working in the organization (Deal & Kennedy, 1991, cited in Hartl, & Hess, 2017), and the culture mainly includes corporate actions (Hoftede, Hofstede & Minkov, 2010). Corporate culture can be defined as "[…] a pattern of basic assumptions, invented, discovered, or developed by a given group, as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore is to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein, 1988, p. 7). This definition of corporate culture will be used in this study.

Scholars have argued that culture is one of the fundamental factors for running a successful business and gaining competitive advantage (Barney, 1986; Flamholtz & Randle, 2012; Hall, 1993; Ogbonna & Harris, 2000). Studies also indicate a linkage between corporate culture and organization performance (Felipe, Roldán & Leal-Rodríguez, 2017; Kotter & Heskett, 1992) as well as the organization's ability to respond to business opportunities (Felipe, Roldán & Leal-Rodríguez, 2017). In response to these business opportunities, organizations are often required to be innovative (Burchardt & Maisch, 2019) and transform their businesses (Vey et al. 2017). Philip and McKeown (2004, p. 625) define business transformation as "bringing radical changes in organizational culture in terms of structure, processes and above all, people's attitudes, beliefs and behaviours". Philip and McKeown (2004) strengthen that definition by saying that in order to make a successful transformation, developing the corporate culture is vital.

2.2.1   Competing Values Framework

Every organization has a unique culture where individuals behave, communicate and display attitudes that have an effect on how the organization operates (Farrell, 2018). Cameron and Quinn (2006) designed a framework (Competing Values Framework) that has been widely used by scholars to provide insights to cultural differences in organizations (e.g. Felipe, Roldán & Leal-Rodríguez, 2017; Hartl & Hess, 2017) and can be used to analyze and initiate cultural changes in organizations (Cameron & Quinn, 2006). The framework consists of different values, assumptions and thought processes that make up the core of corporate cultures. The framework (See Figure 4) is divided into two dimensions, where one dimension describes organizations that are flexible and discreet versus organizations that have stability and control. The other dimension divides into internal and external orientation, where internal focuses on unification and the external focuses on differentiation. These dimensions form four

idiosyncratic cultural types: Clan, Adhocracy, Hierarchy, and Market culture (Cameron & Quinn, 2006).

Flexibility and discretion

Clan Culture	**Adhocracy Culture**
Hierarchy Culture	**Market Culture**

Internal Focus ← → External Focus

Stability and control
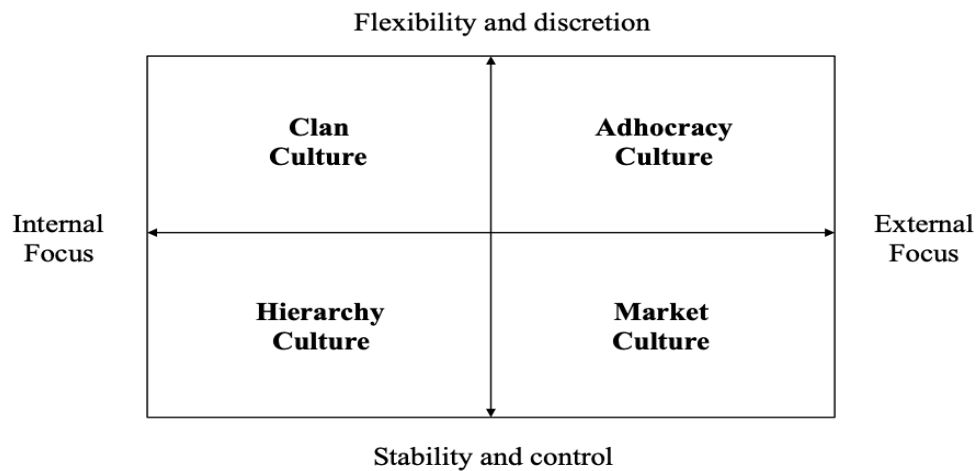
Figure 4: Competing Values Framework (Cameron & Quinn, 2006)

The clan culture symbolizes a family where trust, shared values, commitment, and loyalty prevail. The culture is people-oriented and places a significant focus on aligning employees and teamwork (Cameron & Quinn, 2006). Hartl and Hess (2017) indicate that organizations can benefit from fostering clan culture when going through digital transformation, because of the trust factor that prevails in clan cultures. The elements of adhocracy culture are dynamic, innovative, flexible and risk-oriented, where people strive to be leaders when it comes to knowledge and the development of new products (Cameron & Quinn, 2006). These elements align with values identified as being critical success factors in digital transformation (Hartl & Hess, 2017). Hierarchy culture is characterized by, as the name implies, hierarchy, rules, bureaucracy, and accountability. The working environment is structured and driven by procedures, and decision making aligns with that (Cameron & Quinn, 2006). Lastly, the market culture is characterized by being goal-oriented, hard-working, and competitive (Cameron & Quinn, 2006).

2.2.2   Digital Culture

When reviewing the literature, it becomes apparent that organizations need certain cultural elements in order to successfully implement digital transformation (Harraf et al. 2015; Hartl & Hess, 2017; Kane, 2019; Oertig & Kels, 2014, cited in Vey et al. 2017). The whole organization needs to embrace a culture which supports the alignment of IT and business initiatives (Haffke, Kalgovas, & Benlian, 2017), as well certain organizational values (Hartl & Hess, 2017).

Values

As previously mentioned, values form the foundation of culture and thereby, have an effect on people's behavior in an organization (Flamholtz & Randle, 2011; Hoftede, Hofstede & Minkov, 2010). Hartl and Hess (2017) identified certain values, essential to a successful digital

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transformation, including being open to change, agility, innovation, customer-centricity, entrepreneurship, and having a tolerance to failure. They also mention trust, cooperation, and people's will to learn and participate (Hartl & Hess, 2017). If organizations are aware of the values critical for successful digital transformation, they are able to direct their change management initiatives towards the desired culture (Hartl & Hess, 2017). Innovation and agility were ranked among the most crucial values when it comes to digital transformation in Hartl and Hess's (2017) study, and are concepts that are frequently discussed in the literature (e.g. Burchardt & Maisch, 2019; Harraf, Wanasika, Tate & Talbott, 2015; Jassawalla & Sashittal, 2002; Karimi & Walter, 2015; Osmundsen, Iden & Bygstad, 2018).

Innovative culture

Burchardt and Maisch (2019) state that innovation is an essential factor for organizations to thrive in the business environment today, and as mentioned, innovation is crucial when it comes to digital transformation. However, Harraf et al. (2015) argue that organizations need more than just innovation to succeed, they need an innovative-culture. An innovative culture can be described by what the organization is capable of doing and how people in the organization behave when it comes to innovation. When an organization has an innovative culture, it can facilitate acceptance among employees for change, as well as create values and commitment to innovative thinking (Karimi & Walter, 2015; Jassawalla & Sashittal, 2002). Studies indicate that an innovative-culture can impact how successful the implementation of a new strategy is (Frohman, 1998; Higgins & McAllaster, 2002) and help organizations add value to their digital initiatives (Karimi & Walter, 2015).

Agile organizations

Osmundsen, Iden and Bygstad (2018) did a systematic literature review, called "Drivers, success factors and implications" of digital transformation. They concluded that in order for an organization to successfully implement digital transformation, the culture needs to be agile. Agility is defined as the organization's ability to sense the business environment when it comes to seizing opportunities and detecting threats, and the organization's ability to respond effectively to these changes (Mathiyalakan, Ashrafi, Zhang, Waage, Kuilboer & Heimann, 2005, cited in Ashrafi, Xu, Sathasivam, Kuilboer, Koelher, Heimann & Waage, 2005). For organizations to successfully digitally transform, agility is said to be a fundamental element (Hartl & Hess, 2017). Agility is embedded in the organization's mindsets and those organizations that foster innovation are better equipped to exploit an agile mindset (Harraf, Wanasika, Tate & Talbott, 2015).

2.2.3   Measure culture

An organization's intangible assets can be very valuable (Kaplan & Norton, 2004). For instance, it is difficult for competitors to copy, so measuring the intangible assets will enable organizations to obtain durable competitive advantage. In order to measure the intangible assets, Kaplan and Norton (2004) suggest that the organization analyzes their human, information and organizational needs, as well as evaluate their current situation in regards to

those needs. These capabilities are included in the learning and growth perspective in the balanced scorecard. The organizational capabilities include culture, leadership, alignment, teamwork, and knowledge sharing. Kaplan and Norton (2004) argue that, unlike financial performance, the intangible assets can only be evaluated in terms of their alignment with the strategy. They demonstrate the importance of the organizational capabilities with the following citation:

> Successful companies had a *culture* in which people were deeply aware of and internalized the mission, vision, and core values needed to execute the company's strategy. These companies strove for excellent *leadership* at all levels, leadership that could mobilize the organization toward its strategy. They strove for a clear *alignment* between the organization's strategic objectives and individual, team, and departmental goals and incentives. Finally, these companies promoted *teamwork*, especially the sharing of strategic knowledge throughout the organization (Kaplan & Norton, 2004, p. 56)

2.3   Change management

Changing the corporate culture can be challenging (Kane et al. 2015; Westerman et al. 2011), although often necessary when going through digital transformation (Hartl & Hess, 2017; Kane et al. 2015; Phillip & McKeown, 2004; Rautenbach, de Kock & Jooste, 2019; Westerman et al. 2011). In an era of constant disruption, the concept of change management is highly relevant (Errida, Lotfi & Semma, 2018; Ján & Veronika, 2017; Moran & Brightman, 2000; Mosadeghrad & Ansarian, 2014; Todnem By, 2005). Moran and Brightman (2000, p. 66) define change management as "the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers". Creasey and Stise (2016, cited in Errida, Lotfi & Semma, 2018, p. 206), on the other hand, define change management as "the application of a set of tools, processes, skills and principles for managing the people side of change to achieve the required outcomes of a change project or initiative". Both definitions contain relevant components for the study, therefore both will be taken into consideration.

Due to external environmental factors, such as globalization, digitalization, etc., Graetz (2000) argues that manager's main task is leading organizational change. Furthermore, Todnem By (2005) states that proper change management is essential for an organization to succeed. The findings of Hesse (2018, p. 1858) support this statement by the following quote "In the past change management was a task to perform once or twice in a decade: now it is an everyday activity of my job".

Communication

Organizational change greatly influences the "competitiveness, growth, efficiency and survival" of a business (Ján & Veronika, 2017, p. 5). Yet, organizations often struggle to successfully execute change initiatives (Balogun & Hailey, 2008; Lewis, 2000; Mosadeghrad

& Ansarian, 2014; Richardson & Denton, 1996). Mosadeghrad and Ansarian (2014) present multiple reasons for why organizations may fail, including lack of training, low employee motivation, ill-suited corporate culture, lack of leadership and management support, and insufficient monitoring. Communicating the change to the employees is difficult, and is one of the main reasons why change initiatives fail (Lewis, 2000; Richardson & Denton, 1996). The way management communicates the changes has been proven to affect the result, especially on an individual level (Goodman & Truss, 2004). Richardson and Denton (1996) state that it is important for management to discuss, visualize, and include the employees in the change. "People have to feel confident, secure, and hopeful about the change. Only then can corporate cultures be changed" (Richardson & Denton, 1996, p. 215). Furthermore, Goodman and Truss (2004) argue that clear communication can counteract resistance towards the change. This aligns with Coch and French (1948), stating that managers can use communication to decrease, or even eliminate resistance toward change among the employees. However, Dent and Goldberg (1999) argue that employees are resisting negative outcomes, such as losing their job or their comfort, rather than change itself. Moreover, Oreg (2006) argues that this faulty view of resistance results in a misguided focus of where the real problem lies.

2.3.1   Change models

The implementation of organizational change is often a complicated process. Models can be used by management teams in order to reduce complexity (Recklies, 2015) and increase the chances of success (Mulholland, 2017). Below, a well established change model from Kotter (1995) is presented, together with two change models specific to changing corporate culture. These change models are presented together because change regarding digital transformation and corporate culture are approached differently in the literature. However, when it comes to changing the corporate culture when going through digital transformation, factors from all models are relevant, due to the fact that both the business and the culture is transforming.

Kotter's 8 step change model
In 1995, Kotter introduced a model for change processes, known as Kotter's 8 step change model. The main finding of his previous studies was that successful change processes take a long time to implement and require several unavoidable steps. The model he formulated consists of eight consecutive steps (See Table 2), based on the mistakes he observed organizations make when going through transformations. Many of the steps are strongly connected to corporate culture. For instance, the model includes vision, motivation, leadership, communication, empowerment, management support, trust, inspiration, and involvement. Furthermore, the last step is solely focused on culture, which entails anchoring the changes in the organization's culture. Kotter (1995) states that by creating a clear vision, creating urgency, and communicating the changes, organizations can better clarify the direction for the employees and create motivation.

Table 2: Kotter's 8 step change model (Kotter, 1995)

1. Establishing a sense of urgency
2. Forming a powerful guiding coalition
3. Creating a vision
4. Communication the vision
5. Empowering others to act on the vision
6. Planning for and creating short-term wins
7. Consolidating improvements and producing still more change
8. Institutionalizing new approaches

Nine steps to change culture

Cameron and Quinn (2006) developed a cultural change model. The steps are presented in Table 3. The model is designed to assist organizations in changing the corporate culture by conducting nine steps. The intent of the model is to involve employees in the change process, in order to reduce resistance (Cameron & Quinn, 2006).

Table 3: Nine steps to change culture (Cameron & Quinn, 2006)

1. Reach consensus regarding the current organizational culture
2. Reach consensus on the preferred future organizational culture
3. Determine what the changes will and will not mean
4. Identify stories illustrating the desired future culture
5. Identify a strategic action agenda
6. Identify immediate small wins
7. Identify leadership implications
8. Identify metrics, measures, and milestones to maintain accountability
9. Identify a communication strategy

The first step in Cameron and Quinn's (2006) model revolves around analyzing the current culture in the organization. Few people are chosen to analyze the current culture and establish an understanding. As previously stated, the Competing Values Framework can be used to analyze and initiate change in organizational culture, and therefore, managers can use the framework as support for both steps one and two in this model. The second step mirrors the

first step, except now the group should analyze the desired culture and reach consensus on how they want to change. Cameron and Quinn (2006) argue that by analyzing the current and desired culture, organizations are better prepared and can develop a concrete strategy on how to initiate and implement the changes. The third step revolves around evaluating the effects of the changes. The fourth step is about creating and communicating a story that resembles the desired values, as well as behaviors the organization wants to convey. The fifth step involves creating a strategic agenda on how the organization plans on initiating the changes. This step contains five pillars organizations need to consider. The pillars include preparing people for the changes, explaining why the changes need to happen, and changing the original processes of how to appraise and select people. It also consists of building support around the employees and focusing on sharing information. Step number six is about creating small victories. The organizations should implement the first cultural change soon after the change process starts and choose a small change that generates a victory immediately. Smaller changes usually do not cause much resistance, and therefore, by beginning with smaller things, it can reduce resistance among employees. Step number seven revolves around identifying whether the leaders have the capabilities to initiate the change and lead the desired culture. The leader must also make everyone aware that he or she is dedicated to changing the culture. The eighth step is to establish measurements to evaluate if the cultural changes are effective, and the final step revolves around making a strategy on how to communicate the changes, for example by using symbols, stories or changing the organization's logo.

Six steps to manage the corporate culture

Flamholtz and Randle (2011) designed a similar framework as Cameron and Quinn (2006) on how to manage the corporate culture (See Figure 5). Their process also begins by analyzing the current culture and then defining the desired culture. They emphasize on defining the cultural gap and then designing a strategy according to that. After that, the management team and a formed coalition should communicate the desired culture. Flamholtz and Randle (2011) talk about the importance of making people understand the desired culture and communicate values. They suggest a few communication approaches, including using videos, meetings, written material, and symbols. The final step in their framework is to evaluate the process of cultural change against the formed strategy on how to change the culture. Flamholtz and Randle (2011) mention that whoever designed the cultural management plan should meet quarterly and evaluate the progress, problems encountered, and reevaluate the strategy. They emphasize that changing the culture is not finished after the last step, managing the culture is a lifelong organizational process.

Flamholtz and Randle (2011) suggest approaches organizations can use to manage the culture. These approaches are for example, creating values for the organization, using different communication approaches to spread the culture, selecting and retaining people that understand and are willing to embrace the new culture, and encourage those opposed to the new culture to leave the organization. Moreover, they suggest using training programs to communicate and manage the culture, rewarding people that live by the values, and aligning the organization's structure to the corporate values.
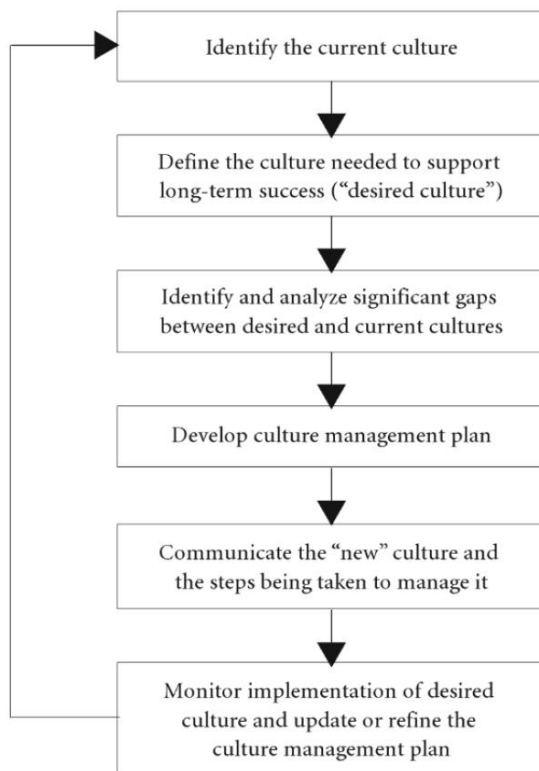
Figure 5: Managing corporate culture (Flamholtz & Randle, 2011)

2.4 Leadership

Literature indicates that scholars agree that change management is essentially about leading people (e.g. Hiatt & Creasey, 2003; Lewis, 2000; Morand & Brightman, 2000; Mosadeghrad & Ansarian, 2014). The literature holds many different conceptualizations and theories about leadership and there is no accepted universal definition for the concept (Bolden, 2004). Northouse (2018, p. 5) defines leadership as "a process whereby an individual influences a group of individuals to achieve a common goal" and he defines the common characteristics of leadership being that "(a) leadership is a process, (b) leadership involves influence, (c) leadership occurs in groups, and (d) leadership involves common goals".

Because of rapid external changes in the organizational environment, due to increased technology, as well as changing customer demands (Osmundsen, Iden & Bygstad, 2018; Schwab, 2017; Vey et al. 2017; Westerman et al. 2011) the need for adjustments in leadership styles that thrive in the digital environment has emerged (Abbatiello, Knight, Philpot & Roy, 2017). Nahrkhalaji et al. (2018) argue that in order to have a successful outcome of a digital transformation, great leadership is necessary. The changes that have to be made when turning digital initiatives into digital advantages demand a management team that can cultivate the right corporate culture, embracing the transformation (Nahrkhalaji et al. 2018). This is supported by Westerman, Bonnet and McAfee (2014), who state that the main reason why organizations do

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not fully reap the benefits of digital transformation and become digital masters, is because of lack of leadership.

El Sawy, Kræmmergaard, Amsinck and Lerbech Vinther (2016, p. 141) define digital leadership as "doing the right things for the strategic success of digitalization for the enterprise and its business ecosystem" and "thinking differently about business strategy, business models, the IT function, enterprise platforms, mindsets and skill sets, and the workplace". Digital leadership demands different mindsets, as well as a set of skills (Abbatiello et al. 2017; El Sawy et al. 2016). It requires the leader to be supportive of innovation, risk-taking, and learning, as well as being supportive of new ways of collaboration and creation of cross-functional teams (Abbatiello et al. 2017). Abbariello's et al. (2017) study indicates that in order for an organization to succeed in this fast moving digital world, the capabilities essential for effective leadership have changed in three areas (See Table 4).

Table 4: Digital leadership capabilities (Abbatiello et al. 2017)

Leaders need to think, act, and react differently to make their organizations succeed in a digital world		
Cognitive transformation (THINK differently)	**Behavioral transformation (ACT differently)**	**Emotional transformation (REACT differently)**
Conceptualizing possibilities in a virtual world	Adapting to constantly shifting power and influence	Tolerating an environment of risk and ambiguity
Handling ever-increasing cognitive complexity	Collaborating with ease across many different teams	Showing resilience in the face of constant change
Thinking divergently about new ways of doing things	Valuing the contribution of new work partners and different interest groups	Being brave in challenging how things are being done
Making decisions quickly without all of the information	Investing huge amounts of energy into getting things right; try, fail, try again	Having the confidence to take the lead in driving change

A successful digital transformation requires "strong top-down leadership", where leaders create a direction, initiate action, and engage the organization in the changes (Westerman, Bonnet & McAfee, 2014, p. 14). In successful transformations, digital leaders develop a future vision for their organization and are continually reevaluating that vision in order for the organization to fully exploit their potential. These leaders are engaged in the changes and set sights on changing people's attitudes towards the changes. They are able to engage people in pursuing the goals and create a strong relationship among the people who work at the technical side of the organization and the business people (Westerman, Bonnet & McAfee, 2014).

Westerman, Bonnet and McAfee (2014), discuss the changes necessary for organizations to exploit a high performing digital culture. They state that changing the culture in an organization needs more than communication from the top-down, it requires engagement from leaders. Leaders can engage their employees in the changes by impacting their behavior, for example

by being role models, using rewards or gamification, and they can foster a learning culture by supporting experimentation (Westerman, Bonnet & McAfee, 2014).

2.4.1 Leadership development

Various studies have been conducted on the effectiveness of training programs for leaders (e.g Burke & Day, 1986; Collins & Holton, 2004). Training can be defined as an approach to improve individuals, teams or organization's performance through learning and development (Goldstein & Ford, 2002, cited in Aguinis & Kraiger, 2009). A meta-analysis by Collins and Holton (2004) regarding the advantages of leadership development programs indicates that training can have significant effects on knowledge, behavior, and the overall organizational results. However, the effectiveness differs between leadership programs (Collins & Holton, 2004). When developing a leadership program, the length, content, and what type of training approach used has to be kept in mind, in order for new competencies to be developed (Collins & Holton, 2004). A variety of different approaches used to develop and train leaders are being practiced (Day, 2000). Including performance feedback, mentoring, networking, and experiential learning. Moreover, distinct platforms are used while applying these methods, such as formal classroom programs (American Society of Training and Development, 1995, cited in Day, 2000), online training, and approaches intertwined in the initial work practices (Day, 2000). Studies indicate that the approaches mentioned can be more effective if they are integrated together in a developmental program (McCauley, Moxley & Velsor, 1998, cited in Collins & Holton, 2004; Day, 2000)

Multi-source feedback

One approach to develop leaders is the performance feedback, particularly the 360 degree feedback. That is a multi-source assessment on the leader's performance (Warech, Smither, Reilly, Millsap & Reilly, 1998). Research indicates that multi-source feedback is one of the most effective developmental practices (Giber, Carter & Goldsmith, 1999, cited in Day, 2000). The intent with the feedback is to impact the leader's development (Warech et al. 1998). Literature indicates that feedback can be useful to increase self-awareness, as well as insights on the impact the leader has on others (Barney & Hansen, 1994; Drucker, 1999). However, there are no guarantees that results from feedback will provide improvement in the leader's capabilities (Day, 2000). The receiver of the feedback must be open and willing to acknowledge the feedback and learn from it (Day, 2000).

Mentoring

Mentoring programs are another way of developing leaders (Day, 2000). Mentoring programs often involve pairing a junior manager with a senior manager (McCauley & Douglas, 1998, cited in Day, 2000), consultant or a peer (Douglas, 1997, cited in Day, 2000). That creates opportunities to observe and learn from other, more experienced managers (Day, 2000). Having a mentor can assist in developing a better strategic perspective on the organization, as well as increase personal development (Day, 2000). Mentoring is also ranked among the most effective leadership development approaches (Giber, Carter & Goldsmith, 1999, cited in Day, 2000).

Networking

Organizations can use networking between functional areas as a way to develop and invest in social relationships (Day, 2000). The intent is to build a supportive environment where people can benefit and gain knowledge from others (Day, 2000). These kinds of programs can either involve connecting people globally or building a network of people with similar training or experience (Day, 2000). The idea is for people to learn and develop by sharing common challenges and opportunities. This approach is said to be effective when it comes to increasing problem solving and enhancing innovation capabilities (Day, 2000).

Experiential learning

The idea behind experiential learning is that people learn by doing. The concept mirrors learning cycles where people have to go through the entire cycle to learn, which includes experience, reflection, thinking, and action (Kolb & Kolb, 2009). The purpose with experiential learning is two folded. The first one concerns learning about a specific subject and the other one revolves around the learning process behind the learnings (Kolb & Kolb, 2009). The approaches used for experiential learning can involve different practices, for example role playing, individual reflection, structured- and unstructured activities, and simulations (Heron, 1999, cited in Tomkins & Ulus, 2016). Research indicates that by using experiential learning techniques, people retain knowledge better than when using conventional lecture techniques (Specht & Sandlin, 1991).

2.5   Literature review summary

In the present day, going through digital transformation is inevitable for any organization, if they wish to stay competitive. According to literature, the corporate culture is an important factor to consider when going through transformation and organizations need to create a culture that thrives in the digital environment. Change management is an essential component of both digital transformation and cultural change, due to the immense changes organizations need to initiate and implement. The literature has given significant attention to the leader's role in the change process and implies that digital transformation as well as cultural change, happens from the top-down.

The four topics presented in Table 5 are all intertwined and equally important to consider when changing the corporate culture due to the need of going through digital transformation. By combining these main categories, the study aims to build a holistic view of cultural change in the context of digital transformation. The following table displays the main components from each section that will be used as a basis for the interviews, the empirical data, as well as the analysis.

Table 5: Literature review summary

Digital transformation
This section discusses the importance of digital transformation in the current business environment, as well as the shift in customer expectations, resulting in the need for a more customer-centric approach. Furthermore, this part includes opportunities with digital transformation and discusses the Digital Mastery Model, developed by Westerman, Bonnet and McAfee (2014).
Corporate culture
The corporate culture section displays the linkage between corporate culture and organizational performance. The Competing Values Framework, developed by Cameron and Quinn (2006), is presented, describing cultural differences in organizations. Furthermore, digital culture is discussed, presenting values important in digital transformation, including innovation and agility. In addition to that, the advantages of measuring culture are discussed.
Change management
This section connects change management to digital transformation and corporate culture. Moreover, it highlights the importance of change management in the current disruptive environment. Communication is argued to be a significant part of implementing successful change and can be used by managers to mitigate resistance toward change. Furthermore, three change management models are discussed, one concerning change in general (Kotter, 1995), and two specific to cultural change (Cameron & Quinn, 2006; Flamholtz & Randle, 2011).
Leadership
The last section discusses changes within leadership, due to the current business environment. It is argued that new sets of skills, knowledge, and mindsets are needed to lead digital transformation. The section also presents different training approaches, which can be used to develop leaders.

3 Methodology

The methodology chapter aims to describe the study's research approach. The following section will therefore present the selected research design, as well as description of the selection process of theory, organization and respondents. Thereafter, the course of action regarding data collection and data processing is explained, and lastly, ethics, validity, reliability, and limitations are discussed.

3.1 Research Design

The authors began by conducting a pre-study that led them to their research focus, resulting in two main topics: digital transformation and corporate culture. Thereafter, the authors sought to acquire deep knowledge within the fields of digital transformation, corporate culture, change management, and leadership. The authors found a gap in academic literature and decided to pursue a deductive research method. Conducting a qualitative study, based on interviews, was considered most suitable for the research question and purpose of the study. By conducting interviews, the authors could be flexible and were able to adjust according to events during the course of the study. Due to the fact that corporate culture is intangible, allowing the respondents to speak freely, as well as having the opportunity to ask follow-up questions, made interviews the most suitable method for the collection of data. Furthermore, the authors decided to focus on one organization, in order to collect in-depth information. Seven interviews were conducted with people from various departments and levels in the organization, and relevant documents collected. The analysis of data was done by categorizing patterns of opinions into four main topics: Digital transformation, Corporate culture, Change management, and Leadership.

3.2 Selection

The following section aims to describe the selection process of relevant theory, organization and respondents within the organization.

3.2.1 Selection of theory

The selection of relevant theories was directed at finding the best knowledge available within the fields of digital transformation, corporate culture, change management, and leadership. When reviewing the literature regarding digital transformation, a great deal is written by practitioners, and not academics, due to the relatively novelty of the subject, as well as the high relevance the subject has to all organizations. Although the authors primarily focused on literature written by scholars, company reports and other sources have also been evaluated, due to the fact that they often have collected a large amount of quantitative data.

The models and frameworks used in the study have been chosen based on their frequent appearance within their specific field. The Digital Mastery Model can be used to understand

the organization's prerequisites of how well they can take advantage of digital opportunities, and also to create awareness of what capabilities the organization is lacking, hindering development. The authors use the model to display the importance of developing both digital capabilities, as well as leadership capabilities. The main focus though is directed at leadership, due to the connection to corporate culture. Furthermore, the Competing Values Framework is used in the study to evaluate the previous and desired culture at The Icelandic Post. That is to understand the need for change, and also how organizations can use cultural analysis to build a strategy. Lastly, the three change models presented in the literature review are included due to the fact that the study examines cultural change, in the context of digital transformation. Therefore, it is relevant to examine change both in regards to business, but also the corporate culture. The models assist in creating an understanding of the change initiatives made by the organization, and by using three different models, the study provides a broader perspective of change management. By using the previously mentioned models and frameworks in the study, connected to digital transformation, corporate culture and change management, the authors create a holistic understanding of cultural change in the context of digital transformation.

3.2.2   Selection of organization

In order to gain a better understanding on how organizations can change the corporate culture, an organization that is in the midst of their transformation was selected. The chosen organization is The Icelandic Post, Íslandspóstur, which operates in an industry highly affected by digitalization (Jaag, 2015). The Icelandic Post is a national organization that handles post services both nationally and in collaboration with international post services. The organization operates within the public sector and employs around 900 people. According to Cameron and Quinn (2006), large and governmentally owned organizations are often driven by hierarchies and conservative cultures. Examining an organization with these characteristics provides an opportunity to discover how extensive cultural changes can be implemented. The Icelandic Post has been around for more than 240 years. Thereby, the organization was built in the pre-digital economy and the digital transformation calls for excessive changes. That poses an intriguing opportunity to study how to manage cultural change in relation to digital transformation. The authors aimed at finding a large organization, where extensive changes to the culture were imperative, and the changes due to digital transformation would affect people in all parts of the organization. In order to ensure that the chosen organization was aligned with the purpose of the study, a short pre-interview was made with the Executive Director of Service and Marketing.

3.2.3   Selection of respondents

In order to gain the best possible information, the authors conducted interviews with employees, contributing with different organizational perspectives and experiences. This provided a variety of insights into how the organization has changed the culture, due to digital transformation. A total of seven people were interviewed, including the Executive Director of Service and Marketing (Sesselía Birgisdóttir), Executive Director of Human Resources (Sigríður

Indriðadóttir), Chief Information Officer (CIO) (Georg Haraldsson), Director of Home Delivery (Guðmundur Karl Guðjónsson), Director of Sales (Elvar Bjarki Helgason), Director of Marketing (Ósk Heiða Sveinsdóttir), and an employee (Kristinn Þór Pétursson) who is a specialist in the department of distribution.

The selection of respondents was based on well grounded proposals from the authors, as well as suggestions from the Executive Director of Service and Marketing, Sesselía Birgisdóttir. Her suggestions added the Director of Home Delivery, Director of Sales and the Director of Marketing Manager to the selection of respondents, due to their experiences and the effects digital transformation has had on their work. The respondents were selected based on how they could contribute to the study, as shown in Table 6. The study provides a holistic view by conducting interviews with employees affected by the changes, and managers who took part in formulation and implementation of the digital transformation strategy, as well as the cultural changes.

Table 6: Selection of respondents

Role	Responsibility	Contribution
Chief Information Officer (CIO) *Interviewed 28 April, 2020*	• Strategy • IT • Leading and implementing digital transformation	• Top-management perspective • Strategy insights • Technology perspective
Executive Director of Human Resources *Interviewed 24 April, 2020*	• Human Resource questions • Human Resource strategy • Leadership training program	• Top-management perspective • Employee insights
Executive Director of Service and Marketing *Interviewed 22 April, 2020*	• Vision and strategy • Leading and implementing digital transformation • Changing mindsets • Voice of the customers	• Top-management perspective • Strategy insights • Many years experience of digital transformation in other companies
Director of Home Delivery *Interviewed 28 April, 2020*	• Distribution of mails, packages and company services • Leading and implementing digital initiatives	• Management perspective • Experience of changes and challenges related to digital transformation • Been in the organization for 13 years
Director of Sales	• E-commerce • B2B and B2C	• Top-management perspective

Interviewed 29 April, 2020	• Product development • Working close to marketing	• Customer perspective • Been in the organization for 12 years
Director of Marketing *Interviewed 29 April, 2020*	• All marketing activities, both internal and external • Working close to sales	• Top-management perspective • Customer perspective
Employees affected by the changes *Interviewed 30 April, 2020*	• Specialist in the distribution department	• Employee perspective • Been in the organization for 13-14 years

3.3 Data Collection

The collection of the empirical data was qualitative, because of the nature of the study. The aim was to receive a deeper understanding of how to change the culture in the context of digital transformation. As previously mentioned, seven employees working in different positions in the organization were interviewed. In addition to that, relevant documents were requested and collected, to acquire a better understanding of the transformation, and the cultural changes.

3.3.1 Pre-study

In order to find a relevant focus of the study, the authors conducted a pre-study. The authors contacted and interviewed a consultant, working with digital transformation. The aim was to attain first-hand knowledge of what was considered relevant when helping organizations go through digital transformation. The questions asked were based on another study, examining challenges connected to digital transformation (Ahlquist, Flink & Sundström, 2019). The result of the pre-study was that corporate culture and digital transformation are connected, and the authors therefore, decided to examine corporate culture in the context of digital transformation.

3.3.2 Interviews

The authors conducted seven structured interviews, six through the online platform Zoom and one phone interview. By using a structured interview model, with the possibility to ask follow-up questions, the authors were able to gain a deeper understanding of the subject (Sekaran & Bougie, 2016). The interview questions were based on theories presented in chapter 2. The authors formulated a frame of questions that were asked to all participants, and in addition to that, specific questions were asked to the different respondents, based on their role and responsibility. By doing so, the authors could expect answers that could be compared and analyzed, as well as provide insights from different levels and departments in the organization. The interview layout is presented below (Table 7) and the full interview guide can be found in

Appendix 1. The interview layout aligns with the structure presented by Sekaran and Bougie (2016).

Table 7: Interview layout

Ethics	The authors began the interviews by going through the ethical aspects, both to inform as well as to receive approval. See section 3.6 for more information about the ethical considerations.
Introduction	Next, the authors introduced the selected area and the purpose with the study. Thereby, it was easier for the respondents to answer the questions in a way that could contribute to the study. The respondents were also asked introductory questions about their work. That was to get a better understanding of the person's position in the organization, and the authors could consequently adjust the questions accordingly.
Effects of digital transformation	Thereafter, the authors went deeper into the subject of digital transformation, and the effects it has had on both the individual, and the organization.
Culture	Lastly, the authors sought to acquire knowledge about the present corporate culture and values, the changes happening, and desired changes for the future.
Follow-up questions	After the interview, the authors sent follow-up questions to some of the respondents, due to the need for clarification or additional information.

3.3.3   Documents

Apart from conducting interviews, collection of documents was used to gather data. The received documents were related to the development of the organization's digital transformation strategy, Human Resource Management policy, cultural measurement, and questions from a survey the Human Resource department sends out to every employee. The documents provided the authors with a better insight into the organization's work and enabled a deeper analysis of the data.

3.4   Data Processing

After conducting the interviews, the authors transcribed them. By doing so, it becomes easier for the authors to identify patterns among the different interviews. It also makes the presentation of the empirical data more reliable, since the interview will be written down, word by word (Bryman, 2012). Two interviews were conducted in Icelandic, at the request of the respondents.

Therefore, the transcripts had to be translated into English. All authors read the transcripts, and analysis was conducted together.

The same structure is used throughout the paper for the different chapters, including the literature review, empirical data, and the analysis of the data. Therefore, data processing revolved around categorizing patterns of behaviors or opinions in the respondents' answers according to the four categories presented in these chapters: Digital transformation, Corporate culture, Change management, and Leadership. All patterns were identified with the purpose and the research question as guidelines.

The empirical data was analyzed and discussed in relation to relevant theories and models. The analysis resulted in an overall framework for cultural change, a framework for a structure of a leadership development program, and a measurement tool aimed at changing the culture when going through digital transformation. The results are presented in section 5.6.

3.5   Validity and Reliability

The authors used triangulation, which according to Sekaran and Bougie (2016) can be used to increase the validity and reliability of the study. Firstly, the authors of this study collected various types of data, through interviews, emails and relevant documents. Secondly, the empirical data was analyzed together with theories and models from different authors to gain a holistic view of the subject. Lastly, both authors collected and analyzed the data, fulfilling researcher triangulation.

By conducting interviews where the respondents could elaborate on their answers and add what they believed was relevant, the authors increased the validity of the study, according to Jacobsen and Sandin (2002). In order to gain a broad perspective, selected respondents worked in different departments, and had different responsibilities within the organization. By carefully choosing the respondents, in order to collect data relevant for the study, the authors aimed to ensure validity. Furthermore, by basing the interview questions on theory, the authors increased the validity of the answers.

Five of the seven respondents were interviewed separately, while two respondents were interviewed together. Two respondents were interviewed in Icelandic because of their preferences. These interviews needed to be translated from Icelandic to English, and according to Sekaran and Bougie (2016), that can challenge the validity of the study. Therefore, the authors tried to make sure the transcription of the interview was thoroughly done in order to increase validity. Another challenge regarding validity is that all data gathered from documents were in Icelandic, and therefore, needed to be translated as well.

By recording the interviews, the authors could capture everything the respondents said, and therefore, increase the validity of the empirical data and the analysis. Due to the fact that the interviews had to be conducted through an online platform, the authors faced some challenges. For instance, body language and other non-verbal communication were more difficult to detect,

and technology may be unreliable because of internet connection, resulting in disturbances (Sekaran & Bougie, 2016). However, the recordings and transcripts of the interviews helped the authors to possess a more correct interpretation of the content. Furthermore, the authors analyzed, and concluded all data together, in order to decrease the risk of mistakes or misunderstandings. A thorough description of the research project, including selection, data collection, and data processing is provided to increase the validity of the study.

Ensuring reliability is difficult in a study such as this one (Bryman, 2012) since the respondents' answers are both individual opinions, and specific to the organization's context, as well as from few respondents. However, internal reliability was fulfilled, since the study was made by two authors who analyzed and interpreted the data together, aligning with one of Bryman's (2012) suggestions on alternative ways to ensure reliability in a qualitative study.

3.6   Ethical considerations

Ethical aspects have to be considered at every step during the study (Sekaran & Bougie, 2016). The authors included questions in the interview guide, aiming to collect informed consent on several ethical issues, in order to ensure a high ethical standard of the data. First, the authors asked for permission to record and transcribe the interview, as well as ensuring that the data will only be used for the purpose of the study. Sekaran and Bougie (2016) state that this is one of the most important responsibilities the authors have. All respondents approved the recordings and transcriptions, although one respondent wished to read and approve. That resulted in removal of one statement in the transcript, which did not affect the results of the study. Second, the respondents were given the opportunity to be anonymous. Giving the respondent the possibility of being anonymous may decrease the risk of not wanting to participate or answering certain questions (Jacobsen & Sandin, 2002). None of the respondents wished to be anonymous, and their titles will be used in chapters four and five. Lastly, the authors informed the respondents that he or she, at any time, could end the interview and retrieve the collected data. None of the respondents wished to do so.

3.7   Limitations

The study contains limitations. First, the results are based on a case study from one organization. Thereby, generalization of results could prove difficult. Further research, including more organizations, will need to be conducted in order to generalize the results. Secondly, the results of the study are driven from one industry. Comparing results with organizations in other industries could indicate different processes when it comes to changing the corporate culture. Thirdly, the authors of this study were not able to choose all respondents themselves, and due to limited time, the number of participants might not represent the whole organization. The chosen respondents could be biased towards their organization and provide answers that do not fully represent their individual opinion. Furthermore, since the organization is in the midst of

their digital transformation and cultural change, the study cannot present an overall effect of the changes that have been made.

The results of this study may be limited to organizations with the same characteristics as the examined organization, for example, large public companies that were established in the pre-digital economy. However, much of the empirical findings correspond with previous literature that is not based on the same type of organization. Therefore, the authors believe the empirical findings are relevant to other types of organizations as well.

4   Empirical Data

The following chapter presents the findings from the conducted interviews, as well as collected documents. The structure of the empirical data follows the same structure as the literature review, i.e. Digital transformation, Corporate culture, Change management and Leadership.

4.1   Digital transformation

During the interviews, participants were asked about what digital transformation meant to them. The respondents agreed that digital transformation is the simplification of procedures and structures, an increase in information flow, development of new business models, and seizing opportunities to meet the demands of society today. The belief of the inevitability of going through digital transformation was also apparent among respondents. The Executive Director of Human Resources illustrated this with the following statement, referencing the current Covid-19 crisis "... [Covid-19] shows us the importance of digital transformation in every aspect and everything we do in the organization. Because you and the world are changing so rapidly". Furthermore, the Director of Marketing said the following:

> Basically, there is not a box anymore, the box has since long been
> shredded into pieces. And you just have the opportunity to create
> something new and fresh, a new perspective on all aspects of the
> business.

4.1.1   Customer-centricity

One part of the organization's new strategy is that the organization is moving toward a customer-centric approach in their way of working. For instance, they use their customers as a basis for their decision making. The Executive Director of Service and Marketing stated the following:

> All the things we do now this year and the next year, should either
> improve the customer experience or improve the business result of the
> company. If it is not falling into those two categories, then we are not
> doing those assignments.

Every respondent mentioned that the essence of their work revolves around customer-centricity. The Director of Marketing stated that due to the developments within digital media, it is now much easier to connect with the customers, as well as interact and have a dialog. The Chief Information Officer (CIO) spoke about a shift that has happened lately, in regards to the way the organization thinks.

> There was a tendency to think, in the company before, what is best for
> us? What is most convenient for us to solve a problem? But today that
> is totally shifted. And today we are taking … the customer-centric

approach, where we put it [the customer] first … what is best for the
customer? … I believe that people are seeing a bigger value.

Having a customer-centric approach does not only affect decision making, it is also argued to affect the motivation for the changes among the employees. The CIO mentioned that it is easier to "sell an idea internally when you're focusing on the customer experience". He believed the reason was "because everybody wants to serve happier customers". This opinion aligned with the Director of Home Delivery, stating that they prepared the employees for the upcoming changes by saying, "if we get more satisfied customers, we get more projects". The Employee stated that the majority of the employees understand why things are changing, because of the emphasis on customer-centricity.

4.1.2   Digital and leadership capabilities

There was a mutual understanding among the respondents that transforming an organization and its culture is a journey, and it takes a long time. However, all the respondents believed that the organization is ready for the transformation, especially in terms of leadership capabilities. Although, in regards to digital capabilities, the Executive Director of Service and Marketing and the CIO agreed that they have a long way to go and that they are still in the process of building a foundation. Furthermore, respondents believed that an organization's ability to respond to new ideas and opportunities lies in the corporate culture of the organization. "It [digital transformation] is absolutely not about the technology. It is about the processes. It is about the culture" (Executive Director of Service and Marketing).

When asked if any cultural aspects had been taken into consideration when formulating the digital transformation strategy, the Executive Director of Service and Marketing and the Executive Director of Human Resources said yes, and mentioned employee and management training programs. Furthermore, they spoke about evaluation of what kind of culture the organization needs, in order to thrive in the current and future business environment.

4.2   Corporate culture

A statement all respondents agreed on was that when going through digital transformation, culture is a very important aspect to consider. The Executive Director of Service and Marketing stated that "culture and the mindset, that is everything with digital transformation". Moreover, the CIO argued that culture is one of the key factors when going through digital transformation, and stated that "culture eats strategy for breakfast". However, several respondents stated that the culture, previous to the recent changes, was very conservative and built upon hierarchies. The Director of Sales spoke about how slow decision making could be, that the organization lacked IT focus, and the attitude was conservative.

The Executive Director of Service and Marketing stated that digital transformation revolves around connecting business and technology. She talked about enabling and promoting

collaboration and cross-functional teams as an important managerial task, and that it becomes more important the more digital the organization gets. She also mentioned that digital transformation is largely about "creating a new and different culture, more agile and analytical". Respondents said that the organization is working towards building an agile, analytical, innovative, sustainable, and healthy corporate culture, where everyone has a voice and can share their opinions. The Executive Director of Human Resources described the desired culture with the following statement: "Just healthy corporate culture, meaning that you can speak up".

4.2.1   Values

Values are said to be the foundation of culture (Flamholtz & Randle, 2011; Hoftede, Hofstede & Minkov, 2010), and therefore respondents were all asked about the organization's values. However, the respondents did not consider the use of certain organizational values as an important factor in the transformation. The prevailing opinion between respondents was that spreading standardized values, without any weight, would not change people's attitudes or mindsets. Therefore, they have not spent any time or effort into anchoring specific values, which becomes apparent when asking the different respondents what their current organizational values are. The Executive Director of Service and Marketing's point of view became clear with the following statement:

> People are getting a little bit tired of those just being words. So we
> decided to focus on the action plan and actually moving us closer to
> the employees and all management teams, and being able to create
> platforms where people can come up with ideas of improvements and
> so on. And actually rather focusing on telling what we are doing and
> how long, and where we need to go, instead of creating fancy words
> that people were not relating to.

The Director of Marketing agreed and believed the use of values to be the old way of doing things. The following quote shows her opinion:

> The old way of doing things was like having three to four fabulous
> values, ... the values that almost every company could have. You
> know, those standard ones. Until the next time the marketing
> departments demand some new strategy, they put up new posters and
> so on. We're not using it that way.

4.2.2   Attitude and mind-set

Respondents agreed that what moves the organization forward in the digital transformation is the attitude among the employees. The Executive Director of Human Resources stated that "it is actually not about the skills. It is much more about the attitude". Respondents implied that they need people who are forward thinkers, believe in the changes and are willing to learn new things. Respondents also believed that employees need to be ready to change their ways of

working into more agile work practices in order to "move the organization towards the modern world" (Executive Director of Human Resources).

The Executive Director of Service and Marketing argued that it is important for the employees to be open-minded toward new technology, and the possibilities it can bring to the organization. It also became apparent when speaking to the respondents that the attitude of the new Chief Executive Officer (CEO) has had a great impact on the employees. Multiple respondents stated that when he came into the organization, he brought a fresh attitude with him. The Director of Sales believed that the fact that the CEO acts and communicates in an open and transparent way with the employees has had a significant influence when it comes to changing the culture in the organization. According to the Director of Sales, you can see the difference in the company, since people are starting to voice their opinions.

> He is very open. Yes, he says everything. He does not hold back. He
> speaks his mind. And that is what people like about him. If he says
> something, he means it.

All respondents believed that the organization has come a long way in changing the mindsets and attitudes of the employees towards more agile, innovative, and forward-thinking minds. The CIO said that:

> We are moving very fast. We are seizing the opportunities that we are
> seeing. And we are not afraid of taking some chances, even if we may
> make mistakes, everybody else accepts that. We can make mistakes.
> And then we just have to learn from them.

4.2.3   Measure culture

The Executive Director of Service and Marketing also mentioned difficulties regarding culture, due to the fact that it is intangible. She stated that when going from a silo oriented, manufacturing way of working, the Key Performance Indicators (KPIs) change, and it becomes more difficult to measure performance. When the organization becomes "very detail oriented, and very forward thinking oriented in service and manufacturing delivery, the KPIs get quite messy". Nonetheless, the Executive Director of Human Resources stated that they are using KPIs to measure the culture, in the same way as they measure financial aspects.

The KPIs the organization uses to measure the culture come from a monthly survey that is sent out to all employees. The survey includes eight questions the employees are supposed to rate on a scale and one open-ended question. The survey measures attitudes, employee job satisfaction, and performance of the management team. The KPIs from the survey include: 1. Quality and relations, 2. Job satisfaction, 3. Independence regarding decision making, 4. Support from managers, 5. Requirements for success, 6. Clear vision, 7. Interest, respect, and loyalty, and 8. Training and development.

The Human Resource department began sending out these surveys three months ago. Managers receive the results from their department monthly, and can react accordingly. The Human Resource department also collects the results from the whole organization in order to find patterns, and to observe the overall progress. The majority of respondents mentioned that the survey is an effective tool to evaluate, improve performance, and influence the organization's culture. The Director of Sales said that he needed to change his way of working, according to the results he received. He said, "I need to do something about this, so I immediately set up things in motion". The Employee also believed that the survey is a useful tool, "if there are bad results I believe the management team will make some changes. I think these surveys are just positive".

4.3   Change management

The Executive Director of Service and Marketing mentioned that the organization has placed much focus on changing the corporate culture. Respondents in the management team were aligned in their answers when asked if the corporate culture needed to change in order to implement a successful digital transformation. Before The Icelandic Post began its digital transformation process, they analyzed how they needed the corporate culture to be in order to prosper in the new digital climate and have a successful implementation. The conclusion of the corporate culture analysis was that they needed to develop sustainable, robust, and service-oriented leadership, because they believe that cultural change in an organization happens through leadership. Thereby, the managers needed to reflect on if they possessed the capabilities needed. If not, they needed to further develop and prepare themselves for the change process.

Respondents believed the new CEO did a great job of creating urgency and awareness for the changes. He spoke honestly, both internally and externally, and clearly stated that the organization could not continue to go on as before. Furthermore, respondents stated that they have tried to communicate the reasons behind the changes, as well as highlighting the benefits the changes will have for both the employees and customers. They also encourage employees to present their own ideas, as well as concerns.

As mentioned, The Icelandic Post is in the midst of the transformation. They have analyzed what needs to change, and begun implementing practices that aim to change the culture to exploit their full potential of successful digital transformation. They have implemented a leadership program for the top-management team, as well as a program for every manager that is in charge of people. They plan to implement a leadership program for all managers in the organization, as well as create a training program for employees working in the organization. Moreover, all newly recruited employees will participate in a program and will be provided with a mentor.

4.3.1   Challenges

Respondents differed in their answers on what they believe is the general attitude in the organization towards the changes. The majority of respondents believed that the general attitude is either positive or neutral, whereas other respondents said they had experienced much resistance. The Executive Director of Human Resources said that the main obstacle they encounter in this digital transformation is the "old and narrow attitude". In addition to that, she stated that when it comes to digital transformation,

> It does not matter what kind of theory you are using or what kind of
> view of researchers or anything. It is just human relations, its
> leadership and its attitudes.

The Executive Director of Human Resources discussed difficulties regarding changing the culture. She had experienced employees that had been working at the company for a long time and wanted to hold on to the conservative culture. She said that changing those mindsets can be difficult. She believed this to be problematic and she argued that "if you need to change the culture, everybody needs to be on board." When respondents were asked about resistance towards the change, all respondents had experienced some resistance, though the amount differed between participants. Everyone spoke about the challenges that arise when people have a fixed mindset, where they do not believe in the change. Respondents all agreed that it hinders the process of implementation and affects the corporate culture negatively. The Executive Director of Human Resources said that it is the main obstacle of successful transformation. However, the respondents agreed that employees were usually positive towards smaller changes in the organization that had little effect on their working procedures. The Director of Home Delivery said that the more extensive changes in the organization are the ones that cause resistance and instability. The CIO said that he had not experienced much resistance, since

> Usually what I am doing for the actual workers or somebody using
> the tools that we have created within the IT department, are ways to
> make their lives a little bit easier to do, you know, to eliminate
> unnecessary manual work.

4.3.2   Communication as a way to deal with resistance

It was apparent that respondents all believed that communication with the employees is the essence of cultural change that leads to successful transformation. Respondents mentioned that communication can decrease the risk of resistance. Not only one-way communication, but rather a dialog. When introducing new changes, the managers do it through information meetings. The Director of Home Delivery mentioned that "the managers need to communicate why the organization is going through these changes, so everyone has a shared understanding of it". He went on saying that "the manager should introduce, communicate and give people time and space to understand what the changes are". The CIO and The Executive Director of Service and Marketing said that managers should over-communicate, rather than under-communicate. Furthermore, respondents spoke about the importance of open, transparent, and

honest communication, and the managerial team stated that they emphasize on providing employees with all numbers, facts, and upcoming procedures.

When faced with resistance towards change, all respondents spoke about addressing the issue and explaining why the organization needs to make the changes. They also highlight for the employees how the changes will benefit both them and the organization. The Director of Marketing talked about how she addresses resistance by saying:

> I think the best way is just to be blatantly honest about the reason
> behind the change. Have an open dialog. If you encounter this with
> another postal worker, just have the dialog. Just talk it out and be
> open. Be honest. Why is this happening? What is the reason for it?
> And why do you object? Do you have another idea?

The respondents all agreed that everyone in the organization needs to be aligned, believe in the shared vision, and understand it. As the Executive Director of Human Resources said "everybody needs to be on board, … if you are not willing to do that, then you are just choosing your way out of the company". The Director of Home Delivery said that employees that are resistant towards the change are always given a chance to change their attitude. If people are not willing to change, they are offered another job inside the organization.

4.4   Leadership

Managing digital transformation requires different leadership styles, according to the Executive Director of Service and Marketing.

> Because you need to look at different metrics than they have done
> before. You need to have different skills. You need to have more soft
> skills. More of a collaboration skill. Strong vision skill. And
> communication is important. You need to be able to communicate and
> make sure that teams can collaborate.

At The Icelandic Post, they have rebuilt almost the entire management team and brought in people that are more tech-savvy, strategic, and forward-thinking. The organization's strategy is to have the leaders anchor the new vision within the organization and in that way, influence and change the corporate culture. The Executive Director of Human Resources believed the organization to be one year along in changing the culture, which is a process that will likely take three to five years,

> It takes time to change culture and we need to do it manually and you
> need to do it on purpose and be very, very focused in what you are
> doing. And it means that you need to change people. You need to
> change managers.

The Executive Director of Human Resources spoke about how leadership changes the corporate culture with the following statement: "the other employees will live it and learn it and adopt it through these leaders". This aligns with the Director of Marketing who said that the employees will develop the confidence to voice their opinions when they see how the management team acts, "it is just, lead by example". According to The Employee, the new management team came in with new emphasis. They communicate more and place focus on motivating and encouraging employees to come up with ideas. He believed the management team engages the employees in the change process, and his perception is that overall, there is much trust towards the management team.

The organization has been using different approaches to communicate and influence the culture, including lectures, seminars, conversations with the employees, and events to bring people closer together. One of their forums consists of streamed online meetings where various people from the organization share their stories, projects, and news in a 15 minute presentation. The Employee mentioned that this platform is a good way to get inspired by other people in the organization, as well as a way to increase information flow between departments, which the Director of Marketing agreed with.

4.4.1   Vision

The importance of having a clear vision became apparent when speaking to the respondents. They all mentioned understanding the vision and the reason behind it as key factors when going through a transformation. The CIO stated that:

> We have to have a crystal clear vision of where we're going and we need to communicate that vision very, very frequently. It is better to over communicate than under communicate. And when you are communicating this vision, you have to also tell them why we have this vision, what is supporting this vision, which is the customer-centricity part. And also what we will gain with the digital transformation.

Furthermore, the Executive Director of Human Resources stated the following, demonstrating the importance of establishing a vision:

> You always need to have a vision. If you do not have the vision, then you are not seeing anything. And it is just like going blindfolded, and you cannot manage a company blindfolded.

The Executive Director of Service and Marketing stated that by having a clear vision, which she believes the organization has, and by ensuring that the employees understand it, the organization will have a successful digital transformation. She also mentioned that developing a clear vision and strategy of how the transformation will happen is challenging. The changes made to the top-management team had an effect on the vision. The Executive Director of Human Resources believed that everything changed when they changed the board of directors,

"because then we had the vision that we needed to bring the Iceland post to the modern world". According to the Executive Director of Service and Marketing, the top-management team worked hard on analyzing the "current business model, and how that is working, and how that will be working for us in the upcoming years". Consequently, they found substantial threats but also great opportunities. The CIO stated that when he first started at the company, he "saw opportunities wherever I looked".

4.4.2   Leadership training program

The Human Resource department has developed and introduced a leadership training program for managers in the organization, as a way of changing the culture from the top. They implemented the program approximately one year ago, and began by only running it for managers with personnel responsibilities. The organization has also prepared a training program designed for all managers and supervisors in the organization.

The leadership program consists of lectures and workshops where they participate in discussions, reflections, and games. The Executive Manager of Human Resources described the program as "learning by doing". The program is built up as three rounds. The first round focuses on motivation and reflection, where the aim is to use constructive feedback to increase performance and exercise how motivation can be used as a managerial tool. The second cycle aims to utilize one's managerial strengths, by identifying strengths and weaknesses, creating awareness of codependency, and recognizing top and bottom behavior. They define top behavior as when people are able to exploit their strengths, and use that to develop, both personally and work related. Bottom behavior, however is when people display behavior, either consciously or unconsciously, that inhibits their development. This kind of destructive behavior reduces the likelihood of succeeding, both personally and work wise. The third cycle focuses on the change process and the role of the leader. The aim is to create awareness of strengths and dysfunctions that can occur in teams, how to prepare and implement changes, and how to engage the employees in the changes. Moreover, they focus on the commitment leaders have to make to human resources and towards developing goals.

During the program, the participants have been provided with tools to address certain behaviors, and the respondents agreed that those tools have been useful. Everyone mentioned that the program has changed their ways of working as leaders, and that it has had an effect on the corporate culture. That corresponds to the results from the monthly survey. As mentioned, they have sent out three surveys, and the last results showed increased trust towards the management team, and satisfaction with how managers are dealing with the Covid-19 situation.

Codependency
A challenge mentioned by everyone in the managerial team is codependency. Meaning, when managers or others have difficulties addressing unwanted behavior. The Icelandic Post is putting much focus on trying to eliminate codependency, where there is no tolerance for destructive attitudes or behaviors. Their methods of reducing codependency mainly consist of awareness about the problem, creating an open climate to discuss it, and making sure there is a

shared understanding of how they want the culture to be. The Director of Marketing spoke about it in the following way:

> We are not going to be co-dependent. We are going to tackle things head on and we are going to address it. We are going to be polite and professional, but we are not going to let it slide. And that is the basic focus of everything that we are doing. And it changed my way of considering myself as a leader.

The Executive Director of Human Resources talked about that by eliminating codependency, people have begun to blossom. The managerial team also talked about the need to foster and encourage top-behavior, but also addressing and not tolerating bottom-behavior.

5 Data Analysis

The empirical data included in the four sections Digital transformation, Corporate culture, Change management, and Leadership will in the following chapter be discussed and analyzed together with the theories and models presented in chapter 2. The chapter finishes by presenting the results of the analysis.

5.1 Digital transformation

When speaking with the respondents, it became clear that their view of digital transformation aligns with the descriptions used in literature. The Director of Marketing spoke about connecting people, both internally and externally, as well as sharing information and knowledge, which aligns with Nwankpa and Roumani's (2016) view of digital transformation. The respondents agreed with Schwab (2017), Brynjolfsson and McAfee (2014), as well as Rautenbach, de Kock and Jooste (2019), that the current period of time entails fundamental changes in how business is conducted. The Director of Marketing stating that there is no box anymore, confirms that.

5.1.1 Customer-centricity

The organization's view on the customers and the shifts regarding expectations and demands also aligns with the common opinion in the literature, that customers now have a greater impact on the business (e.g. Legner et al. 2017; Osmundsen, Iden & Bygstad, 2018; Schwab, 2017; Vey et al. 2017; Wersteman et al. 2011). The customers influence the way The Icelandic Post conducts business, and they believe that this is important in order to survive in the current and future market. Westerman et al. (2011) state that changes in customer expectations is one of the main drivers for organizations to transform, and it is clear that it was for The Icelandic Post.

Using the customers as a basis for decision-making is mentioned in literature (e.g. Osmundsen, Iden & Bygstad, 2018; Vey et al. 2017; Westerman et al. 2011), but using the satisfaction of the customers as a means to motivate employees during changes was new for the authors of this study. It is clear that the organization has customer-centricity as a value, even if it is not official and pronounced. That corresponds to Hartl and Hess (2017) who list customer-centricity as one of the top five values an organization should embrace in order to have a successful digital transformation.
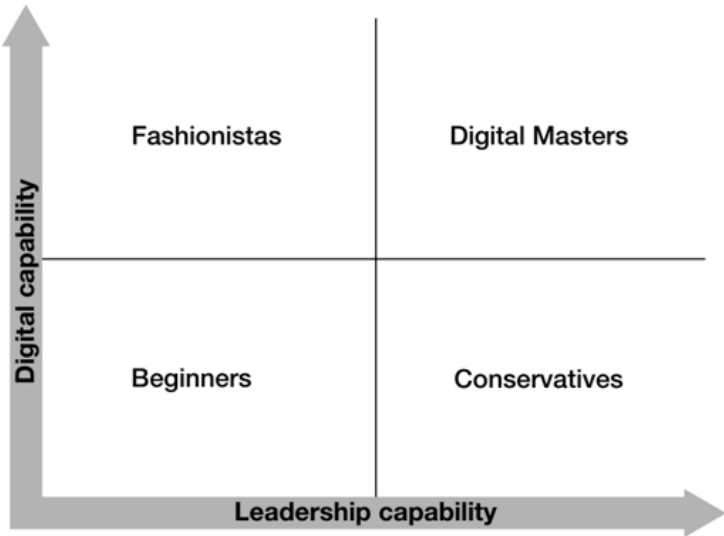
5.1.2 Digital Maturity

Based on answers the authors of this study received concerning the organization's digital and leadership capabilities, the organization is labeled as conservative, according to the Digital Mastery Model (Westerman, Bonnet & McAfee, 2014). The respondents believe they have a high degree of leadership capabilities, due to the new top-management team and the leadership

training program. However, they agreed that they are lacking in regards to their digital capabilities. This mirrors the culture they believed they had previous to recent changes, and even though they are working towards being an organization fit for the digital economy, in regards to digital investments, they are not there yet. Although, they are investing in establishing a solid digital foundation to build on. By doing so, according to the theory, they might develop and become digital masters, which Westerman, Bonnet and McAfee (2014) argue will increase profit. The organization has invested much in leadership, since they believe the change will happen through them. They considered digital transformation to be a cultural challenge, rather than a technical one, and that further explains their position in the Digital Maturity Model.

Four levels of digital mastery

Figure 6: Digital Maturity Model (Westerman, Bonnet & McAfee, 2014)

5.2   Corporate culture

Cameron and Quinn (2006) and Flamholtz and Randle (2011) state that organizations that analyze their current and desired culture, before implementing cultural changes, are better prepared for the changes. The analysis enables them to build a comprehensive strategy around what needs to change. The authors of this study analyzed the previous and desired cultural type at The Icelandic Post, by using the Competing Values Framework (CVF).
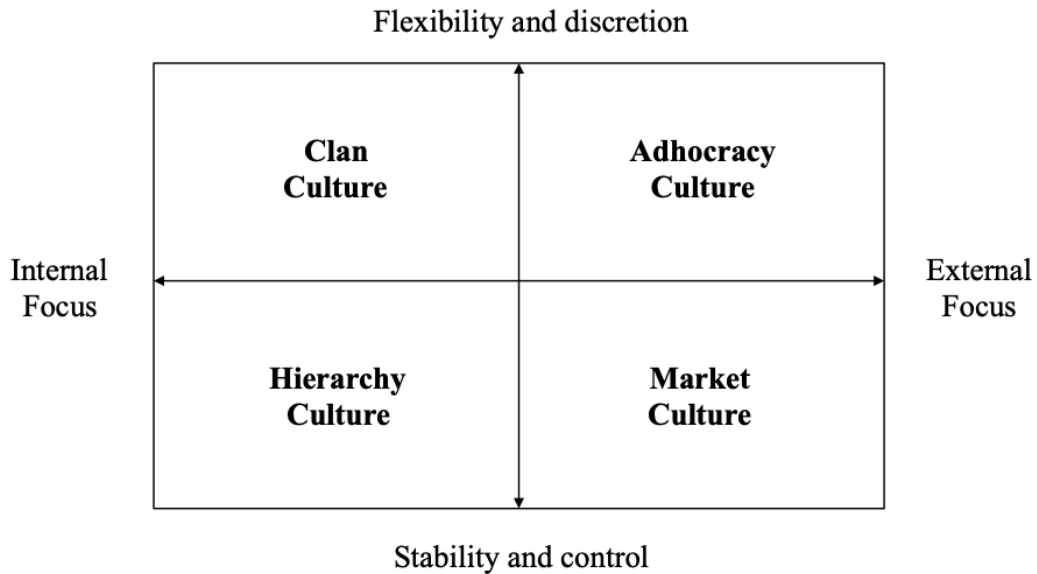
Flexibility and discretion

	Clan Culture	Adhocracy Culture	
Internal Focus			External Focus
	Hierarchy Culture	Market Culture	

Stability and control

Figure 7: Competing Values Framework (Cameron & Quinn, 2006)

Respondents were all asked to describe the culture in their organization and what kind of culture they need, in order to reach their strategic goals with the digital transformation. Even though the organization has made changes to the culture the previous year, they are in the midst of their cultural change and have not reached their desired culture yet. According to the answers, the culture prior to changes was built on hierarchies, and decision making corresponded to that. The organization lacked IT direction, and the attitude was conservative. This description corresponds to a hierarchy culture, according to the CVF. Decisions in a hierarchy culture are made by the authority, and the process can take much time, because of rules and procedures (Cameron & Quinn, 2006). The Icelandic Post has a long history and is governmentally owned, which also corresponds to the hierarchy culture in the CVF.

The organization is working towards building a culture that supports their digital transformation. The organization wants to build an innovative and agile culture, where people are encouraged to voice their opinions. When analyzing their desired culture through the CVF, the authors of this study believe the organization aims to develop an adhocracy culture, characterized by innovation, flexibility, and risk orientation. The organization is moving towards the digital world, where they will be transforming their ways of working and adapting to new opportunities by developing new skills, knowledge, and products.

5.2.1 Digital culture

The literature indicates that in order to successfully go through digital transformation, organizations need to exploit certain characteristics of digital culture (Harraf, Wanasika, Hartl & Hess, 2017; Kane, 2019; Oertig & Kels, 2014, cited in Vey et al. 2017; Tate & Talbott, 2015;). These characteristics correspond to the desired culture The Icelandic Post is working towards building. They have begun implementing technology into their business strategy, as

well as increased collaboration, and development of cross functional teams. That aligns with Haffke, Kalgovas and Benlian (2017), speaking about the importance of supporting both the business and the technology initiatives of the organization.

Values and attitudes

Another aspect that seemed to be assertive among scholars regarding digital culture and successful transformation is associated with the importance of fostering certain organizational values (Burchardt & Maisch, 2019; Hartl & Hess, 2017; Jassawalla, & Sashittal, 2002; Karimi & Walter, 2015; Osmundsen, Iden & Bygstad, 2018). However, respondents at The Icelandic Post agreed in their belief that having certain organizational values would not have the right effect on their journey of changing the culture. Although the organization has written values, respondents were unsure of them and implied that they are not guiding their behavior. Nevertheless, even though they did not give the impression of considering communicating certain values to the organization important, we could identify several common features, mentioned in all interviews. For instance, it became clear that customer-centricity is central for the organization, together with agility, willingness to learn and being open to change, which the authors of this study believe could be considered as values. Therefore, the authors believe the organization has been able to incorporate these into the culture, without actually stating them as corporate values. The identified values harmonize with the values needed to implement a successful digital transformation, according to Hartl and Hess (2017).

A majority of respondents mentioned that they believe the organization needs people with certain attitudes towards the changes. The attitudes central to The Icelandic Post correspond well with the values the authors of this study identified. Therefore, it seems as they rather encourage certain attitudes, than spreading specific values. This does not align with scholars, arguing the importance of clearly communicating organizational values (e.g. Cameron & Quinn, 2006; Flamholtz & Randle, 2011; Hartl & Hess, 2017; Hoftede, Hofstede & Minkov, 2010). For that reason, the authors of this study believe that the strong focus scholars seem to place on building and communicating organizational values, does not necessarily need to be the focal point when changing the culture. Creating understanding by emphasizing on communication and changing people's attitudes towards the changes should be given more weight than communicating values that are not commonly shared.

Innovative culture

The Icelandic Post implied that their main focus is on developing an innovative culture and fostering agile working methods. According to literature, that is the essence of thriving in the fast moving business environment today (Burchardt & Maisch, 2019; Harraf et al. 2015). Furthermore, Harraf et al. (2015) mention that agility is a mindset, and innovative organizations have the potential to foster that mindset. Despite the fact that the organization has a history of being rigid and lacking innovation, changes are happening at a fast pace in regards to both innovation and agility. The authors of this study believe the organization is working towards building an innovative and agile culture, by encouraging the employees to contribute with new ideas and by implementing projects where the only way of succeeding is to be agile.

5.2.2   Measure culture

When analyzing the empirical data, it becomes apparent that the organization aligns with Kaplan and Norton's (2004) description of how a successful organization utilizes its organizational capabilities. The organization places great emphasis on creating and communicating a strong vision in order to establish a shared understanding of the changes happening. They consider strong leadership important and invest in the development of managers, who they believe can lead the organization through a successful transformation. They are increasing collaboration and enable teamwork across the organization, which they believe is essential to survive in the current environment.

> "Successful companies had a *culture* in which people were deeply aware of and internalized the mission, vision, and core values needed to execute the company's strategy. These companies strove for excellent *leadership* at all levels, leadership that could mobilize the organization toward its strategy. They strove for a clear *alignment* between the organization's strategic objectives and individual, team, and departmental goals and incentives. Finally, these companies promoted *teamwork*, especially the sharing of strategic knowledge throughout the organization" (Kaplan & Norton, 2004, p. 56)

According to literature, organizations that measure their intangible assets, including culture, leadership and knowledge sharing, have a better chance of gaining competitive advantage (Kaplan & Norton, 2004). As previously stated, The Icelandic Post is investing heavily in changing the culture of the organization. Before they began their digital transformation journey, they analyzed both the internal and external needs of the organization. That analysis included the employees in the organization as well as the cultural aspect. Therefore, as mentioned by Kaplan and Norton (2004), they are better suited to measure their intangible assets.

As a part of The Icelandic Post's cultural strategy, they use specific measurements to evaluate how effective their change initiatives are. By sending out a monthly survey to all employees in the organization, management is able to evaluate how far along they are in changing the attitudes of the employees. They receive an overview of the employee's job satisfaction, gain performance measurements for the management team, and identify potential issues. The respondents mentioned that the organization benefits from the survey, both because employees are able to express their opinions on different matters, and managers receive insights and can act accordingly. Moreover, since they also analyze the responses company wide, they are able to detect patterns. By implementing the survey, they have established a communication channel enabling feedback, as well as knowledge and information sharing.

By measuring the culture monthly, the authors of this study believe that management can discover and address issues before they evolve and impact the culture. Organizations can also use the survey as a way to create Key Performance Indicators (KPI), and the authors of this study believe they can be used when developing balanced scorecards. Other factors that are connected to the digital transformation could also be added to the survey, since there are certain elements vital to successful digital transformation (Hartl & Hess, 2017). Hartl and Hess (2017)

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argue that organizations that are aware of these elements can direct their cultural change toward the desired culture. Therefore, measurements that aim to evaluate the level of agility, innovation, openness to change, customer-centricity, tolerance to failure, cooperation, and trust could be beneficial for organizations going through digital transformation.

5.3 Change management

The three change models presented in the literature review have several common components. Even though Kotter's 8 steps model is describing change processes in general, and Cameron and Quinn's (2006), and Flamholtz and Randel's (2011) models are specifically developed for changing the culture, they are similar, and useful since the organization is both going through digital transformation and cultural change. The following section describes the actions made by the organization in their change process and also displays the alignment with the steps presented in the change management models. The sections are not in consecutive order, but rather a compilation of all the steps mentioned throughout the empirical data. All steps align with one or multiple models, but not all models include everything the organization has done.

5.3.1 Change initiatives at the Icelandic Post

Creating urgency

Several statements revealed that the CEO was open about the critical situation the organization was in, which respondents believed was the main reason why employees understood the severity of the need to change. Creating urgency is mentioned in two out of three models, "Establishing a sense of urgency" (Kotter, 1995), and "Determine what the changes will and will not mean" (Cameron & Quinn, 2006). Creating urgency makes it easier for the organization to create motivation for the changes (Kotter, 1995) and thereby, can reduce resistance towards the changes (Cameron & Quinn, 2006). Therefore, the authors of this study consider this initiative to be important for organizations to do deliberately.

Creating a strong vision

According to the respondents, The Icelandic Post is focusing on creating a clear vision and communicating that vision to the employees. That aligns with step three in Kotter (1995), where he discusses the importance of creating a vision. By creating a clear vision, and communicating it well, it clarifies to employees the direction the organization is heading (Kotter, 1995). Hence, understanding what is about to change, can create alignment among employees, and reduce the resistance towards the changes (Cameron & Quinn, 2006). Creating a vision also corresponds to Cameron and Quinn's (2006) model, where they talk about telling stories that illustrate the desired culture. They argue that stories are a way to communicate the changes and assist in creating an understanding.

Analyzing the desired culture

In the beginning of the change process, the organization's current situation, as well as areas in need of change in order to remain at the market, were analyzed. The organization analyzed both external and internal factors, including the employees and the culture. However, the organization did only analyze the desired culture, which is step two in Cameron and Quinn's (2006) model, as well as Flamholtz and Randle's (2011). They did not conduct the first step in these models, which is analyzing the current culture. However, the authors of the study believe organizations may benefit from analyzing the current culture. According to Cameron and Quinn (2006), organizations that analyze both the current and desired culture, can better prepare for the upcoming changes, and it enables them to prioritize what changes are most urgent. Even though the organization did not conduct a formal analysis of the current culture, they all agreed that it was too conservative and rigid, and that they had to change. In order for a successful transformation, they needed to move from traditional and conservative ways of thinking to more agile and innovative ways of working. They also agreed that in order to achieve the cultural change, the organization needed to form a sustainable and robust leadership culture.

Creating a new top-management team

Respondents said that in order to lead the organization through the transformation, rebuilding the majority of the management team was imperative. The new members are believed to be more tech-savvy, strategic, and forward-thinking, and therefore more suitable to manage an organization in the digital age. Their emphasis is on transforming the organization and making radical changes to the corporate culture, so it thrives in the digital environment. The second step in Kotter's 8 step model (1995) entails gathering people in the organization that is believed to be able to lead the change. That also aligns with suggestions from Flamholtz and Randle (2011), in regards to selecting the right people that correspond to the cultural changes and can help with executing the cultural strategy.

Reflecting on skills and capabilities

Leadership in the digital age requires different skills and capabilities (Abbatiello et al. 2017). The managers at The Icelandic Post self-reflected and evaluated what they needed to develop. That corresponds to the seventh step in Cameron and Quinn's (2006) model, where they mention that leaders should evaluate if they possess the capabilities needed to implement and lead the cultural changes. By evaluating one's capabilities, self-awareness increases, and that can make leaders more aware of how their behavior impacts others (Drucker, 1999).

Implementing a leadership training program

As a way to develop the organization's leadership capabilities, a training program was developed and implemented, to provide managers with the knowledge and tools needed to lead a successful transformation. That could be seen as an addition to Cameron and Quinn's (2006) model, where they talk about leaders needing to reflect if they have the competencies necessary to initiate cultural changes. The leadership program also corresponds to Flamholtz and Randle's (2011) model, where they suggest that organizations should have employee and leadership training inside organizations, and those programs should include cultural aspects.

Communicating the change

The managers were clear about the importance of fostering open and honest communication with the employees regarding the changes. The organization has emphasized on introducing all changes thoroughly, addressing issues that arise, creating distinct platforms to reach the employees, and keeping everyone informed. The importance of communicating the change demonstrates in all three models. Kotter (1995) discusses how to communicate the vision. Cameron and Quinn's (2006) model mentions ways to communicate the changes, for instance telling stories or implementing visual changes, such as logos. Lastly, Flamholtz and Randle (2011) suggest different platforms for managers to communicate cultural change.

Motivating employees

Engaging and motivating the employees in the changes was a topic every respondent mentioned. The ways The Icelandic Post motivates the employees includes highlighting the benefits of the change, and emphasizing the advantages of higher levels of customer satisfaction. Their focus is also on encouraging the employees to contribute with their own ideas, resulting in the feeling of involvement. Motivating the employees to engage in the changes aligns with suggestions from Flamholtz and Randle (2011), mentioning rewarding people that are positive and engaged in the changes. That also corresponds to Kotter (1995), where he talks about the importance of empowering the employees to carry out the vision.

Creating measurements

In order to measure and evaluate the cultural changes, The Icelandic Post developed a monthly survey they send out to all employees. Evaluation of the change progress corresponds to step eight in Cameron and Quinn's (2006) model, where they mention the crucial aspect of measuring or identifying metrics. Flamholtz and Randle (2011) also speak about identifying measurements, corresponding to the initial culture management strategy. Moreover, they suggest that these measures should be evaluated quarterly and revised.

Conclusion regarding change initiatives

The analysis of the empirical data showed that The Icelandic Post included steps that Kotter's model of change (1995) did not. Including, analyzing the culture to direct the change initiatives towards the culture that thrives in the new environment, reflection of leadership skills and capabilities, implementing a leadership program to enhance the chances of successful changes, and creating measurements to evaluate the progress. Moreover, the authors of this study identified initiatives that have not been included in Cameron and Quinn's (2006), as well as Flamholtz and Randle's (2011) models. For instance, Cameron and Quinn (2006) do not include selecting people to lead the change or implementing a leadership program. Flamholtz and Randle (2011) do not include reflection of skills and capabilities. The authors of the study believe that all initiatives mentioned should be considered when changing the culture while going through digital transformation.

5.3.2 Challenges

The challenges regarding change initiatives presented by Mosadeghrad and Ansarian (2014), including lack of training, low employee motivation, ill-suited corporate culture, lack of leadership and management support, and insufficient monitoring, are clearly challenges the organization has considered. All respondents were coherent in their answers on whether they believed there has been resistance towards the changes. Although, as already stated, the opinions on the degree of resistance differed. Everyone in the management team also agreed that codependency has been a challenge for the organization and that they have been working towards reducing that. The leadership training program was used as a platform to deal with the issues of codependency, which the respondents considered to be effective.

The challenges mentioned, can occur because of elements related to the corporate culture (Hafsi & Assar, 2016). The Icelandic Post has implemented proactive measures as their way to reduce resistance and increase the likelihood of successful transformation. Those measures include implementation of training programs for leaders, focus on fostering open and transparent communication, developed ways to motivate and engage their employees, as well as creating platforms where employees can influence the way the managers lead the changes.

5.4 Leadership

The digital environment demands that leaders possess certain knowledge and skills, different from former leadership theories (Abbatiello et al. 2017; El Sawy et al. 2016). That includes thinking, acting, and reacting differently (Abbatiello et al. 2017). That is coherent with how The Icelandic Post approached its digital transformation. As previously mentioned, before the organization began its initial journey, they rebuilt the management team and brought in people with different mindsets and more knowledge regarding technology. The organization has been putting a lot of focus on developing the managers, who have been attending a leadership training program. It was mentioned that leading change means that people have to develop and challenge their old ways of working and thinking. That aligns with Abbatiello et al. (2017) on how managers should think, act, and react when it comes to leading a successful digital transformation.

At The Icelandic Post, they approach both the digital transformation and the cultural change from a leadership perspective. The management emphasis is on being role models, as a way to impact the employees' behavior. Their attention has been on encouraging innovation, developing a learning culture, and building and communicating a strong vision. That corresponds to Westerman, Bonnet and McAfee's (2014) view on what is required from leaders, when implementing digital transformation and creating a culture suitable to the digital environment. They state that successful digital leaders are engaged in the changes and are able to create a vision, and communicate that vision effectively to everyone involved (Wersterman, Bonnet & McAfee, 2014). The respondents at The Icelandic Post all agreed with this statement, and place much emphasis on delivering their vision effectively so everyone involved understands it.

5.4.1 Leadership development

Research indicates that leadership development programs can have a significant impact on the organization's knowledge, skills, and overall performance (Collins & Holton, 2004). The Icelandic Post has implemented a leadership program intended for managers at all levels in the organization. The program is built to further develop the managers into being the digital leaders required for the changes.

Research shows that the benefits of leadership programs differ, depending on the content, context, learning approaches, and length of the programs (Collins & Holton, 2004). The program which The Icelandic Post built consists of a combination of different methods that they believe are relevant and suitable for their employees in order to gain the best possible outcome. Their leadership program consists of lectures, games, discussions, and reflections. Their focus is on creating self-awareness about strengths and weaknesses, motivating employees, and leading the changes.

The literature presents different approaches that have been proven useful for leadership development, including performance feedback, mentoring, networking (Day, 2000), and experiential learning (Kolb & Kolb, 2009). When analyzing the leadership program developed by The Icelandic Post, it is apparent that they have picked out elements corresponding to approaches mentioned in the literature review.

Multi-source feedback
The Icelandic Post uses feedback as a way to improve performance. They use both monthly feedback from employees, as well as feedback on performance through the leadership program. Those respondents who were asked about the survey all agreed that the feedback has been useful to them and it has provided them with insights on how they are performing as managers, and the overall job satisfaction of the employees in their department. That aligns with a statement from Barney and Hansen (1994) and Drucker (1999), where they say that feedback can increase self-awareness and the impact leaders have on others in the organization. However, The Icelandic Post did not mention that they include the 360° feedback in their leadership program. According to literature, that kind of feedback is beneficial for managers to develop and therefore the authors of this study believe it could be valuable to include in leadership programs.

Mentoring
The purpose of mentoring programs is to increase personal development among participants (Day, 2000). The Icelandic Post does not have a mentoring program for leaders as a part of their leadership program. However, they are planning on implementing a mentoring program for newly recruited employees, where they are paired with more experienced workers, in order to enhance personal development. Judging from the benefits mentoring can have on employees, the authors of the study believe that it could be beneficial for organizations to incorporate mentoring in a leadership program.

Networking

According to literature, networking can prove beneficial to extend knowledge, improve problem solving skills and innovation capabilities (Day, 2000). The Icelandic Post does not include networking in their leadership program. However, since it is an organization that employs around 900 people it could be beneficial for them to add networking to their program, especially since the organization is aiming to increase innovation. Both for employees and managers, to gain knowledge from others in the organization with similar experience, as well as networking with others outside the organization.

Experiential learning

The way The Icelandic Post structures their leadership program is similar to experiential learning techniques. The program is a combination of different approaches, and managers get assignments from the leadership program and reflect afterward on their performance. The intention with that technique is that the managers learn by doing.

5.5   Summary

To summarize, the organization is well aware of the importance of going through digital transformation, in order to stay competitive. The respondents' view on digital transformation corresponds well with theory. The organization has realized that they need to make large changes in the way they conduct business, due to changing customer expectations. They also consider culture to be important, in order to achieve their strategic goals. When evaluating the organization's digital and leadership capabilities, it becomes clear that although they have a high level of leadership capabilities, they lack in terms of digital capabilities.

Furthermore, changing the culture at The Icelandic Post from the conservative ways of working was imperative in order for the organization to successfully implement digital transformation. The organization's desired culture corresponds to what literature declares are success factors of digital transformation. In order for the organization to exploit this desired culture, they believe attitudes are a turning point. These attitudes correspond to values Hartl and Hess (2017) state are essential for successful digital transformation. The organization also aligns with Kaplan and Norton's (2004) description of successful companies' relationship to culture, leadership, alignment, and teamwork. In order to track and evaluate their cultural change initiatives, the organization has implemented cultural measurements as part of their key performance indicators.

The Icelandic Post has conducted numerous change initiatives in order to implement digital transformation and change the corporate culture. The organization's strategy on how to initiate cultural changes is, for the most part, in line with the literature on managing cultural change, and also aligns with several steps from Kotter (1995). The authors of this study believe the organization has considered many of the challenges that may arise due to change initiatives, and they have created proactive measures to handle them.

The Icelandic Post approaches their cultural change, as well as the digital transformation, through the managers in the organization. Therefore, they brought in new managers with different knowledge, skills, and mindsets, and are planning on investing in further development for managers at all levels in the organization. The organization has both invested in a leadership program for the top management and developed a leadership program for all managers in the organization, responsible for personnel. The program consists of feedback, reflection, assignments, lectures, and workshops.

5.6 Result

The result of the analysis consists of three frameworks, developed by the authors of this study. The first framework, the Cultural Change Framework, is developed because academic literature lacks a cultural change framework in the context of digital transformation. The current business environment brings new challenges and opportunities, and the following framework is developed to create a culture suitable for the fourth industrial revolution. The Cultural Change Framework (See Figure 8) consists of four main components found important when changing the corporate culture during digital transformation. The framework is intended for practitioners to use as guidelines and should be seen as a continuous process of evaluating, communicating, developing, and measuring cultural change. The simplicity of the framework makes it easy for managers to follow and it also offers concrete measures to apply. The first two components of the framework (Evaluate and Communicate) resonate well with existing literature regarding digital transformation, cultural change, and change management. The study's addition to academic literature is mainly the last two components in the framework, regarding Develop and Measure.
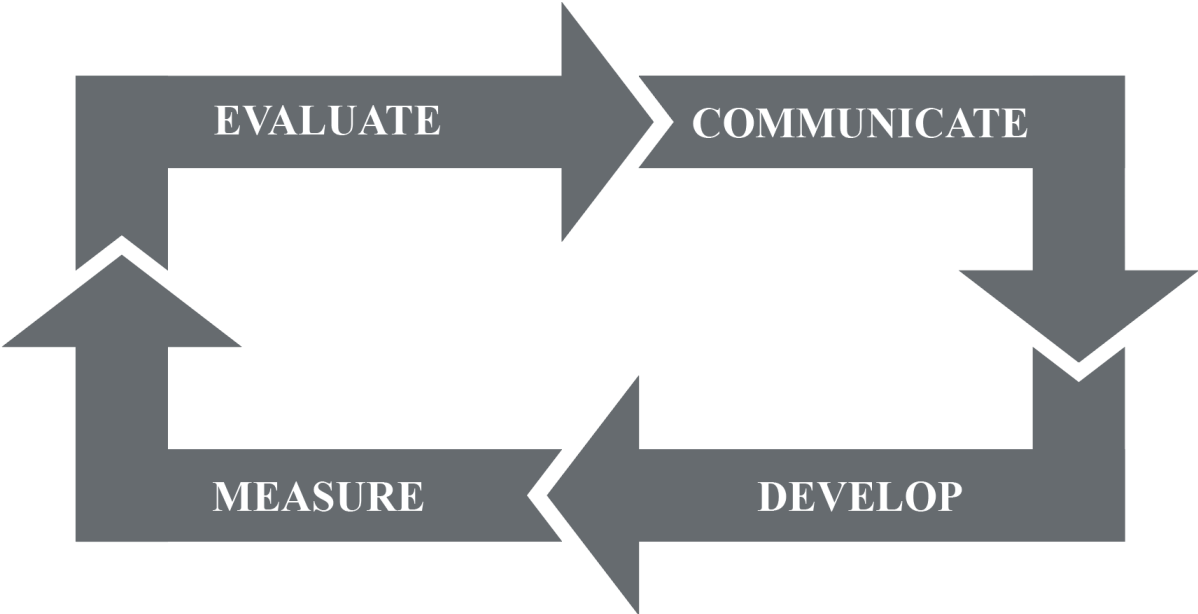

Figure 8: Cultural Change Model

5.6.1 Evaluate

Evaluating the current and desired culture, corresponds with both cultural change models presented in this study (Cameron & Quinn, 2006; Flamholtz & Randle, 2011). Initially, in order to prepare for the changes, the authors of this study recommend organizations to evaluate the current and the desired culture. Thereafter, the organization can develop a strategy that corresponds to the changes needed. When analyzing the culture, the authors of this study believe that organizations could also benefit from evaluating their digital and leadership capabilities, in order to assess their digital maturity. Organizations can use this evaluation to clarify what leadership capabilities the organization needs to develop further, and the results can be used as a base to develop a leadership program.

As previously mentioned, the framework represents a continuing process. Therefore, the culture should be re-evaluated regularly, for instance, when receiving results from a monthly survey presented under *Measure*. Thereby, organizations can evaluate the progress of the cultural change and make necessary changes when needed.

5.6.2 Communicate

The authors of this study believe that fostering good communication throughout the process should be a cornerstone of the changes in order to increase the chance of successful cultural change that supports the digital transformation. Communicating the change aligns with the literature on change management (Cameron & Quinn, 2006; Flamholtz & Randle, 2011; Kotter, 1996). Thereby, the authors of this study have identified certain factors essential for organizations to focus on when communicating the cultural change in the context of digital transformation. These factors all aim at reducing the resistance towards the change and enhancing motivation. The identified factors include fostering open and transparent communication, creating urgency for the changes, developing a shared vision that is communicated well, and reaching the employees through various channels.

Organizations can use various ways to communicate the strategy, vision, values, and goals. The authors of this study present different communication approaches, mentioned either in literature or the empirical data. These approaches include using meetings, videos, personal interactions, and encouraging dialogs. Other ways to communicate the change include using symbols, stories, role modeling, and creating common goals, as The Icelandic Post did with their change of emphasis to a customer-centric approach. Another communication channel suggested by the authors of this study, derived from The Icelandic Post, is using short, company wide, online presentations. These meetings provide an opportunity to increase knowledge sharing, and can work as a means to create alignment among different departments.

5.6.3 Develop

Develop referrers to investing in the people leading the change. Cultural change scholars have mentioned the benefits of investing in leadership programs while changing the culture (Flamholtz and Randle, 2011). However, the authors of this study did not find any literature regarding what practitioners can include in the leadership program to develop leaders for digital transformation. Based on literature and empirical data regarding digital transformation, leaders need to think, act, and react differently (Abbatiello et al. 2017), as well as develop new skills and mindsets (El Sawy et al. 2016). Therefore, the authors believe that the current business environment increases the need to develop managers to lead the digital transformation.

For that reason, the author's contribution to literature and practice is the development of the second framework, the Leadership Development Framework. The framework (See Figure 9) demonstrates a structure of a leadership program with the aim of developing managers and equipping them with the right tools to change the culture and lead the organization through digital transformation. The framework can be used and applied when going through cultural change in the context of digital transformation, as well as independently to develop managers to become more capable to lead digital transformation. The framework should be used as guidelines when developing a program for managers leading digital transformation. The framework demonstrates what (topics) leaders need to develop and how (formats) they can accomplish that.

Prior literature regarding leadership programs implies that a combination of different approaches has proven to be most effective when developing leaders (Day, 2000; McCauley, Moxley & Velsor, 1998, cited in Collins & Holton, 2004). Therefore, the authors of this study present a structure where different formats, as well as different topics should be applied together, and set up as experiential learning. The formats are derived from both literature and empirical data. and all formats presented have been proven useful for leadership programs in general. However, the authors of this study believe that they can be applied to any context. The topics, on the other hand, are subjects the authors of this study found most important for organizations to focus on in order to have a successful digital transformation. The program's content should align with the overall strategy and vision of the organization, and the program can be used to ensure alignment and understanding among participants.

Figure 9: Leadership Development Framework

5.6.4 Measure

The Measure component of the Cultural Change Framework, emphasizes the importance of measuring the progress of cultural change, aligning with other cultural change models in the literature (Cameron & Quinn, 2006; Flamholtz & Randle, 2011). Based on literature about cultural change and empirical findings from this study, organizations should use measurements to evaluate how change initiatives are affecting the culture. The measurements should correspond to the corporate culture change management strategy that organizations build after analyzing the current and desired culture (Flamholtz & Quinn, 2011). However, this study's contribution to academic literature and practice is the third framework the authors developed, the Cultural Measurement Framework. The framework presents ways of measuring the intangible asset culture through monthly feedback surveys. Literature regarding how to measure culture was scarce, and no academic literature was found on how organizations can use measurements to direct their change initiatives towards the desired culture, in the context of digital transformation. Therefore, the framework contributes to the literature regarding digital transformation, cultural change, and leadership. Managers can use the framework to receive employee insights and acquire a better understanding of how they perceive the culture. Based on the responses, managers can react accordingly and enhance their chances of successful implementation of digital transformation initiatives. The authors of this study also suggest that organizations use the results to evaluate the Key Performance Indicators (KPI), and use the KPIs when developing balanced scorecards.

The authors of this study suggest a way of measuring cultural change progress by sending out a monthly survey, targeting specific metrics, as The Icelandic Post has done. The following categories, presented in figures 10 and 11, are suggested to be used as a basis for the questions. These categories are derived from empirical data, as well as relevant literature regarding digital transformation and corporate culture. The questions are divided into two sections, that should be combined and sent out as a monthly survey. The first table (See Table 8) targets the general opinions of the employees' experience working in the organization. These questions are based on empirical data from The Icelandic Post. The second table (See Table 9) includes questions that aim to collect opinions in regard to the development of the desired culture. Table 9 shows the topics based on findings from literature, where scholars have identified these as cultural success factors when going through digital transformation (e.g. Harraf et al. 2015; Hartl & Hess, 2017; Higgins & McAllaster, 2002; Frohman, 1998; Goodman & Truss, 2004; Karimi & Walter, 2015; Nahrkhalaji et al. 2018; Osmundsen, Iden & Bygstad, 2018; Richardson & Denton, 1996; Westerman et al. 2011; Legner et al. 2017). However, the authors of this study recommend that organizations also use the findings from *Evaluate,* regarding their desired culture, as topics to measure. The organization can acquire insight into how well the current culture corresponds with the desired culture by including topics related to the desired culture. Thereby, organizations can evaluate the effects of their change initiatives and respond quickly if they are not going in the desired direction. The survey can therefore be used as a tool to reevaluate their current and desired culture.

GENERAL QUESTIONS ABOUT THE CORPORATE CULTURE	
TO WHAT EXTENT DO THE EMPLOYEES EXPERIENCE:	**DEFINITION**
JOB SATISFACTION	HOW SATISFIED ARE THE EMPLOYEES WITH THEIR JOB?
SUPPORT FROM MANAGERS	DO THE EMPLOYEES RECIEVE ENOUGH SUPPORT FROM MANAGERS?
CLEAR VISION	DO THE EMPLOYEES CONSIDER THE VISION TO BE CLEAR?
INTEREST	ARE THE MANAGERS SHOWING INTEREST IN THE EMPLOYEES AND THEIR WORK?
RESPECT AND LOYALTY	WHAT LEVEL OF RESPECT AND LOYALTY DO THE EMPLOYEES FEEL TOWARD THE ORGANIZATION? DO THE EMPLOYEES CONSIDER THE MANAGERS TO BE RESPECTFUL AND LOYAL TO THEM?
SUFFICIENT TRAINING AND DEVELOPMENT	DO THE EMPLOYEES BELIEVE THEY RECIEVE THE TRAINING AND DEVELOPMENT NEEDED?
SUFFICIENT INFORMATION	DO THE EMPLOYEES BELIEVE THEY RECIEVE SUFFICIENT INFORMATION FROM MANAGEMENT?

Figure 10: General questions about culture

SPECIFIC QUESTIONS RELATED TO THE ORGANIZATION'S DESIRED CULTURE
TO WHAT EXTENT DOES THE ORGANIZATION FULFILL THE FOLLOWING:
AGILITY
INNOVATION
OPEN COMMUNICATION
OPENNESS TOWARD CHANGE
CUSTOMER-CENTRICITY
COLLABORATION
OPENNESS TO IDEAS
RISK-TAKING
TOLERANCE TOWARD FAILURE

Figure 11: Questions about desired culture

6   Conclusion

Based on literature and empirical findings, it is evident that there is a strong connection between digital transformation and corporate culture. The new digital business environment demands other types of cultural characteristics (Burchardt & Maisch, 2019; Harraf et al. 2015; Hartl & Hess, 2017; Kane, 2019), as well as different leadership skills and capabilities (Abbatiello et al. 2017; El Sawy et al. 2016). Change is inevitable in order to stay competitive in the current disruptive market (Rautenbach, de Kock & Jooste, 2019; Hartl & Hess, 2017; Heavin & Power, 2018; Nahrkhalaji et al. 2018). However, organizations often fail when transforming their business (Baculard et al. 2017; Balogun & Hailey, 2008; Lewis, 2000; Libert, Beck & Wind, 2016; Mosadeghrad & Ansarian, 2014; Richardson & Denton, 1996; Westerman et al. 2011), and research indicates that the corporate culture can be a vital influential factor (Baculard et al. 2017; Kane et al. 2015; Kavanaugh, 2020; Mosadeghrad & Ansarian, 2014; Philip and McKeown, 2004; Richardson & Denton, 1996; Westerman et al. 2011).

Even though the organization examined in this study has a strong external focus on the customer, they evidently have a strong inner focus as well. The organization has put a strong emphasis on investing in the leadership capabilities needed to turn digital investments into performance. Moreover, they have invested in developing the managers, as a way of leading change, to make the organization suitable for the digital business environment. Due to the lack of theory regarding how organizations can invest in changing the culture when going through digital transformation, the authors of this study aimed to answer the following research question: *How can organizations change their corporate culture to enhance the chances of succeeding with digital transformation?*

The authors of this study believe that organizations can enhance their chances of successful digital transformation, by using the frameworks presented (See Section 5.6) to change the corporate culture. Organizations will thereby be able to develop their desired culture, suitable for the digital economy. The first framework (Cultural Change Framework) works as guidelines that organizations can follow when changing the corporate culture. The framework consists of four components: Evaluate, Communicate, Develop and Measure, and are meant to be revised frequently. The second framework (Leadership Development Framework) is demonstrating a structure for a leadership program that is aimed at developing managers to be in the forefront of leading digital transformation. The framework consists of formats and topics, relevant when going through digital transformation and cultural change. The study also resulted in the Cultural Measurement Framework, meant to measure cultural change progress, through a monthly survey. All frameworks are developed based on existing literature within the fields, as well as findings from the empirical data from the case study.

6.1   Research contributions

The result of this study is contributing to the academic fields of digital transformation, corporate culture, change management, and leadership. The frameworks developed by the authors of this study can be used by scholars for further research, as discussed in section 6.2, as well as benefit practitioners going through cultural change in the context of digital transformation.

The Cultural Change Framework (See Figure 8) can be used by practitioners to enhance their chances of successful digital transformation by changing their corporate culture. The framework provides clear and simple guidelines of what to consider when changing the corporate culture, in the context of digital transformation. Although the Leadership Framework, as well as the Cultural Measurement Framework, are part of the Cultural Change Framework, they can be used independently, and contribute to further research within the fields of digital transformation, corporate culture, change management and leadership. Moreover, practitioners can use the frameworks as guidelines when developing either leadership programs or measuring the culture when going through digital transformation.

6.2   Further research

The research area regarding corporate culture in the context of digital transformation is still novel, therefore further research on this subject is recommended. Particularly in regards to how to initiate and implement cultural changes when going through digital transformation. The Cultural Change Framework presented in this study needs to be further studied, where it is applied and used for changing the culture in organizations going through digital transformation. Since the framework is based on empirical data from one organization and literature regarding cultural change in other contexts than digital transformation, the framework should also be applied to other organizations and industries. Furthermore, the authors suggest conducting larger comparative studies in order to prove its effectiveness.

Moreover, research regarding leadership programs, especially aimed at developing leaders for digital transformation is scarce. Therefore, more research within that field could prove beneficial for practitioners. The Leadership Development Framework presented in this study would profit from further research as well. The framework is developed from prior literature regarding leadership development in general, thereby the framework needs to be tested in the context of digital transformation. Furthermore, since the framework is based on literature and empirical data from one organization, the authors suggest further research where the leadership program is applied in other organizations and industries. Moreover, since the content (Formats and Topics) is not specifically defined, further research on how each section should be set up to increase leadership development is recommended.

Lastly, the authors suggest further research into the subject of measuring culture, since literature on how to measure cultural elements is limited. The authors of this study also suggest that scholars apply and research the effectiveness of the Cultural Measurement Framework

presented in this study. Moreover, conducting a quantitative study using the Cultural Measurement Framework, examining the effects of applying the tool during cultural change, could be beneficial. By conducting a quantitative study, the framework can be tested at a larger scale, resulting in greater generalizability.

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Appendix A – Interview Guide

General questions for all respondents
- **Ethics**
  - Permission to record and transcribe the interview?
  - Anonymous, or can we use your name and title?
  - The material will only be used for the thesis
  - The interviewee can at any point end the interview, and withdraw the data
- **Introduction**
  - Description of us and our thesis
  - What is your role and responsibilities, within the organization?
  - How long have you been working in the organization?
  - What is digital transformation to you?
  - What is your role in the transformation?
- **Effects of digital transformation**
  - What changes have you seen in the organization, connected to digital transformation?
  - Have these changes had any effect on the employees?
    - If so, what kind of effect?
  - In which ways are you affected by it?
    - Are there any new skills/knowledge/competencies needed for these changes?
    - If so, what?
- **Culture**
  - Can you describe the corporate culture in your organization?
  - Do you think there are different cultural characteristics between departments in the organization?
  - What do you think is the general attitude towards change?
  - What are your company values?
    - **Values from Hartl & Hess - to what degree do you believe the culture is:**
      - Open to change?
      - Customer centric?
      - Innovative?
      - Agile?
      - Willing to learn?
  - Have you noticed any cultural changes due to the digital transformation
  - Have you experienced any resistance towards the changes among the employees?
    - What kind of resistance?
    - For managers: What have you done to handle it?
  - Do you want the culture to change?
    - If so, what kind of changes to the culture would you like to see?
  - Do you think culture is an important aspect during a transformation?

General questions for all managers
- **Formulation**
  - What kind of changes have you implemented now?
  - What kind of changes are you planning on implementing?

- **Culture**
  - What do you believe is required from management, to successfully implement a digital strategy, concerning employees and culture?
  - Did you do anything to prepare the employees for the changes?
    - If so, what?
  - What response have you seen from the employees, so far?
- **Training program**
  - Are you taking part in the training leadership program for managers within your organization?
    - If so, can you tell us more about it?
  - What kind of learnings/developments have you attained by participating in this program?
  - Has the program affected the way you work as a manager in any way?
    - If so, how?
  - Do you believe this program will have an effect on the corporate culture in the organization?
    - If so, what kind of effects?
  - Have you seen any changes to the culture because of this program?
  - In what way can managers lead the change, according to you?
- **KPI:s**
  - Are you using any KPI:s related to the employees and the culture?
- **The survey**
  - The monthly survey for employees in the organization, can you tell us about it?
  - Do you believe it can help create the desired culture?
    - If so, in what way?
  - Do you think that is useful for you?
    - If so, in what way?
  - Have you changed the way you worked because of results from the survey?
- **Online meetings**
  - Do you have weekly, online meetings?
  - What is the purpose?
  - Do you believe they are helpful in communicating the vision?
    - If so, in what way?
  - Changing attitudes towards the change?
    - If so, in what way?

Specific questions for respondents
The Executive Director of Service and Marketing and Chief Information Officer
- **Introduction**
  - Can you describe the role of the management team?
  - What level of digital capabilities do you believe the organization has? (Digital investments, etc.)
  - What level of leadership capabilities do you believe the organization has?
- **Formulation**
  - When forming the DT strategy, did you use any framework?
  - Were the employees involved in formulation?
  - Did you take cultural aspects/challenges into consideration?
    - If so, what/in what way?
- **Culture**

- o How prepared do you think the employees are for these changes?
- o You said they hired new C-suite managers in the beginning of the change, do you think that affected the culture in any way?

The Executive Director of Human Resources

- **Introduction**
  - o Is there an HR strategy regarding the digital transformation?
    - o If so, were you involved?
    - o Can you describe the strategy?
    - o Did you use any frameworks/models when formulating the strategy?

- **Effects of digital transformation**
  - o Has the digital transformation changed your work in any way?
    - ▪ Are you hiring people with different skills/competencies?
    - ▪ How do you acquire new skills?
    - ▪ Have you had to let people go because of the transformation?
    - ▪ Are there jobs that will be automated, resulting in some positions not being needed?
- **Follow-up questions sent to Executive Director of Human Resources after the interview**
  - o We are very interested in the training program you have for leaders, can you elaborate more on how that works?
    - ▪ How often do they attend the program?
    - ▪ How is it structured/what is the format?
    - ▪ Is there something special you are focusing on?
    - ▪ What is the goal/purpose with the program?
    - ▪ What do you want the managers to get out of it?
    - ▪ Can you describe what top- and bottom behavior means?
  - o In the interview, you said that there was not a specific training program regarding the employees in the company.
    - ▪ So how have you prepared them for the upcoming changes?
    - ▪ You mentioned "learning by doing" as a way to change the attitudes of the leaders. Can you elaborate a bit more on that?
  - o In another interview we were told that, every week there was an online meeting for all the employees in the organization. Would you say that's a part of your strategy to change the culture in the organization?
    - ▪ If so, how?
  - o You said you have not experienced any cultural changes due to the digital transformation, yet. However, you also mentioned that the culture is more agile and innovative now than it was before.
    - ▪ What is the reason for that?
    - ▪ When hiring a new management team, did that have any effect on the culture in the organization?
    - ▪ When it was apparent that the organization was going to go through extensive changes (when people were told about how urgent it was for the Icelandic post to go through changes) did that have any effect on the corporate culture?
  - o Are all the managers in the organization getting the same leadership training? Or only top-management?

- o You said that you send out monthly surveys to the employees in the organization.
    - ▪ Have you seen any changes in responses after the leadership program began?
    - ▪ Have there been any changes in relation to support/trust to the leaders?

Director of Home Delivery
- **Effects of digital transformation**
    - o What has been most challenging during the change?
- **Culture**
    - o What has been most challenging related to culture?
    - o Did the change in the management team have any effect on the culture?
        - o If so, how?

The Employee - Specialist in the distribution department
- **Effects of digital transformation**
    - o Do you have any concerns regarding the changes due to DT?
    - o What do you do with these concerns?
- **Culture**
    - o What is your attitude towards the changes?
    - o What would you say is the general attitude towards the change?
    - o Did the change in the management team have any effect on the culture?
        - ▪ If so, how?
- **Management/leadership**
    - o Do you believe you get enough support/information from management in this transformation?
        - ▪ If so, can you elaborate on that?
    - o Do you trust the management team?
    - o Do you think there is general trust towards the management regarding the changes?
    - o Do you think that the changes they plan on implementing will benefit the organization? Or the employees?
        - ▪ If so, how?
    - o Do you feel included in the change?
    - o What would you like to have/see from the management team?
        - ▪ Do you get that?
        - ▪ If not, what do you do about it?