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Investigating employees' participation in the digitalisation of the audit profession in light of individual unlearning: A qualitative approach

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Executive summary

The continuous development and advances in technology makes organisational change a reality most organisations must face. This thesis explores employee participation in digitalisation. In particular, a form of passive resistance is investigated, as employees' absence of adjustment to and adoption of change may impede the successful implementation of digital work tools. This is investigated through the concept of individual unlearning, which emphasises that employees must move away from old work habits, behaviours and attitudes, in order to partake in the new tools resulting from digitalisation. The thesis takes an exploratory approach, by investigating the impact of digital infrastructure, employee participation, and support through the lens of individual unlearning.

The findings from interviews with nine employees at BDO, a Norwegian auditing firm, indicate that individual unlearning is a key aspect when implementing digital work tools, and should be facilitated for prior to implementing digital change. In relation, avoiding implementing rushed and flawed work tools was found to be a key challenge. Furthermore, organisations must in addition to providing sufficient training and informal support for the employees to actively participate in changes, ensure that the employees are given the time and resources needed to engage in such activities. The role of leadership was found to be of importance, through providing information, clear expectations and guidelines regarding digital work tools and its usage. A conceptual model is presented, and later revised based on the data analysis and findings. Limitations, practical implications, and suggestions for future research are also discussed.

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1 Introduction

The continuous development and advances in technology makes organisational change a reality most organisations must face. Organisational change can come in various forms, for instance through the introduction of new technology (Ashburner, 1990), or digitised working methods. Digitalisation is cause to one of the most important current transformations of today's society, infiltrating both the personal life and business world of people (Hagberg, Sundstrom & Egels-Zandén, 2016). Such global technology trends have sparked discussions about the future working environment and fears of future unemployment (Degryse, 2016). In particular, the auditing profession is often pointed to as being especially affected by the continuous technological developments, as illustrated by a study from Oxford University, which reported that the profession risks a 94 % chance of becoming computerised or automated over the next two decades (Computer Science Online, 2017; Frey & Osborne, 2017).

To fully take advantage of digitalisation, it is important to include employees in the process (Andrus, Kejriwal, & Wadhvani, 2016). However, organisational change has traditionally been managed from a technical perspective, not adequately considering human factors (Bovey & Hede, 2001; Vakola, Tsaousis, & Nikolau, 2004). While a main goal of digital transformation often is to improve the customer experience to stay competitive and gain market shares, employees often report a lack of organisational attention towards providing a positive employee experience during change. Employee experience includes the extent to which employees feel their organisations provide opportunities for growth and skill development (Andrus et al., 2016). However, employees are often not given enough opportunity to participate in and adjust to organisational changes accompanying digitalisation efforts. Organisational change must be managed in a way that balances both organisational and human needs (Bovey & Hede, 2001), particularly so given that the employees make up the organisation (Smith, 2005).

Organisational change, regardless of its application and background, represents a deviation away from what is known to both the organisation and its employees, which opens up for uncertainty and an unknown future. When individuals are faced with substantial change, they may go through a reaction process. This reaction process can lead to individuals employing various defence mechanisms, which can obstruct their adaptability to changes. Resistance to change is considered a natural response to organisational change processes, and has been

identified as a leading cause for failing change initiatives (Bovey & Hede, 2001; Palmer, 2004), including implementation of information technology (Lapointe & Rivard, 2005). As such, employees' reactions to and the integration of new technology into established workplace routines will continue to be a challenge (Becker, 2010) in the foreseeable future. It follows then, that resistance to change must be dealt with constructively for change to manifest, by helping employees adjust and adapt to the changes. Overlooking employees' work setting when digitising business, can have consequences on the organisations' ability to fully adapt to and take advantage of digital advancements. Hence, organisations should focus attention on their employees by providing opportunities for them to better transition away from the 'old ways' towards a new, digitised way (Andrus et al., 2016). However, actual change is not only a result of employees learning new practices, ideas and behaviours. Successful change also includes moving away from what is already established and known (Hislop, Bosley, Coombs & Holland, 2014). These two aspects are both of importance, but the latter part, often referred to as unlearning, has gained significantly less attention within the change literature (Srithika & Bhattacharyya, 2009; Hislop et al., 2014).

After identifying a partnering organisation within the auditing industry, a pre-project was conducted in order to investigate specific challenges regarding organisational change and digitalisation. The insights gained from the pre-project will be elaborated on in the following sections. In addition to the above argumentation, indicating that digitalisation and organisational change must be managed in accordance with human factors within any organisation, the goal of the thesis is to explore the theme of digitalisation in the audit profession, with a particular focus on employee participation. Following, a theoretical review will be presented, in order to clarify the concepts relevant to exploring the thesis' theme, before providing the purpose of this thesis. Lastly, a conceptual model in light of the theoretical review will be presented.

2 Theoretical Review

In the following section, a theoretical review related to the thesis' research theme will be presented. The aim is to investigate and present theories, key concepts and research relevant to the thesis' area of interest. More specifically, the review will present key concepts in relation to organisational change in general, before going into a more in-depth analysis of digital change within the auditing industry, of which the chosen organisation operates. Then, resistance to change as a barrier to organisational change will be presented, as it has a critical role in either facilitating or hindering successful organisational change. More specifically, organisational change, through the lens of digitalisation, may be hindered by a more passive form of resistance to change, a relatively overlooked field in an otherwise comprehensive literature on resistance to change. Lastly, the key concept of individual unlearning is presented, as this is highlighted as a key challenge in getting employees to participate when implementing digital change in organisations, and as it can be understood to be a form of passive resistance to change.

2.1 Organisational change

An ever competitive and continuously evolving business environment creates demands on the organisations in today's society (Beer & Nohria, 2000). For an organisation to survive, it is crucial that change is managed successfully by the organisation (Todnem By, 2005). Organisations must be able to quickly react and adapt to rapid, and even unexpected, changes in their environment (Liebhart & Garcia-Lorenzo, 2010; Collin et al., 2015), while simultaneously delivering positive financial results and sustainable growth (Ewenstein, Smith, & Sologar, 2015). As such, organisational change is one of the most important issues organisations are facing (Burnes, 2004), and organisations must be able to both identify and manage needed changes (Todnem By, 2005).

Organisational change is a major topic in management literature (Bamford & Forrester, 2003; Elving, 2005). However, despite the attention and research devoted to change, many organisational change efforts fail (Bovey & Hede, 2001; Elving, 2005; Whelan-Berry, Gordon, & Hinings, 2003). Indeed, research suggests that approximately 60-70% of change programs fail to meet their desired goals (Beer & Nohria, 2000; Burnes, 2004; Ewenstein et al., 2015). With the attention given to organisational change by both academics and practitioners, debate follows

as to what organisational change is, and how it should be addressed (Burnes, 2004). This has generated several approaches aimed at describing, understanding, and handling organisational change. In the following, some of these approaches to organisational change will be addressed, along with the conceptualisation of change as an occurring event or as a constant factor.

2.1.1 Types of change

Organisational change has traditionally been understood as a process of moving from one state to another (Beer & Nohria, 2000; Nelson, 2003; Smith, 2005), with the implication that the latter constitutes a more desirable state (Ragsdell, 2000). There has been proposed several categorisations of organisational change. For instance, *episodic* change is argued to be typical for change that is discontinuous and intentional (Weick & Quinn, 1999). However, this assumes that organisations are static and stable entities, where change is a reactive response. Such perceptions of change processes have been argued to be an oversimplification by academics (Cummings, Bridgman, & Brown, 2016). In contrast, other academics advocate a perspective of change as being *continuous*, where organisational change is ongoing and continually evolving (Weick & Quinn, 1999). From this perspective, change is not a single event, or even a series of specific events, but rather a characteristic of organisations (see e.g. Smith, 2005; Todnem By, 2005). Accordingly, Elving (2015, p. 129) stated that “The only thing constant within organisations is the continual change of these organisations”. Hence, organisational change is perceived as being emergent, and as compared to larger and ‘visible’ discontinuous changes, it is rather characterised by several smaller adjustments, which, according to Weick & Quinn (1999), collectively constitutes significant change. In addition to distinguishing between episodic and continuous change, a distinction can be made between *planned* change and *emergent* change. The planned change approach builds on the episodic approach, and views organisational change to be a series of pre-planned steps (Bamford & Forrester, 2003). However, planned change often assumes a stable and predictable business environment, which is not necessarily the case. The emergent approach views change as less dependent on planning (Bamford & Forrester, 2003), and highlights the complexity and unpredictability of the modern business environment. Emergent change is rather often unintentional and iterative, and involves improving and adjusting existing factors of the organisation (Liebhart & Garcia-Lorenzo, 2010). Change can be

context-dependent, and is an unpredictable process, and can thus lead to both intended or unintended outcomes (Balogun, 2006). Digitalisation has been argued to fit into the perspective of emergent change. In this view, organisational change arises from a rather unpredictable and continual interaction of information technology, organisational structure and the employees (Markus & Robey, 1988).

Of particular interest to this thesis is the organisational change that accompanies digitalisation and the developments made in information technology. It was argued as early as in the 1950s that information technology would dramatically affect and impact both the shape of the organisations, as well as the nature of management (Leavitt & Whisler, 1958). Indeed, digital technologies play a major role in organisational change, as modern organisations are supported by, and to some extent driven by, information technology (Korhonen, 2015). Furthermore, as information technology is interwoven with the organisational structures, strategies and knowledge within the organisation (Bloodgood & Salisbury, 2001), digitalisation and organisational change exist in a reciprocal relationship, in which they both affect and depend on each other. Given this close association, the thesis will refer to the term “digitalisation” as leading to, or a form of, organisational change. In the following section, a clarification of terminology is presented, as the field is characterised by concepts that may be difficult to distinguish from one another, before an introduction of how digitalisation is affecting the auditing industry is presented.

2.1.2 Digital change

Digitisation, digitalisation, and digital transformation

Digitisation, digitalisation and digital transformation are conceptual terms that often are used interchangeably (Brennen & Kreiss, 2016; Bloomberg, 2018). However, there is an analytical value in distinguishing them from each other (Brennen & Kreiss, 2016), as the concepts have different meanings. Furthermore, a clarification can help overcome the issue of digitalisation simply being a buzzword within modern management and organisational practice and research.

Digitisation refers to the technical process of encoding analogue information into digital information (Bloomberg, 2018; Gartner, 2019a). In other words, digitisation refers to making information digital (Bouza, 2018), as in encoding a paper-based document into a computer file. ***Digitalisation*** refers to “the use of digital technologies to change a business model and provide new revenue

and value-producing opportunities” (Gartner, 2019b). It can thus be understood to be the process of converting to a digital business (Bloomberg, 2018), and presumes digitisation (Bouza, 2018). Lastly, *digital transformation* refers to the transformation of business models, business activities and competencies to fully leverage the opportunities created by digital technologies (Bouza, 2018). It is a broader term referring to a customer-driven strategic transformation by the implementation of digital technology (Bloomberg, 2018). As such, one digitises information, digitalise business processes, and digitally transform the organisation’s business and strategy.

While digitalisation regards the organisation and technology, digital transformation is customer-related (Bloomberg, 2018), and can furthermore be understood to be the effect of digitalisation as a process. Digitalisation is the introduction and usage of digital and information technologies aimed at transforming overall business processes. As the topic of this thesis is digitalisation, the discussion will be focused around the introduction of digital technology aimed at enhancing business processes and value-creation of the organisation.

2.1.3 Digitalisation within the auditing profession

The process of digitalisation, and its accompanying effects, has been described as a “global megatrend that is fundamentally changing existing value chains across industries and public sectors” (Collin et al., 2015, p.29). Indeed, digitalisation is unavoidable for organisations in most industries in modern working world (Holley, 2004; Arsenie-Samoil, 2010). This includes the professional audit and accounting industry, which must adapt to technological developments and its accompanying challenges (Arsenie-Samoil, 2010).

Auditing is the process of examining and evaluating the financial statements of an organisation (Kenton, 2018). Based on criteria such as structure, size and ownership, organisations may be subjected to an annual audit, with the aim of establishing whether the financial report represents accurately the financial position of the organisation (ElBorno, 2019). Previously, auditing could only be performed by accountants manually going through financial information. The implementation of digital tools can improve auditing firms’ operations’ efficiency, customer focus, productivity and business model.

Digitalisation creates several implications for the audit profession. For once, as various types of auditing software are introduced to the audit process, auditors

can spend more time on addressing more complex challenges their clients are facing (Bierstaker et al., 2001). Technology might automate several processes and can free the auditor from repetitive and mundane tasks, allowing more time for higher level tasks. Furthermore, new technology might help to identify and develop various measurable objectives and performance indicators, to better help identify and adjust clients' challenges and performance, increasing the value of the audit process in the eyes of the client (Bierstaker et al., 2001). However, as both auditing firms and their clients become more digital and complex, auditors are faced with a demand for accepting and implementing the new tools and systems, and accordingly adjust their work design and activities thereafter (Arsenie-Samoil, 2010). Thus, auditors must keep up with the pace of the digitalisation, understand its impact, and have the competence needed to deal with it successfully (Meuldijk, 2017).

However, organisations are not uniform in successfully achieving a positive, digital transformation (Zhu, Dong, Xu, & Kraemer, 2006). Managing change is to a large extent about managing the human aspects of the process, and the people involved can be either important resources or obstacles in organisational change (Smith, 2005). Organisational change may be perceived differently by individual members of a given organisation (Ragsdell, 2000). For some, it may be the source of new challenges and opportunities, while for others, it may be threatening and a source of insecurity. In the following, reactions to change will be discussed, with an emphasis on the impact this may have on successful implementation of organisational change.

2.2 Employee participation

In this part, individual reactions to change will be discussed, with a focus on how this influence the participation in digital change. More specifically, the section will explore resistance to change as a challenge for succeeding with digitalisation. Then, the thesis sets to investigate employees' participation in change as influenced by the degree to which they engage in the process of individual unlearning.

2.2.1 Resistance to change

Most research on organisational change has taken an organisational level of analysis (Bovey & Hede, 2001; Oreg Vakola, & Armenakis, 2011), addressing how organisations themselves prepare for, implement and react to organisational change (Oreg et al., 2011). In comparison, research on individuals' reactions to, and

perceptions of, change has traditionally been scarce (Bamford & Forrester, 2003), although the recipients of change have been the subject of growing attention (Stensaker & Meyer, 2011). This is especially due to an increasing consensus regarding how employees' reactions to change is critical to the successful implementation of organisational change (Oreg & Berson, 2011; Oreg et al., 2011). In their article, Stensaker & Meyer (2011) notes that most studies on behavioural aspects of reactions to change tend to focus on resistance to change. Resistance to change is consistently being identified as one of the key reasons as to why organisational change programs fail (e.g. Bovey & Hede, 2001; Palmer, 2004; Stensaker & Meyer, 2011; Wittig, 2012). Taking employees' reactions and resistance to change into consideration is a key activity when conducting successful change initiatives (Wittig, 2012).

Given its importance for the success rate of change programs in organisations, resistance to change is an ever-growing field of literature. As a result, the phenomenon has been subject to various and partly differing definitions and explanations of its meaning (Erwin & Garman, 2010). Thus, no single, agreed upon definition of resistance to change exists (Ford & Ford, 2010). For instance, Maurer (1996, p. 23) explained resistance as "a force that slows or stops movement". Additionally, Kotter (1995), in his widely known publication, argues that resistance can be understood as an obstacle that prevents change. The common theme in these definitions is that resistance to change is perceived as a negative force. The traditional approach to resistance to change is indeed one in which resistance is a problem which must be minimized or overcome (Piderit, 2000; Mabin, Forgeson & Green, 2001; Giangreco & Peccei, 2005; Smollan, 2006; Erwin & Garman, 2010). More recently, a more objective approach to resistance to change has been taken by academics, in which resistance to change is viewed as both natural and even positive. For example, Piderit (2000) argues that unfavourable resistance to change may be rooted in positive intentions of employees, due to ethical considerations or beliefs about what is the best for the organisation. Furthermore, Mabin and colleagues (2001) propose that resistance to change is both necessary and useful, and that it can be 'harnessed' in a productive way to better plan and implement organisational change. Hence, it can be argued that one should take a more neutral approach to resistance to change, where it is central to take into consideration the various forms of resistance to change (Giangreco & Peccei, 2005).

Following the varying approaches to and classifications of resistance to change, resistance to change can be categorised in relation to how it is expressed by change recipients. According to Steinsaker & Meyer (2011), there are several proposed typologies and categories of resistance in the literature. The categories usually differ along the dimensions of 1) active or passive; and 2) constructive or destructive. An example of the former is Hultman (1995) who in his article presents the two dimensions with a destructive perspective, claiming that symptoms of active resistance includes being critical, sabotaging, distorting facts or starting rumours. In contrast, passive resistance to change includes behaviours such as agreeing verbally without actually following through, failing to implement change or procrastinating. Giangreco and Peccei (2005) also put attention to the distinction between passive and active resistance to change. In their study of the privatisation of an Italian electric company, they found that resistance to change was commonly expressed through passive activities rather than active and overt ways. More specifically, dissent for middle managers was expressed through a failure to actively support or facilitate change.

It can thus be argued, that passive resistance to change, as illustrated through failing to participate in changes by for example Hultman (1995), is an important reason to why change efforts fails. Hence, it can be assumed that organisations depend on the employees to abandon their previous ways of working to successfully implement changes and new initiatives. Thus, the ability to unlearn is considered a key factor in succeeding with organisational change (Hislop et al., 2014, p. 556).

2.2.2 Unlearning

In times of continually changing environments, organisational learning has been highlighted as essential for organisations to successfully change and adapt to their new surroundings (Argote, 2012). Learning can be argued to be a prerequisite to organisational success (Alas & Shafiri, 2002), as it is vital that organisations are able to identify and react to changes, which requires them to be learning organisations (Holt, Love, & Li, 2000). Indeed, a total of 86 % of the respondents of this year's Global Human Capital Trends survey, say reinventing their ability to learn is considered of great importance when faced with the rapid changes brought on by technology (Deloitte, 2019). Such organisational changes may lead to the departing from routinised work systems and practices for both the organisation and a whole and for its individual employees (Piderit, 2000; You, Kim, & Lim, 2017).

Thus, much of the productivity accompanying learning arises from unlearning (Holt et al., 2000), given that one must disrupt old behaviours and habits in order to learn new ones that can replace them. Unlearning can be defined as “the process by which individuals and organisations acknowledge and release prior learning (including assumptions and mental frameworks) in order to accommodate new information and behaviours” (Becker, 2005, p. 661).

For change to be sustainable, and for organisations to be able to survive and compete, old practices must be eliminated prior to obtaining the new practices and procedures (Akgün, Byrne, Lynn & Keskin, 2007; Becker, 2010). Researchers have argued that a factor explaining why implementation of new technologies often fails, is that the change management process does not consider the importance of unlearning. As emphasised in the literature on technology implementation, implementation success suffer when it disrupts organisational routines and when prior knowledge is embedded in the organisation (Edmondson, Winslow, Bohmer, & Pisano, 2003). This is important in relation to the introduction of new technology and accompanying changes to the work setting, as existing work processes, structures and knowledge may hinder such processes (Scheiner et al., 2016). As such, for changes in an organisation’s information system and technologies to be successful, the parties involved must behave differently than they did before the change, in which they relinquish prior ways of working while learning the new, accompanying practices (Becker, 2010).

The concept of unlearning can also be seen in light of more traditional theories and literature. For instance, parallels can be drawn to Lewin’s (1951) three-step change model. This model lists the stages of 1) unfreezing, 2) transition, and 3) refreezing. Some researchers have argued the unfreezing phase to be linked to unlearning (Barr, Stimpert & Huff, 1992), as the phase is characterised by established beliefs being abandoned in order to make way for the new understandings (Barr et al, 1992, p. 17). Others have claimed that unlearning is related to the transition phase, as it is in the models’ second phase that the mental structures are changed (Akgün et al, 2007, p. 801). Nevertheless, as the aforementioned literature have emphasised, it can be argued that the process of unlearning must be present for change initiatives to have its intended outcome.

2.2.3 *Individual unlearning*

While organisational unlearning has received some academic attention (see Tsang, 2008; Casillas, Acedo & Barbero, 2010; Pighin & Marzona, 2011; Wong, Cheung, Yiu & Hardie, 2012), the knowledge on individual unlearning remains more limited (Hislop et al., 2014). However, individual unlearning can be fruitful to investigate since, as expressed by Hedberg (1981, p. 18) “organizations learn and unlearn via their members”. Consequently, it has been argued that an unlearning process among the employees is of importance, as a means to allow for and encourage the inclusion of new information and behaviours, subsequently strengthening organisations in facilitating learning, change and innovation (Becker, 2008).

In her study from 2010, Becker identified and presented seven factors that hinder or help the facilitation of an individual unlearning process during organisational change. These factors will be elaborated in the following. The first factor is **positive prior outlook**. This relates to how the individual perceive the change *before* it has been implemented. This entails the opinions the individuals have towards the change happening, whether they feel sufficiently prepared for it, and their evaluation of the change being necessary. The second factor is **feelings and expectations**. This relates to the individuals’ feelings and expectation both prior to and during the implementation. It includes affective assessments of the new way, such as whether the individuals perceive what’s coming to be difficult or necessary to implement. The third factor is **positive experience and informal support**. This factor also relates to experiences during the change. It focuses on the facilitating role of colleagues and immediate managers have in providing personal support. This factor is coined “informal” as to separate it from the formal measures taken by an organisation to support change. The factor also comprises individuals’ own level of experience of their capacity to engage in the change and to unlearn. The fourth factor is **understanding the need for change**. This relates to individuals’ assessment of the change post implementation. The factor focuses on cognitive aspects of the change, such as not only understanding the need for the change before it is carried out, but also after it has been conducted. While this is measured on an individual level, it is highly anticipated to be influenced by the many aspects following the way the organisation has chosen to perform the change. The fifth factor is **assessment of new way**. This factor also relates to reviews about the change after it has been implemented. Here, the views of the individuals are

emphasised in regard to their evaluation of the new way of doing things compared to what existed prior. Indeed, the factor includes aspects such as how it has been to get used to the new ways, as well as their analysis of the new way compared to the old way in terms of comfort and difficulty. The sixth factor is **history of organisational change**. This factor relates to previous changes in the organisations, in terms of individuals perception of whether the changes have been well handled and the necessity of the previous changes. The factor can be fruitful to assess, as poor experiences with change can be a hinder in getting employees in adopting new routines. The seventh, and final, factor is **organisational support and training**. This, in contrast to the informal support factor, refers to support provided by the organisation in terms of training sessions, information, guidelines, procedures and so forth relating to the new way. The factor contributes to the individual concept both in representing formal requirements needed to learn the new way, but also reflect the importance of signalling that engaging in change and implementing a new way of doing things require substantial recognition.

Through the pre-project and initial conversations with the partnering organisation, we got a rich description of their experiences with implementing digital work tools and processes. It was claimed that despite seemingly agreeableness among the employees when first presented with the tools, the employees rarely used it. At best, as described by the top management at the company, the auditors use the new work tools in addition to the work methods they already employ. The top management referred to their experiences and observations as the employees showcasing “an unwillingness to unlearn”. Thus, we perceive individual unlearning to be a valuable concept to further investigate. Following, a review of important aspects for facilitating for employee participation in change, and consequently a successful change implementation, is presented.

2.3 Support

While each individual employee plays an essential part in how organisational change will evolve, it is difficult to deny the importance of the role of the organisation when implementing change. Indeed, managing change is to a large extent about managing the people in the change process (Smith, 2005). In this section, formal support, informal support and leadership will be presented, along with their role in succeeding with digitalisation through facilitating for employee participation.

2.3.1 Leadership

Yukl (2013, p. 7) defined leadership as: “the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives”. Hence, leadership is arguably an essential component towards succeeding with implementing change (Van der Voet, Kuipers, & Groeneveld, 2016). Several contributions have been made to suggest how leaders should best manage and implement change. For instance, Kotter (1995, p. 60) stated that “[c]hange, by definition, requires creating a new system, which in turn, always demands leadership”. Kotter goes on to suggest eight stages change agents must take when implementing changes in an organisation. The stages include 1) establishing a sense of urgency, 2) forming a powerful guiding coalition, 3) creating a vision, 4) communicating the vision, 5) empowering other to act on the vision, 6) planning for and creating short-term wins, 7) consolidating improvements and producing still more change, 8) institutionalising new approaches. Though useful for gaining insight into change processes and how to reduce the chances of undesirable employee reactions, the process model proposed by Kotter (1995) has only been one of many (e.g. Judson, 1991; Galpin, 1996; Armenakis, Harris & Feild, 1999). However, organisational change processes are unpredictable and chaotic, and the eight stages mentioned above are argued to be the ones change managers most commonly fail pursuing (Kotter, 1995).

Research on digitalisation and implementation of information systems indicates that managerial support is one of the most critical factors in achieving successful implementation. As digitalisation demands resources, both material and managerial, in order to develop infrastructure and support end-users, managerial support may help provide the resources needed (Sharma & Yetton, 2003). Additionally, support from management and leaders, through for example visible commitment and symbolic actions, help legitimise digital changes and put attention to appropriate actions needed to implement and facilitate usage of new technology (Purvis, Sambamurthy, & Zmud, 2001; Sharma & Yetton, 2003).

Indeed, as it is usually top management that introduces and drive change initiatives, their reactions and actions will be of great importance for the employees’ change responses as well (Self & Schraeder, 2009). This notion has further been supported by several researchers. For instance, Covin and Kilmann (1990) found that when management explicitly showed support for and commitment to a change

initiative, a positive change perception was created among the employees. In contrast, a negative change perception was the outcome when management expressed a more visible lack of support or consistent behaviours towards the change initiative. Managerial support has also been found to be linked to individual unlearning. In their study, Cegarra-Navarro and Dewhurst (2006) found that rather than being random, unlearning emerges when there is a context to nurture it. As such, unlearning is not likely to be present on an individual basis, unless it is fostered. Hence, it can be argued that individual unlearning requires empowerment by management, rather than being obstructed by rules and regulations.

2.3.2 Formal support

As digitalisation can alter job descriptions and the skills needed to perform new job tasks, formal organisational support should be made available to employees affected by such changes (Rintala & Suolainen, 2005). Formal support can be offered through enabling training and development programmes related to the change implementation and accompanying changes in the work setting, and has been found to be an important factor in providing learning and development (Burke, 1995). Formal support through training and learning are often related to planned and organised learning activities aimed at enhancing specific skills and knowledge, and how to use them in order to perform tasks well (Manuti et al., 2015). For example, access to training, supervisory support for attending training, and clear benefits from training are related to employees' levels of commitment in times of organisational change (Bartlett & Kang, 2004). In addition, organisational support, through for example organisational attention to employees' work setting and socio-emotional needs, enables higher levels of employee participation and support of organisational change processes (Ming-Chu & Meng-Hsiu, 2015).

Studies have emphasised how formal training efforts help towards success of implementation of digital technology. For instance, training has been found to be essential for both individuals and teams, especially when the technological changes were characterised by complexity. When digitalisation entailed interdependent tasks, training was considered especially important when those affected by the changes received training together (Sharma & Yetton, 2007). However, organisations that provide sound opportunities for development through formal training efforts often vary in the extent to which they include unlearning as

important factors of training in order to help employees participate in change. It has been argued that training and development should take into account the existing knowledge and behaviours of employees, in order to help employees develop these further, or relinquish them if the organisation no longer is in need of the knowledge or behaviours (Becker, Hyland, & Acutt, 2006). Indeed, one of the seven factors related to individual unlearning is “organisational support and training” (Becker, 2010). This factor relates to support “provided to the individual via training sessions, information sessions and documentation such as policies and procedures relating to the new system” (Becker, 2010, p. 263). By securing proper training and development, the organisation emphasises the value of the new system. However, it is important that the organisation does not simply try to provide information that will result in a clear mind among the employees, but rather provides training that relates to the previous systems or methods so that “new processes are paralleled with old” (Becker, 2010, p. 263). In other words, it is important that unlearning is a prior consideration to effectively implement new systems, and not an afterthought (Becker, 2010).

2.3.3 Informal support

Despite the evidence for formal training and development initiatives’ impact on employees’ participation in change and individual unlearning, these are not the only aspects of significance. Within the change literature, the importance of informal support from peers and colleagues have also been highlighted. Indeed, when new changes are announced by top management, employees often turn to colleagues or their immediate manager in an effort to interpret and make sense of the meaning of the change initiative (Self & Schraeder, 2008). Thus, if the colleagues or the immediate manager also are unsure of the rationale of the change initiative, change readiness can be impeded. For instance, supervisory support, through supportive work relationships between direct manager and employee, is important in times of change as it can lead to beneficial attitudes, well-being and evaluations of change (Day, Crown, & Ivany, 2017). Positive relationships between manager and employee also helps reduce resistance to change (Van Dam, Oreg, & Schyns, 2008). The importance of informal support and colleagues is further supported by Rousseau and Tijoriwala (1999), who found in their study that despite not trusting top management, hospital workers trusted their peers’ perception of the change initiative. One reason for this can be argued to be the information gap that

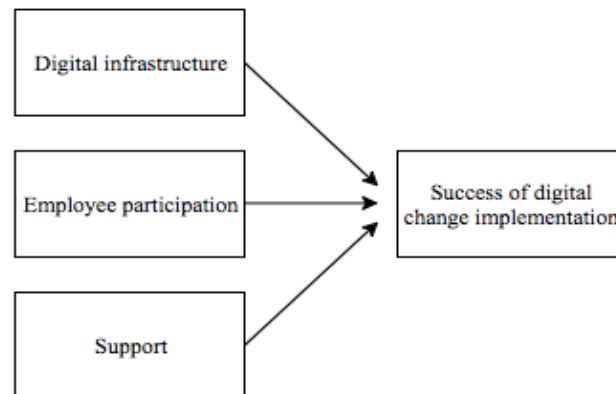
often arises during change implementation; the need for information often increases concurrently with the complexity of the change, simultaneously as the quantity and quality of the information available often decreases. As such, employees often rely on informal sources, such as colleagues, to interpret and gather information about the nature of the change (Rousseau & Tijoriwala, 1999).

The importance of informal support has also been emphasised by the unlearning literature. Becker (2010) points to the factor of “positive experience and informal support” as facilitating for individual unlearning. This factor emphasises how the presence of colleagues relates to the facilitation of unlearning. Here, the term “informal support” is presented in order to describe more personal levels of support, often between colleagues or employees and their immediate manager in an informal way (Becker, 2010). The importance of informal support is further drawn attention to by Cegarra-Navarro and Dewhurst (2006), who argue that both teamwork and informal colleague support could have positive impact on individual unlearning. Such informal support can be important for changes to be successful in an organisation, as a supportive climate where employees perceive the new changes implemented to be considered a positive improvement by managers, can encourage unlearning. Consequently, new digital work tools that gets introduced to the organisation will have a greater chance to be successfully adopted by the employees (Becker, 2010).

2.4 Purpose of thesis

The aforementioned research accumulates in the purpose of our thesis, where we seek to further explore the concept of unlearning at an individual level, and how it together with the nature of the digital infrastructure and available support, relates to succeeding with implementing digital work tools within the auditing profession. By interviewing auditors at different levels at an auditing firm, we want to gain insight into how the digital infrastructure present, the employees' participation as expressed through individual unlearning, along with the support available in the organisation, together may influence the success of digital change and development.

Figure 1: *Conceptual model*



Based on the theoretical review, paired with the purpose of this thesis, a conceptual model has been developed as shown above (Figure 1). This model serves as a starting point for illustrating the theme and purpose of the thesis. As illustrated by the model, we suggest that several factors will influence the success of digital change implementation. More specifically, these factors include the digital infrastructure present in the organisation, employee participation as seen through individual unlearning, and support from leadership, formal, and informal sources.

3 Methodology

This chapter will address the methodology and research strategy applied for investigating the purpose of this thesis. Following, the research design will be presented, along with the method and process of data collection. The data analysis, reliability and validity, along with ethical considerations will also be accounted for.

3.1 Research strategy and design

As the aim of the thesis is to further explore the concept of individual unlearning, and how this concept, along with the digital infrastructure and support available, relates to the implementation of digital work tools within the auditing profession, the thesis takes an exploratory perspective (Yin, 2003). Therefore, a qualitative approach is evaluated as appropriate. Qualitative research, as compared to a quantitative research approach, can be explained as having “an emphasis on the particularity of experience rather than a search for universal laws or generalized processes” (Haverkamp, 2005, p. 147). This gives the qualitative research approach a strength, as it is inductive, rather than strictly deductive in nature, meaning that it is suitable for generating theory rather than imposing preconceived ideas on the data. Furthermore, the flexibility offered by the qualitative approach makes it beneficial to apply, as inductive research often takes an iterative nature, allowing for movement back and forth between theory and data, and for the design components to be reconsidered or modified if changes or developments in other components demands it to (Maxwell, 2013; Bryman & Bell, 2011). This makes it an applicable research approach for our research topic.

3.2 Pre-project

The chosen research design included a pre-project prior to the data collection. The pre-project consisted of several informal conversations with staff in the organisation chosen as the research context. The pre-project was conducted to better support and facilitate the subsequent research and data collection. The goal was to achieve a better understanding of the organisation and its challenges, and to gain better insights into how digitalisation affect their profession. It helped highlight that despite an initial agreeableness among the employees when first presented with new digital work tools, the employees rarely used it. The top management referred to their observations as the employees showcasing ‘an unwillingness to unlearn’, which they considered a challenge and a hindrance of

digitalisation and change implementation. Furthermore, the pre-project helped identify which digital work tools and processes that are both available to and used by auditors, which served as a discussion point for the latter part of the project. Additionally, it was indicated that the research topic was of interest and highly relevant to the organisation and its challenges related to digitalisation and change. Lastly, it helped identify potential participants with knowledge and relation to the research topic.

3.3 Data collection method

When the aim of the research is to develop an insight and understanding, conducting an exploratory case study is appropriate (Yin, 2003). This way, theory can be explored and built, rather than simply being tested. Furthermore, as we seek to explore the topic of employee participation and digitalisation, and to increase our insight of the contributing factors for succeeding with this, the explorative nature of an in-depth interview is considered suitable. Boyce and Neale (2006) explain in-depth interviewing as “a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation” (p.3). In-depth interviews are an appropriate method of data collection when the goal is to explore new issues (Boyce & Neale, 2006).

3.3.1 Interview guide

A semi-structured interview guide was developed to guide the interviews (see Appendix 2). When using a semi-structured interview guide, a set of fairly specific questions related to the research topic is covered. However, the interviewees are offered a flexibility in how to reply. While this make is possible for the interviewer to ask follow-up questions and explore new information that the interviewees present, all the interviewees will be asked the same questions in a similar wording (Bryman & Bell, 2011). The interview guide applied in this thesis can be perceived as consisting of three separate parts, each addressing differing focus areas. The first part focuses on the digital infrastructure in the organisation. The second part focuses on the individual employee and his or her thoughts, feelings and behaviours towards the digital implementation. The third and final part of the interview guide addresses leadership and informal support from peers in relation to the implementation of digital work tools. The questions were based on the themes presented in the literature review. The seven factors of individual unlearning as

presented by Becker (2010) were especially emphasised. The items retrieved from the literature were refined as to suit the purpose of this thesis. In addition to the main questions, a set of background variables were also recorded. These included age, gender, education, job duration, position, percentage of employment, and leadership responsibilities.

3.3.2 Case selection

When investigating partnering organisations in which to conduct the research, one of the main selection criteria was the involvement in current digitalisation efforts. In particular, the organisation was chosen based on the extent of which it was affected by new demands from digitalisation and accompanying organisational change. Additionally, it was desirable that the organisation was operating within an industry characterised by rapid technological and digital changes and development. As we have focused on digital change within the audit profession, an auditing firm was chosen for collecting data. Having such criteria that guide the case selection in a strategic way, is referred to as purposive sampling (Bryman & Bell, 2011). We thus reached out to BDO for conducting our research. BDO is a part of a large, international network of public accounting firms, which conducts operations in 162 countries, and globally employs approximately 80.000 employees (BDO, 2019a). As per 2019, BDO Norway employs approximately 1650 people, who are distributed across more than 70 offices. The organisation is one of the leading firms in Norway in offering services related to auditing, accounting, consultancy and law, of which auditing services is their biggest business area (BDO, 2019b). BDO are actively digitising their work tools and processes within the auditing service in order to better benefit from digital opportunities. More specifically, the goal can be understood to be to create more efficient and higher-quality audits, in order to create more value to customers and enrich the employees' work setting. As BDO partakes in such digitalisation efforts, they were particularly interesting to partner with for this thesis.

3.3.3 Participants

Participants were also sampled through purposive sampling. This was anchored in our aim to investigate and increase our knowledge regarding a specific topic of research, meaning that the participants had to be selected in a strategic way based on a set of criteria. Our main criterion was that the participants were auditors, as this was the industry of interest. Furthermore, we wanted the participants to be

spread across different levels of employment, and represent both genders and a variety of ages, to better gain a holistic and representative understanding of the organisation and participation in digitalisation across employee characteristics. This was achieved through informing our contact person at the organisation about our criteria of preference, and expressing our wish to recruit employees who matched these criteria. All of the participants were auditors who in varying degrees take use of the digital work tools and processes available to them. To hinder skewness of the data and conflicts of interest, none of the sampled participants had been a part of developing or making decisions related to the implementation of the relevant digital work tools. A total of ten participants were recruited, of which nine were interviewed for the purpose of this thesis. A sample size of nine was deemed sufficient, as we reached data saturation, in which the data collection method did not yield any new or relevant data for providing new, theoretical insights (Dworkin, 2012; Marshall, Cardon, Poddar, & Fontenot, 2013; Malterud, Siersma, & Guassora, 2016).

3.4 Data collection process

The data was collected through in depth semi-structured interviews, guided by an interview guide that included open-ended questions relating to the themes discussed in the theoretical review. The interviews were held at the selected organisation's location, using their meeting rooms to make sure that the interviews were held at the employees' convenience and in a comfortable and familiar setting (McGrath, Palmgren, & Liljedahl, 2018). The duration of the interviews varied from approximately 25 to 50 minutes, and resulted in a total of 6:10:36 hours of recorded interviews. All interviews were recorded with the written consent of the participant. The interviews were then transcribed word by word. Inaudible words, words that were repeated, and small talk regarding topics irrelevant to the research, were excluded from the transcription. In addition, 'filler' words were, in accordance with most qualitative research, kept out of the transcriptions, as they do not represent data, in order to focus on the accuracy of the content (Sandelowski, 1994).

3.5 Data analysis

To analyse the transcribed interview, the data was coded. Coding is regarded to be the main starting point for analysing qualitative data (Bryman & Bell, 2011), and aims to break down the data so it can be organised into categories. By categorising the data, items within each category can be compared, which can

further lay the foundation for developing theoretical assumptions (Maxwell, 2013, p. 107). Since the overarching topics of our analysis were already set as presented in our conceptual model, our thesis had a hybrid of inductive and deductive approach to the analysis. The categories of “digital infrastructure”, “employee participation” and “support”, along with the factors presented by Becker (2010) were already predetermined. However, any other sub-themes, meaning the categories making up each of the overarching theme, were obtained in an inductive manner, through identifying the subjects emerging from the analysis.

3.6 Reliability and validity

The value of research is based on its quality in terms of method and its integrity (Long & Johnson, 2000), and regardless of the method, reliability, validity, and generalisability is often a major concern in order to ensure rigour and soundness when conducting research (Morse et al., 2002). Reliability refers to the consistency of the measurement instrument, internal validity refers to whether the instrument measures what it is designed to measure (Long & Johnson, 2000), and external validity, or generalisability, refers to the extent to which the results are transferable and applicable to other contexts (Noble & Smith, 2015). While the concepts of reliability and validity are easily applied to quantitative research, their applicability to qualitative research is a topic of discussion (Noble & Smith, 2015). Indeed, numerous researchers have questioned the relevance of applying reliability and validity to qualitative research (Bryman & Bell, 2011). As qualitative research indicates a shift in purpose as compared to quantitative research, it has been argued that it may be more fitting to use alternate frameworks to establish rigour and integrity in qualitative research (Noble & Smith, 2015). It is difficult to apply the concept to qualitative research for several reasons. For instance, it is not possible to “freeze” a social setting and all aspects of a situation for it to be replicated later, thus making it hard to ensure reliability (Bryman & Bell, 2011). Generalisability, or external validity, also poses a challenge, as a case study with a small sample has issues being generalised across other social settings. The concept of internal validity is somewhat more applicable to qualitative research, as the in-depth exploration of a real-life setting is believed to enable a high level of congruence between the concepts applied and data collection conducted (Bryman & Bell, 2011).

3.7 Ethical considerations

An important aspect to take into consideration when conducting data collection and in-depth interviews is that the method follows ethical research standards (Boyce & Neale, 2006; Allmark et al., 2009). Qualitative research poses some unique ethical challenges that researchers need to be aware of when conducting research. These include confidentiality, informed consent, recruitment of participants, and interpretation of the data collected (Haverkamp, 2005; Ponterotto, 2010). To ensure that the research held the ethical standard necessary, the project was registered and approved by NSD (see Appendix 4 for approval from NSD), in addition to being in accordance with the new guidelines posed by GDPR. Preservation of privacy and confidentiality was done in accordance with recommendations by Allmark and colleagues (2009), through changing or removing individually identifiable details of the respondents. Each participant was also presented with, and signed, a written declaration of consent (see Appendix 3 for consent form). All collected data will be deleted upon submission of the thesis.

4 Findings

In the following section, the empirical findings from the research is presented. A brief description of the respondents is presented in Table 1. The respondents were between 27 and 49 years old, and consisted of four females and five males. The respondents had worked in the organisation from between 1,5 to 14 years, and were all working full time. They had various roles within the organisation, of which two were partners, four were managers, and three were associates. Eight out of the nine participants had leadership responsibilities in various extent. All of the participants had completed a master level of education, and were working as auditors at the time of the data collection and interviews.

Table 1: *Descriptive data of participants*

N	Gender	Age	Job duration	Role	Leadership responsibilities	Work status
9	4 Females	(27-49 years)	(1,5-14 years)	2 Partners	8 Yes	9 Full-time
	5 Males	M = 33,2 years	M = 7,3 years	4 Managers	1 No	
				3 Associates		

The subsequent presentation of the results has been divided into the main topics as presented in the conceptual model. The themes identified through the respondents' input will be presented following its overarching topic. In appendix 1, each of the identified themes are presented, along with the number of times statements regarding the theme were reported, as well as how many of the statements were considered to be positively or negatively loaded. Furthermore, the number of respondents who reported the statements and a description of the theme, in addition to corresponding example quotations, are provided.

4.1 Digital infrastructure

When investigating digital change and individual unlearning in the organisation, it was assumed that an important factor would reside in the digital infrastructure already present in the organisation. We wanted to include questions regarding the digital infrastructure as we expected the respondents' perception of the available digital tools' nature to be of importance for employees' participation and acceptance of new digital work tools. The nine interviews resulted in a total of

71 statements related to digital infrastructure. After analysing the statements, it was found that they represented two differing underlying structures. Hence, they were categorised into two sub-categories, referring to their magnitude and quality. In the following, the statements will be presented in accordance with their accompanying categories.

4.1.1 Magnitude

As previously discussed, digitalisation entails the introduction of new work tools and processes at a fast rate. We wanted to investigate the extent to which the participants were satisfied with the amount and availability of digital work tools and processes in their daily work setting. When discussing digital infrastructure, it became evident that there were multiple perceptions and opinions about the magnitude of digital work tools and processes within the organisation. In total, the analysis yielded 38 statements relating to magnitude, of which 24 were negative. While some of the respondents reported that they perceived it to be a manageable amount of digital work tools, several respondents raised their concerns relating to a perceived large amount of digital work tools available to them. Some respondents expressed negativity as they experienced that several of the available digital work tools were overlapping, and that the number of tools made it difficult to navigate between them and knowing which ones are relevant and the most suitable to use:

“It is really a lot of overlapping tools available on several platforms (...) which can turn into a real mess of documentation, so you never know what is the latest version. (...) This affects my implementation rate, as I do not know myself what the latest version is.” (Respondent 3)

“Yes, we have access to a lot which is not in use. (...) and I hear of others who use both three, four and five almost entirely similar tools, so now we are talking overlapping tools, which I think is very unnecessary that we should have.”

(Respondent 5)

4.1.2 Quality

The second sub-theme related to the digital infrastructure refers to the practical use of the digital work tools. More specifically, the quality of the current digital work tools was addressed, which include their technical rigour and ease of use, and how their quality affects the workload and work setting. During the

interviews, the respondents often referred to a specific digital auditing tool that had been released and implemented the previous year, succeeding a prior and well-working tool which had been used for a long period of time. Hence, it should be noted that this part of the findings to some extent is based on the respondents' experiences regarding one specific digital tool.

The analysis yielded 33 statements regarding the quality of the available work tools, of which 31 were negative, illustrating challenges and a perceived low grade of quality in the available digital work tools. Several of the respondents stated that the readiness and quality of the specific work tool was inadequate by the release date, in that the tool had several bugs and technical issues, making it challenging to use in their daily work activities. Respondents also reported that these technical difficulties resulted in extra work, and that it for the time being was not resulting in efficiency gains in carrying out the day to day work tasks and responsibilities:

“My experience has often been that when tools are released, and they don't work properly in the start, we become the test subjects who have to endure a lot of failures in the start, which means that we spend a lot of time on them. The tools should make things more effective and better, but as of today we are not spending any less time because it takes a long time to learn the new system. So we have not seen any efficiency gains from it yet”. (Respondent 9)

“I am of the impression that it [the specific tool] was a very unfinished program when it was released. I am very positive towards everything new, but you have to see the benefits, and you have to implement functioning tools. So right now, it is learning by doing, and a lot of technological development parallel to the usage, which results in us using a lot of extra time on the new tool, which is unfortunate”. (Respondent 4)

4.2 Employee participation

The second topic of our conceptual model focuses on the individual employees. We assumed that engaging in individual unlearning would be an important element when implementing organisational change. More specifically, the factors of individual unlearning are highlighted as important in determining the extent of which individuals partake in change, and are willing and able to change

themselves and their behaviours, through departing from old practices in order to learn new ones.

The interviews and subsequent analysis generated 114 statements regarding the factors related to individual participation. These were analysed and categorised in the predetermined factors highlighted in the individual unlearning literature (Becker, 2010), in addition to one new category that emerged from the analysis. The categories, which will be presented in the following, are positive prior outlook, feelings and expectations, understanding the need for change, assessment of the new way, previous experiences, and impact of age.

4.2.1 Positive Prior Outlook

It was assumed that when dealing with change, how employees react to information about change prior to its implementation is important. Hence, we wanted to investigate how the respondents felt about changes in general, and more specifically before such changes are actually facilitated. Our goal was to investigate whether there were specific patterns regarding a positive or negative attitude towards change, if they expressed an understanding of the reasons for digital change in the organisation, and to what extent they perceived themselves to be prepared and ready for the changes to occur (Becker, 2010). When analysing the data, we found a total of 21 statements regarding prior outlooks, of which 18 were positive, and three were negative.

In general, the respondents communicated a rather positive, unreserved perspective on future changes in their work setting and available work tools. The respondents explained their positive prior outlook in clearly seeing that future changes would bring with them several potential benefits across multiple areas. For example, several respondents referred to benefits related to the quality in the auditing industry, effectivity in their individual work setting, more flexibility, more exciting and rewarding work tasks, and that digital change would incur several benefits for their customers:

“I have always been a supporter of finding good solutions, whether they are digital or not. That is always positive. And I think digital change is good for the industry (...) I think that the quality of our work will improve, the tasks will be more fun, and the increased effectiveness will lead to lower costs as well, which would create more value for the customers, which is positive.” (Respondent 2)

“From my personal perspective, I would say that digitalisation is very positive as it creates an opportunity for increased efficiency, which would generate more cash on the bottom line. This is the main thoughts I have about it. And we have had a history of very little standardised work processes previously. So I would be very positive towards it.” (Respondent 9).

4.2.2 Feelings and expectations

We also wanted to investigate specific feelings and expectations related to digital change in the organisation. In other words, the extent to which the respondents expressed confidence or apprehension towards change, their level of comfort with the previous situation, and whether they assume that implementing change would be challenging to them (Becker, 2010). After categorising the statements from the respondents, the analysis yielded a total of 13 statements related to feelings and expectations towards change. Of these, five were positive, while eight were negative. This indicates that there were differing opinions on digital change, and more specifically regarding how they would react to changes and the subsequent activities while partaking in changes (Becker, 2010). The respondents who responded favourably to digital changes, expressed a desire to change, combined with a personal interest in being able to partake in such situations. The explanation seems to reside in the fact that these respondents felt it was advantageous to shift away from the current or previous work setting, and that it would be exciting to change, and try out something new:

“I am confident I use 100% of all the digital work tools available to me. I would rather spend time on getting to learn a new tool than do manual processes multiple times. It is challenging and time consuming to do so, but it is important to me. (...) I am very positive to everything that comes. They release new stuff all the time, and I always think that ‘Yes, here comes something new, and I cannot wait to get to try it out’.” (Respondent 4)

This can be seen in accordance to the respondents’ statements related to having a positive prior outlook, as both categories to a certain degree refer to being positive and open to change. However, an interesting finding was that while we

recorded a relatively strong positivity towards change in general, we also recorded more negative statements to concrete feelings and expectations towards change. More specifically, the respondents expressed concerns related to the change process itself, and the entailing consequences for them individually:

“By itself, digitalisation brings with it certain challenges, as you have to change your daily work routines and as you have to face the unknown. It is demanding to change, and it is scary, too. And I notice myself, and several of my colleagues, are sceptical in accepting new situations and things we do not have full control over.”

(Respondent 7)

4.2.3 Understanding the need for change

While the two previous categories address perceptions prior to and during digital change and the introduction of new digital work tools, we also wanted to investigate the respondents’ subsequent impressions and thoughts after implementing digital change and work tools. Particularly, we wanted to address how such changes had affected their work situation and their accompanying interpretations of their new situation. This category thus includes the respondents’ understanding of why the change was needed and why the organisation decided to move forward, in addition to their level of comfort with the changes (Becker, 2010). After analysing the interview data, we categorised a total of 35 statements into this category, of which 31 were positive. Based on the statements provided, it was indicated that the respondents mostly understood why digitalisation was needed, and they highlighted multiple reasons for this. For example, several respondents referred to how digitalisation help towards creating more value to the customer, while also emphasising how digitalisation has improved their work setting, tasks and responsibilities, and the quality of their work. This suggests that most respondents have a broad and general understanding of why digital work tools have been introduced in their work:

“I feel the changes that have happened have been thoroughly thought through, and that there is a clear reason for why they were implemented. And I see that it is for the best for BDO, (...) and the quality of my work has improved significantly.”

(Respondent 3)

“Previously, we have worked with developing ‘working papers’ which is our documentation of the auditing process. It is time consuming to develop them, copy and paste passages of text and create analyses. But now, we automatically get these working papers already completed, and can use our time on the analyses instead of actually developing the analysis, which I think is a very favourable development.” (Respondent 4)

4.2.4 Assessment of the new way

We also wanted to investigate whether the respondents compared their new situation to the old. Assessment of the new way refers to whether the respondents view the changes as difficult, and to what extent they use the ‘old way’ as a reference point when assessing the new situation they find themselves in with the new digital work tools (Becker, 2010). This category had a relatively low number of statements, with three positive and five negative statements. As such, it appears that for the most part, the respondents do not generally compare the previous or existing tools and systems to be superior to the new ones, nor do they perceive previous tools as being sufficient so as to evaluate digitalisation to be excessive.

4.2.5 Previous experiences

A total of 15 statements from six of the respondents referred to previously negative experiences with new, digital work tools. While three of the respondents also told about positive experiences, this was reported at a much lower frequency, and always came in addition to negative experiences. 14 out of the 15 negative statements referred to tools or systems having been released with bugs and errors. The respondents reported that such experiences at times resulted in the employees having a sceptical approach to newly released digital tools, manifesting itself through a “wise from injury”-like attitude towards new digital work tools:

“When you have bad experiences with angry clients because the client-tools haven’t worked the way they should... Of course, it results in people dreading to use the tools at new clients”. (Respondent 5)

“Last year I had lots of issues with one of the new auditing tools. So this year, when a new tool came, I held back from using it, because my experiences indicated that there would be problems with this new tool as well. So that’s the consequence, you get very sceptical. And that’s not good. It is almost like you learn from your mistakes, just that the mistake is using the new tool”.

(Respondent 3)

“The challenge is, and it is such a shame it is that way, that when they release tools and systems without testing it thoroughly, it makes people incredible sceptical every time something is released. Last time they released a new system, it brought with it a bunch of problems, and several offices actually opted out of the organisation”. (Respondent 7)

4.2.6 Impact of age

An interesting finding that emerged during the interviews, was the respondents’ perspective on the impact of age among the employees. While this was a theme not specifically addressed by us, the participants repeatedly reported about a perceived difference among junior and senior auditors in regard to the extent of which employees start using new digital tools introduced to them. While three of the respondents emphasised that they did not perceive any clear differences between the levels of experience and age, a total of 20 statements from six respondents argued the opposite. The statements indicating a difference included arguments that older auditors may have become stuck in their work habits, while the relatively newly employed auditors have not yet learned any alternative way than the newest tools and systems, making them more responsive to digital changes.

“I believe the digitalisation is dependent on young people who haven’t got stuck in bad habits yet. It is easier than trying to turn around the 40-year olds who have worked a certain way for years. Of course it is harder for them, they are used to work in a specific matter”. (Respondent 2)

“I think young employees are more used to digital tools, they have grown up in a completely different time. They are used to things being digital. That makes them readier for the types of tools and changes emerging from the digitalisation”.

(Respondent 9)

4.3 Support

The nine interviews resulted in a total of 176 statements referring to support. These statements were further categorised into the three separate categories: leader involvement, formal support, informal support.

4.3.1 Leader involvement

Leaders were assumed to be an important factor when establishing the usage of new tools among employees. We wanted to investigate how the respondents perceived their leaders' involvement relating to the implementation and introduction of new digital work tools in order to get an insight into their role in influencing employees' reception and usage of such tools. The questions were related to the extent to which the respondents experience their leaders to be engaged and encouraging in using new tools. Several aspects of leader involvement were uncovered, such as the degree to which the respondents perceived their leaders having knowledge and ability to use the digital tools implemented. Furthermore, the analysis revealed that there is a lack of clear expectations and guidelines from top leadership regarding which tools that are to be applied, as well as an absence of consequences relating to the usage of the new digital tools. Seven of the respondents stated that they did not think, or expected, their leader to know how to use the digital tools available to them. While some expressed a wish for this, most of the respondents argued that this was not necessary, as it is not the leaders who do the operational auditing, but rather the associates and managers. The leader merely approves the auditing, and most of the respondents stated that they would rather depend on their manager if they had questions regarding the digital work tools:

“I would never ask my leader for help related to digital tools, I believe I know more than them. Because they don't work with the things we do. It is the managers who push us and tell us to use it, and then it is my responsibility to actually use it”. (Respondent 4)

However, a total of 25 statements related to an expressed wish for the top management to have clearer demands and guidelines for those in the lower levels of the organisation in using digital work tools. Several respondents argued that without clear expectations and guidelines from the top management and partners to use the new digital work tools, it would be challenging to get the lower level

employees to actually start using them. Five of the respondents also emphasised the lack of consequences for not using digital tools. According to the respondents, the organisation does not have a structured way of measuring to which extent the employees use digital tools when performing their work. This means that there are no consequences or sanctions for the employees who does not use the new tools, nor is those who use it rewarded for their usage:

“That is kind off the challenge, if there is a demand that a tool is to be used, there is no checking whether it actually gets used. It might be discussed at partner meetings, but it doesn’t show at the lower levels in the organisation”.

(Respondent 9)

“I have yet to experience it being any consequences for someone who doesn’t use a new tool. They might be perceived as being a bit slow among other colleagues, but there are no consequences”. (Respondent 8)

4.3.2 Formal support

We also wanted to investigate the perceived usefulness and satisfaction with how the organisation formally facilitates the implementation of new digital work tools, through offering training and information. We hoped to reveal how the training and facilitation provided by the organisation might hinder or help with how the employees receive and use new digital work tools. As such, the participants were asked to describe their access to training, relevant information and the time they had to learn new digital work tools. A total of 35 statements were positively related to formal support. In contrast, 43 statements were negatively related to the concept. When talking about the formal training offer and access to relevant information regarding new digital work tools, multiple respondents emphasised lacking guidelines and routines as problematic:

“I don’t feel that we as an organisation have a clear plan that help guide each implementation. We don’t do things similarly, so there is no correct answer to how we implement new digital work tools. It is a bit random, and sometimes it is a bit by “word of mouth”. Other times we gather the work group, and someone comes in and explain the background and reasons for why we’re going to use this new thing”. (Respondent 5)

Despite the apparent lack of formal guidelines for providing training and information, it appears that most of the respondents perceived there to be sufficient access to training offers and information when new digital work tools get introduced. Several respondents talked about the elimination of mandatory training, and the increased responsibility to learn the new tools themselves. An interesting finding is that partners and managers often emphasised the importance of taking responsibility for one's own learning, and that the exclusion of mandatory courses and workshops was for the better. In contrast, lower level auditors expressed a greater dissatisfaction with the self-learning, requesting more group-level learning and mandatory training:

“It has to be done at a group level. More group work and more specific practical training. A practical introduction on how to use new tools has to be a part of the official training. You can learn a lot by finding it out yourself, but it takes time”.

(Respondent 1)

“The training offer is actually pretty good. But it is not used as much by the employees, myself included. There is a bunch of guides and manuals on how to use a tool, but then I don't take the time to look at it. So I feel like the offer is there, the demand for it is there as well, but then it doesn't get used after all. What I have found to be the most fruitful is the few times we have dedicated time within the department to actually learn what's new”. (Respondent 7)

Another important factor in formal support is the access to relevant information. Five out of the nine respondents stated that they were satisfied with the information given, saying that it was a sufficient amount and that it was of good quality:

“We have our platforms for information sharing where I feel that there is a lot of information about the digital work tools. That's were all the new about bugs and down time is posted. Not everyone uses the platform, but if you check it every once in a while, you'll be updated”. (Respondent 1)

However, despite the apparent access to and positive quality of the information, several statements referred to issues finding relevant information, or having time to look for it. As such, it appears that accessing the information demands an active, conscious action from the employees, which was perceived as being challenging. Indeed, one of the most frequent findings when analysing the statements regarding the formal support, was the respondents' experience of not having sufficient time available to engage in the training and information offered. A total of 24 statements referred to not having the time for engaging in or learning new digital work tools. Several of the respondents said that because of the time pressure auditors have, what's most important is that they make their deadlines. This, paired with not having time dedicated to learning new digital tools, result in the acquiring of new digital work tools not getting prioritised, consequently impeding digitalisation:

“That’s the sort of the dilemma we face in this business. Even though it pays off in the long run, it feels like you’re wasting your time while doing it, when you have a certain number of hours in the day, and a certain number of things that has to be audited.” (Respondent 1).

“The thing is, in the end, what’s most important is that the job gets done, not how you did it. That is because we are measured on several different parameters. Sure, it’s great if I used a new tool, but if I have spent an extra 15 hours that I can’t bill the client for, it is hours that are lost, and we’re supposed to make a living out of this.” (Respondent 7)

“There is not enough time, and I really think that is a barrier. I absolutely never feel, and I haven’t had that feeling in years, that I have made it through the “to do” list. And there is too much things that get in the way, that is urgent, all the time, for you to sit down and spend an hour or two to learn a new tool properly.” (Respondent 8)

Furthermore, the cycle of an auditor's working year is arranged so that January to April is characterised of an increased workload and deadlines due to the annual reports of which auditors are responsible for preparing for their clients. Because of this, the timing of when a new digital work tool is introduced was also highlighted by several of the participants as being an important aspect influencing whether or not the employees will start using the new tool. It was expressed that the organisation should have a stricter policy on not introducing new work tools during the most hectic months of the year, and rather time it in accordance to the auditors' annual work cycle.

4.3.3 Informal support

In addition to formal support provided by the organisation, we wanted to investigate how colleagues influence each other in the acquisition of new digital work tools. As such, we asked them questions relating to informal support, and how they perceived colleagues to impact their perception of new digital work tools. Eight out of the nine participants stated that they had experienced positive influence from their colleagues or immediate managers, which had facilitated their usage of the tools, resulting in a total of 18 positive statements:

“Colleagues play a part in the implementation of new digital work tools when it comes to the engagement expressed by employees. It is so important that your colleagues are positive and express it”. (Respondent 6)

“People who start using new tools definitely influences others. For instance, we recently had a colleague who took some time to show an employee how to use a new tool. And then the employee suddenly realised how much better and effective the new tool was. So colleagues helping each other can help the implementation, rather than having to sit by yourself and trying to figure it out”. (Respondent 3)

In addition to the positive influence colleagues can have on each other, they also have the potential to hinder the digitalisation, by spreading bad experiences and negative attitudes. Seven of the participants stated that they also had experiences in which colleagues had a negative impact on the extent to which someone had started using a new tool:

“I think negativity spreads easily, much easier than positivity. Because you hear someone who has tried some new tool and who says “wow, that really sucked”. And then you can’t even be bothered to try it out. And then you never get started. If one person has tried it and is dissatisfied, it’s over”. (Respondent 5)

Nevertheless, as the aforementioned statements reveal, colleagues were considered an important source of influence, whether it is expressed as positive support or negative warnings.

5 Discussion

As illustrated through the conceptual model, the purpose of our thesis is to examine how the factors of individual unlearning, together with the factors of digital infrastructure and support, play a part in succeeding with implementing digital work tools. The purpose of this section is to discuss the findings, and to suggest how the elements of the conceptual model proposed contribute to organisational success when implementing digital change. The data analysis presented in the previous section revealed that each of the elements proposed play a role in succeeding with employee participation when implementing digital work tools. Following, the findings will be discussed in accordance with the structure of the conceptual model, divided into the topics of digital infrastructure, employee participation and support. Lastly, a summarising table of our main findings and points of discussion will be presented, in addition to a revised and concluding version of our model.

5.1 Digital infrastructure

The analysis indicated that the respondents perceived there to be too many and overlapping digital work tools available, and that certain implemented tools had been characterised by having bugs and being unfinished at time of release. It appears that these findings are strongly connected to the negative statements regarding one of the categories related to individual unlearning, named “previous experiences”. As several statements regarding negative previous experiences referred to digital tools having technological challenges and flaws, it is assumed that the introduction of flawed or excess tools may result in a negative experience of digital change, which consequently might impede future success of implementing digital change. This is in line with several studies, for instance the research presented by Benamati and Lederer (2000), who found that errors related to new technology can result in it being perceived as ‘useless’. This was especially found to be an issue when organisations hurry the implementation of new products as a response to competitive pressure. Furthermore, research has indicated that employees’ perceptions of digital work tools’ ease of use and usefulness affect the degree to which they use the tools (Davis, 1989; Teo, 2011). Thus, if employees do not perceive new digital work tools to help them perform better, or if they are demanding to use, employees are less likely to use the digital work tools (Robinson Jr., Marshall, & Stamps, 2005), which hinders digital implementation and change.

Indeed, it can be argued that the experience of flawed and rushed technology being implemented, can influence the employees' memories and experiences of change, generating inertia, or a form of passivity, and limit future organisational change. Furthermore, Becker (2010) found that the organisational history of change can impact unlearning, in which negative associations hinder active engagement in change by unlearning.

As such, it can be assumed that this will both affect the employees' passiveness in partaking and engaging in individual unlearning, and the overall success of digitalisation. As the auditing profession has been put forward as a profession that will be greatly affected by digitalisation (e.g. Arsenie-Samoil, 2010), it can be argued that the frequent reports of flawed and excessive digital tools rise from a competitive pressure to have a digital profile, both in regard to clients and employees. As a result, this might lead to technical flaws and an unnecessary number of tools being implemented. Hence, organisations seeking to digitise their work setting should be cautious when implementing digital work tools, and make sure that the tools are not suffering from issues and subsequent problems related to their usage.

5.2 Employee participation

Our findings confirmed the notion that employees cannot be reduced to simply being "recipients" of digitalisation, but rather, are individuals who have feelings, thoughts, and needs which must be taken into consideration for change to have its desirable outcomes. By applying the predetermined categories presented by Becker (2010), employee participation was investigated through the concept of individual unlearning. Firstly, a clear finding was that the respondents in general did have a positive prior outlook on digitalisation. Statements regarding the probability for increased efficiency, flexibility, and more interesting work tasks were frequently reported, reflecting that the respondents had a rather unison positive perspective on digital change before its implementation. Positive expectations to outcomes of change has been linked to employee commitment and participation in change (Portoghese et al., 2012). In addition to holding positive expectations, the respondents also expressed an understanding of why change is appropriate and needed. For instance, they stated that they had expected the audit profession to be more digitised by now than what it actually is, and that such additional changes would be regarded as positive, as changes would entail

additional improvements in their work setting. As such, they might consider news about new digital tools as an opportunity of being freed from mundane and repetitive tasks which characterise parts of their work setting, which may induce a willingness to unlearn and adapt to future changes. The respondents also reported an understanding of needed change *after* the implementation of digital work tools and processes. Even when reporting about flawed tools, respondents often emphasised that they perceived the tools to be needed, and that it was the isolated versions of the tools that were the problem, not that the digital tool in itself was excessive and unnecessary. Obtaining insight into employees understanding of needed change can be fruitful when designing change interventions. In their research on organisational change within auditing firms, Whelan-Berry and colleagues (2003) found that successful change was dependent on auditors' understanding of why change was needed, and on their perceptions of how changes had provided them with clear improvements in their work setting after implementation.

Despite reporting an overall positive perspective on the need for change, both prior to and after changes, respondents often reported negative feelings and expectations towards the actual process of changing. These negative statements were often based on a fear of the unknown, having work routines disrupted, and expectations that changing would be difficult and involve a loss of control. These responses are in accordance with a multitude of earlier empirical findings, suggesting that factors as fear of the unknown (Dent & Goldberg, 1999), fear of losing control (Oreg; 2003; Weeks, Roberts, Chonko, & Jones, 2004), and uncertainty (Curtis & White, 2002) are considered one of the main explanations as to why resistance to change arises. As such, it appears that understanding the need for change and being positive towards change can be considered separate from how the actual changes are perceived and experienced. Hence, it can be argued that positivity and openness towards digital change not necessarily shield emotional and cognitive responses and effects on employees. Indeed, it has been argued that attitudes towards change, including resistance, can be understood as a multidimensional concept consisting of emotional, cognitional and intentional factors, which can give rise to what has been termed ambivalent responses to change (Piderit, 2000; Oreg, 2006). For instance, employees may have positive beliefs about change, but still experience negative emotions, and employees can simultaneously feel both excitement and fear about changes. In consequence,

individuals may have several conflicting motivations for participating in change. It can thus be argued that organisations should be aware of how such varying responses to change may impact participation, and that organisations should appropriately try to accommodate for them in order to be more likely to succeed in implementing digital change.

In addition to the findings in accordance with Becker's (2010) factors of unlearning, an additional category emerged from the data analysis, which were related to individual employee demographics. The emergent category was one related to the impact of age, or to what extent age affected the level of participation in digital change. Indeed, Becker (2010) argued that certain demographics, like age, may be influencing individual experiences during change. Age and tenure has been proposed as important factors influencing perceptions of organisational change as technology implementation (Laumer, Maier, Eckhardt, & Weitzel, 2016). Most respondents discussed how age and experience in colleagues created differences in the implementation rate of new digital work tools and processes. Research has indeed suggested that age is related to increased difficulties in correcting or unlearning previous responses and behaviours (Belbin, Downs, & Moore, 1964). As age and tenure can be expected to create stable work habits, this is an important factor to consider in unlearning, as habits and routines are difficult to change or abandon (Tsang & Zahra, 2008). Indeed, routines tend to persist even when change is needed, and can thus be considered a source of resistance to change (Edmondson et al., 2003). Particularly, it was proposed by the respondents that older employees had a harder time unlearning work habits, which lead to lower rates of individual unlearning in order to start using newer digital work tools.

However, some of the respondents noted that such generalisations could be too simplistic, as they perceived significant differences in implementation rates within various age groups. Indeed, several other individual factors has been linked to attitudes towards change, such as personality traits. For instance, the trait openness to experiences has been linked to digitalisation via affecting technology acceptance and adoption (Nov & Ye, 2008). It is likely that a variety of individual factors can impact the extent of employee participation, and that organisations must consider such variables when engaging in technological changes, and help employees cope with changes in accordance with their personal characteristics (Vakola et al., 2004).

5.3 Support

In regard to leadership involvement, the analysis revealed that the respondents did not perceive their leaders to have the technological knowledge and competence needed to assist them with the usage of the digital tools, and that this was not something they evaluated as being an issue. However, the respondents did express a wish for clearer guidelines, communication of expectations, and consequences for employees' who did not participate in the digitalisation. This can be seen in light of the stages suggested by Kotter (1995). Especially the fourth, fifth and sixth stages were found to be neglected by the organisation's leaders. The leaders might create a vision for the organisation to be digital, but they are not adequately creating and communicating a clear strategy for how the employees will achieve this. It was also reported that there were few consequences for those who did not participate in the digitalisation, as well as a lack of reward or recognition offered to those who participated and embraced the usage of the new digital tools. Consequently, the respondents said that they lacked both sanctions and clear incentives for whether or not to participate in the usage of the new tools. Indeed, research has indicated that rewarding technology adoption and integration supports implementation of digital change (Beggs, 2000; Hsu & Lin, 2008).

It was also found that there were obstacles undermining the success of digitalisation in relation to formal support and leadership involvement. Especially, not having enough time to learn the tools was repeatedly emphasised as one of the key issues slowing digitalisation. This creates a discord between the organisation's focus and commitment to becoming more digital, and the actual resources available for the employees to act on this vision. Indeed, while the formal support reflected in the training and information offered was evaluated as being adequate, the reporting of insufficient time to actually engage in it was perhaps one of the most frequently reported findings resulting from the interviews. As a result, despite the reported clear understanding and need for the digitalisation, several of the respondents stated that they now perceived it as a "waste of time" to devote time to learn the tools during the most hectic periods, as the importance of reaching the deadlines outweighed the importance of acquiring skills needed for participating in the new tools. Not having the appropriate time to engage in training inhibits the motivation to learn as it becomes 'something extra' in addition to their daily work duties (Tjepkema, 2003). Thus, it can be assumed that the lack of time to engage in the acquiring of the skills needed to use the new tools represent an obstacle for

organisational change success. Consequently, as emphasised by Kotter (1995), this should be a key concern for the organisation to take into consideration, and it should be willing to take the costs associated with securing sufficient time for the employees to actually learn the tools.

An additional interesting finding is that the leaders reported that they perceived self-learning to be of great importance, and that this was something that was working well for the employees. However, lower level employees repeatedly argued the wish for more formal and mandatory training sessions. A reason for this might be due to the fact that the leaders does not use the digital work tools themselves, and thus lack a complete insight and understanding of how the digital work tools operate in practice. While the tools in theory might be easily understandable, it is evident that their practice requires more attention than what is available for the employees to invest in at the current point in time. Consequently, the employees tend to use the tools already familiar to them, and are thus not engaging in unlearning. Hence, it can appear that the organisation treats the facilitating of unlearning as an afterthought, rather than a prior consideration (Becker, 2010).

Informal support was also found to be a key factor influencing the success of digitalisation. Almost all of the respondents confirmed that their colleagues and immediate manager played a significant role in their usage of digital work tools, consistent with the proposition of the “informal support” factor presented by Becker (2010). Colleagues who spoke positively about new tools facilitated both an urge and a pressure among peers to adopt them. Furthermore, employees often used colleagues in addition to, or instead of, the formal training offer. Several of the respondents stated that they often found it easier to use tools after a colleague had explained how to use it. Asking a colleague for help was reported to be easier and more convenient, as time pressure made it difficult to navigate the formal training offer alone during the most hectic periods. However, colleagues also held the potential to have detrimental effects on their peers’ engagement in the digitalisation. Colleagues and team members who shared bad experiences had a contagion effect, and an attitude of “If he’s had a bad experience, I’m not going to be bothered to try it out” was often the result after someone had shared bad experiences. The findings that colleagues and peers plays an important role in participating in the change is in accordance with research. According to Madsen, Miller and John (2005, p. 228), employees’ social relationship at work was found to be linked to organisational

change readiness, meaning that positive feelings, attitudes and perception of colleagues has the potential to facilitate an environment where individuals are more willing and open for being involved and supportive of organisational change. In relation, it is natural to assume that this relationship also is present in the opposite sense, meaning that negativity in the social relationships can affect the change participation, through reducing the willingness to engage in the change.

5.4 Main findings

In order to summarise the main findings, and to offer a more elaborated and representative understanding of the findings and analysis, a systematically presentation of the results can be arranged. The questions accompanying the findings are provided in order to give a systematic overview of the main findings, following the structure of the conceptual model proposed. The table is presented over two pages.

Table 2: *Systematic overview and summary of the thesis' main findings*

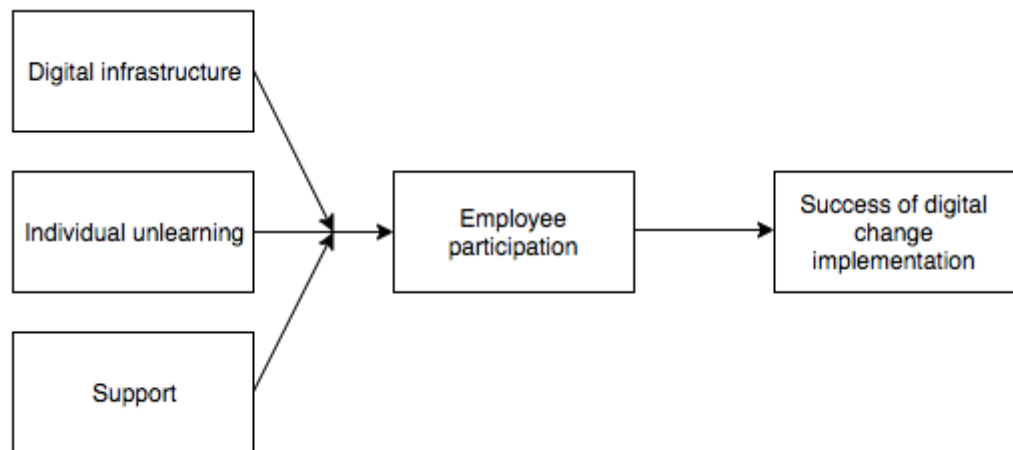
<p>In what ways are the digital infrastructure present in the organisation today perceived by the respondents in relation to succeeding with digitalisation?</p>	<p>The findings revealed that while having a strong emphasis on being digital and having digital work tools available, the available tools were to some extent evaluated as being excessive and overlapping. It had also been multiple experiences with flawed and bugged tools, resulting in bad experiences with implementation of digital work tools. These bad experiences were repeatedly reported to impede the respondents' engagement in acquiring the skills needed to learn new digital work tools.</p>
<p>What individual factors are reported to impact employees' participation in the digitalisation?</p>	<p>Through applying the predetermined factors of individual unlearning, it was found that most of these were present in the respondents. This comprise of the respondents reporting that most of them had a positive prior outlook, and saw the need for the changes post implementation, but that they had some negative affective evaluation during change. In</p>

	<p>addition, it was found that age was perceived as being a factor impacting the participation.</p>
<p>How is the leader involvement, formal, and informal support perceived by the employees, and how does this affect the success of digitalisation?</p>	<p>A somewhat surprising finding was that they respondents didn't perceive their leaders limited knowledge of the application of new tools as problematic. Rather, they expressed a wish for more formal guidelines, clearer expectations and consequences accompanying the digitalisation. Furthermore, the formal support as expressed through the training and information offer was initially perceived as being sufficient, however, the lack of time to engage in the offer was pointed out as one of key challenges to getting the employees to participate in the digitalisation. Lastly, informal support was found to be of great importance, both in facilitating, and impeding, the engagement in digital work tools, as colleagues shared their experiences of applying the tools with each other.</p>

5.5 Revised model

Through the aforementioned review of the data collected, analysis and discussion, we propose a revised and concluding model (Figure 2), elaborated and developed from our initial conceptual model (Figure 1), in order to better represent the findings of the thesis.

Figure 2: *Revised and concluding model*



The revised model illustrates how employee participation can be seen as a result of employees' engagement in the process of individual unlearning. While figure 1 proposed that the elements of digital infrastructure and support had an isolated, or separate, impact on the success of digital change implementation, our findings rather suggest that these elements influence the degree to which an employee engage in individual unlearning, and consequently his or her participation in digital change. As such, the digital infrastructure present and support available in an organisation that is going through digitalisation, is believed to be key elements in either facilitating for, or hindering, the process of individual unlearning. Furthermore, the engagement in individual unlearning is believed to affect employee participation, and consequently, the success of an organisation's digital change implementation.

6 Limitations

There are certain limitations to this study that should be addressed. For instance, qualitative research has limitations in regard to the extent to which it is possible to draw conclusions and generalize from the findings (Kvale, 1996; Boyce & Neale, 2006; Atieno, 2009). The study has a small sample size, consisting of nine respondents sampled from one specific organisation at one point in time. Hence, it is difficult to generalise the findings and to draw general inferences, as it is difficult to compare the results with other employees or organisations (Becker, 2005). However, a sufficient sample size is reached when participants generally bring up the same information and topics. Additionally, a small sample size may be prone to bias (Bovey & Neale, 2006), which can influence the analysis and findings through subjective interpretations and meanings, as exemplified by most respondents referencing a specific digital auditing tool when discussing the overall quality of the available digital infrastructure. However, generalisation is not necessarily the main goal of qualitative research (Morse, 1999), but rather to develop a deeper understanding (Boddy, 2016), in which smaller sample sizes are more appropriate and justifiable in order to fully investigate a given concept (Crouch & McKenzie, 2006). Nevertheless, a limitation of the study lies in the restricted opportunities to generalise the findings to other contexts.

Furthermore, although in-depth interviews are a useful method for gathering information (Guion, Diehl, & McDonald, 2001), there are pitfalls related to conducting them. They require the interviewer to be focused and objective, while being aware of cues that can guide the respondent's answer, such as body language or wording of questions (Boyce & Neale, 2006).

As the data collection consisted of interviews held in Norwegian, it is acknowledged that some of the meaning of the verbal content may have been lost, or altered, in the process of translation, as the translation of qualitative data can conflict with the need to properly capture the meaning, contexts and nuances in conversational speech. In order to counter this, we transcribed the interviews in Norwegian, before back-translating to English, to be more able to fully convey the true content in English (Lopez, Figueroa, Connor, & Maliski, 2008). However, certain elements may have been altered throughout the translation process.

7 Future research, practical implication, and theoretical contributions

It should be noted that individual unlearning has been the subject of relatively few empirical investigations. Because of this, the concept does not necessarily fit into already established theoretical frameworks. Thus, a lack of attention to individual unlearning may be a reason as to why it as a concept has been argued to stand on a somewhat weak conceptual foundation (Tsang & Zahra, 2008). Furthermore, the research that has been conducted has been centred around organisational learning, rather than individual unlearning. Hence, we recommend more research on the concept of individual unlearning in order to properly investigate the concept and thus advance the literature on organisational change. As the thesis takes an exploratory approach, the thesis contributes theoretically by opening up for more quantitative research on the topic, which can allow for the scope and generalisability of the qualitative findings in this thesis to be assessed (Bryman & Bell, 2011). Furthermore, as there has been relatively scarce academic interest in individual unlearning within the change literature, the thesis yields theoretical contributions towards creating a better understanding of how individual unlearning is important in facilitating employee participation in organisational change.

Given the somewhat limited research dedicated to the field of individual unlearning, interpreting and applying arising knowledge in the field to new settings should be done with caution, as relevant processes and factors prior to and during unlearning is not yet fully understood. Thus, there is a need for further research to investigate factors relevant to the concept. This can for instance be individual factors such as demographics, personality traits, or mind-sets that might influence the degree to which employees engage in individual unlearning. Additionally, there is a need for more research on situational and organisational factors influencing individual unlearning. For example, national contexts, industries, culture and organisational size can be assumed to have an impact (Becker, 2010). Lastly, more research is needed in order to fully understand the benefits of successful individual unlearning in organisational change initiatives. We believe that increased attention on individual unlearning can help unveil its potential, and that by doing so, organisations will be more willingly to address this concept while implementing change.

8 Conclusion

The main purpose of this thesis has been to investigate the link between employee participation and succeeding with implementing digital change. More specifically, we wanted to explore the concept of individual unlearning as presented by Becker (2010), and how this together with the present and available digital infrastructure and support, together may influence successful digitalisation. In line with previous research, we found that the factors of individual unlearning had implications for employees' engagement in using new digital work tools. More specifically, it was found that despite having employees who had a positive perspective and understanding of digital change, organisations must also acknowledge and handle the negative feelings and reactions accompanying disruptive changes. Individual characteristics, such as age, may also have implications for employees' ability to engage in the process of unlearning.

Furthermore, organisations must refrain from getting overwhelmed and carried away by the competitive pressures of being digital, and rather take careful consideration when deciding which digital work tools to implement. The study found that exposure to overlapping or flawed tools results in bad experiences, which consequently can hinder the extent to which the employees engage in individual unlearning, and participate in digital change. Thus, organisations should accompany their focus on digitalisation with a quality oriented scepticism and selectiveness when deciding which tools to introduce.

It was also established that support is essential when engaging in change. Having uninvolved leaders impede change success, and leaders must set clear demands for digitalisation, ensuring that the employees has the resources needed for engaging in what's new. This entails securing sufficient amount of time to engage in the formal training offer, and providing incentives for employees based on their participation. Furthermore, promoting positive encounters between colleagues should be a priority, as a means towards facilitating positive informal support, as this affects the engagement of individual unlearning.

Summarised, we found support for the importance of facilitating for individual unlearning prior to implementing digital work tools, and to further investigate this concept as to gain a broader insight into how to best engage in digital change. It is evident that organisations have to make sure that the affected employees have the resources necessary to relinquish what they knew yesterday so that they are ready to receive and engage in the new digital work tools of tomorrow.

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Appendices

Appendix 1: Summary of key concept and themes derived from data analysis

Table 2
Summary of Key Concepts and Themes Derived from Data Analysis

Theme	Concept	N of statements	N of interviews	Description	Example quotation
Digital infrastructure		Positive = 14	6	Perception of it being a satisfactory amount of digital work tools.	"I don't think that there are a lot of overlapping tools, and I have access to what I need."
	Magnitude (N = 38)	Negative = 24	7	Perception of it being too many, too few, or too overlapping digital work tools.	"... We are talking overlapping tools, which I think is very unnecessary that we should have."
	Quality (N = 33)	Positive = 2	2	Being satisfied with the quality and ease of the digital work tools.	"The quality of auditing has increased significantly with the digital work tools."
Employee participation		Negative = 31	9	Experience of digital work tools being flawed.	"It has not worked as supposed, it has been a lot of bugs we hoped would not be there."
		Positive = 18	6	Having a positive overall view and understanding of why change is needed.	"Personally I am very positive because there is a hope for efficiency gains and more cash on the bottom line."
	Positive prior outlook (N = 21)	Negative = 3	3	Being sceptical when receiving news of implementing new digital work tools.	"We are sceptical if we don't understand the reasons for change. I am critical if I don't see the benefits."
		Positive = 5	3	Having positive feelings and expectations towards managing the new digital work tools.	"I am positive towards all that comes (...) I always think that 'Yes, here comes something new, and I can't wait to get to try it out.' "
	Feelings and expectations (N = 13)	Negative = 8	5	Feeling apprehension towards the new digital work tools and expecting it to be difficult.	"With the tools I have spent time learning, I would be sceptical if it came changes in them."
		Positive = 31	9	Individuals' understanding of the need and reasons for change, and comfort in decision to change.	"Our customers expect us to become digital and create value for them. It is clear, it is important to us."
	Negative = 4	2	Individuals' lack of understanding the need and reasons to change, and discomfort in decision to change.	"I don't think we do things more effectively. The total is negative."	
	Positive = 3	2	Being satisfied with the new digital work tool and perceiving it as being better than the previous tools.	"What has arrived has helped."	
	Negative = 5	3	Finding the new dig. work tools difficult, and perceiving the previous tools as being sufficient.	"The tools I know from earlier are those I use because that is the easiest and problem-free."	
<i>(continued)</i>					

Table 2
Summary of Key Concepts and Themes Derived from Data Analysis

Theme	Concept	N of statements	N of interviews	Description	Example quotation
Employee participation (cont.)	Previous experience (N = 20)	Positive = 5	3	Positive previous experience with digital change positively affecting future implementation of change.	"I don't think my negative experience affects my future implementation, as I have experienced more positive implementations."
		Negative = 15	6	Negative previous experience with change negatively affecting future implementation of change.	"I'll rather wait, as my experience is that new digital systems entails a lot of challenges (...) I am once bitten, twice shy."
	Impact of age (N = 25)	Yes = 20	6	Perception of age/experience being related to the degree of implementation of digital work tools.	"With digitalisation, you are dependent on young people who are not stuck in old routines."
		No = 5	3	Perception of age/experience not being related to the degree of implementation of digital work tools.	"It may be more about interest (...) and it may be about personality, willingness to change and curiosity."
Support	Formal support (N = 78)	Positive = 35	9	Perception of satisfactory access to training, relevant information and time to learn new digital work tools.	"The formal offer for training and development is maintained well."
		Negative = 43	8	Perception of insufficient access to training, relevant information and time dedicated to learning.	I don't feel we have a clear framework for training and time to learn new digital systems."
	Informal support (N = 25)	Positive = 18	8	Influence from colleagues or managers that positively facilitates the reception of new digital work tools.	"Colleagues have a big impact on using new digital work tools. It becomes a talking point if people have a positive experience."
		Negative = 7	6	Influence from colleagues or managers that negatively affects reception of new digital work tools.	"Negativity spreads easily (...) We hear about people's negative experiences, and then I don't bother."
Leadership involvement (N = 73)	Positive = 23	7	Leaders are involved, encouraging, and sets guidelines in implementing digital work tools.	"It is clear why the tools are implemented as there has been a major focus on effectivity (...) which has been communicated."	
	Negative = 50	7	Leaders are not involved, encouraging and not setting guidelines in implementing digital work tools.	"You have expectations, (...) but it doesn't show downwards in the organisation."	

Appendix 2: Interview guide

Introduksjon:

- Introduksjon av tematikk
- Begrepsavklaring
- Forklare hva slags spørsmål som vil bli stilt
- Informere om hvordan intervjuet vil foregå og om hvordan data vil bli behandlet
- Signere samtykkeerklæring

Bakgrunnsvariabler:

- Alder:
- Kjønn:
- Utdannelse:
- Fartstid:
- Stilling:
- Stillingsbrøk:
- Lederansvar:

Åpne spørsmål:

Teknologisk infrastruktur:

1. Hvilke digitale arbeidsverktøy har du tilgang på i din arbeidshverdag?
 - *Omfang*
 - *Er noen av verktøyene overlappende?*
 - *Tydelige retningslinjer vs. frihet til å velge*
 - *Estimat på aktiv bruk*
 - *Begrunnelse*

Tanker, følelser og forventninger:

2. Hva er ditt perspektiv på hvordan digitaliseringen har påvirket revisjonsbransjen?
 - *Opplevelse av forbedring/effektivisering av arbeidshverdagen*
 - *Opplevelse av samsvar mellom digitalisering og forventninger. Er det mer eller mindre?*
 - *Hvordan opplever du behovet for denne digitaliseringen?*
3. Kan du fortelle litt om dine tidligere erfaringer med organisatorisk endring?
 - *Positive eller negative opplevelser?*
 - *Erfaring med digitalisert endring?*
 - *Tror du at dine tidligere erfaringer/det at du ikke har tidligere erfaringer, påvirker dine følelser og forventninger når av nye digitaliserte arbeidsverktøy blir introdusert?*
4. Hvordan vil du beskrive dine forventninger i det du blir fortalt at et nytt digitalt arbeidsverktøy skal bli introdusert?
 - *Positivt eller negativt?*

Leder, kollegaer og implementering:

5. Hvordan introduseres og implementeres digitale arbeidsverktøy og metoder i organisasjonen?
 - *Informasjon og begrunnelse fra leder*
 - *Kollegaer rolle i introduksjon av nye verktøy*

6. Hvordan vil du beskrive tilbudet organisasjonen tilbyr av trening og opplæring i forbindelse med introduksjon av nye verktøy?
7. Hvordan vil du beskrive at måten organisasjonen implementerer digitale verktøy på er i samsvar med dine behov for å best mulig ta de i bruk?
 - *Forberedt, forståelse, tilretteleggelse?*

Avsluttende spørsmål:

8. Har du opplevd utfordringer knyttet til implementeringen av nye digitale arbeidsverktøy?
9. Om du ble bedt om å komme med forslag til hvordan organisasjonen bedre kunne introdusert og implementert nye digitale verktøy, hva ville de anbefalingene vært?
10. Er det noe du ønsker å legge til eller kommentere?

Appendix 3: Consent form

Vil du delta i forskningsprosjektet ”Digitalisert Endring i Revisjonsbransjen”?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt som skal undersøke forhold rundt ansatte i revisorbransjen og deres opplevelse av, og reaksjon på, implementering av digitale verktøy og arbeidsmetoder. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Formålet med dette prosjektet er å avdekke hvorvidt vellykket introduksjon og implementering av digitale arbeidsverktøy og -metoder i revisorbransjen. Mer spesifikt er formålet å avdekke i hvilken grad avlæring er tatt i betraktning og hvordan dette eventuelt påvirker suksessgraden av digitalisert endring. Prosjektet er en masteroppgave for linjen Leadership and Organizational Psychology ved Handelshøyskolen BI.

Hvem er ansvarlig for forskningsprosjektet?

Handelshøyskolen BI er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Det er din arbeidsgiver som har identifisert og rekruttert deg som deltaker i prosjektet. Det tas sikte på å rekruttere 8-10 personer til prosjektet.

Hva innebærer det for deg å delta?

Hvis du velger å delta i prosjektet, innebærer det at du deltar i et intervju. Dette vil ta deg ca. 45-60 minutter. Intervjuet inneholder spørsmål om teknologiske, organisatoriske og individuelle faktorer tilknyttet digitaliseringen av din arbeidssituasjon hos din arbeidsgiver. Det vil bli tatt lydopptak og notater fra intervjuet.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykke tilbake uten å oppgi noen grunn. Alle opplysninger om deg vil da bli anonymisert. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg. Det vil heller ikke påvirke ditt forhold til din arbeidsgiver.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Det er kun prosjektgruppen, bestående av to studenter, og veileder som vil ha tilgang til dine opplysninger. Informasjon om deg og opplysningene du gir oss vil bli anonymisert og lagret på en egen enhet, og holdes adskilt fra øvrige data. Ved prosjektslutt (01.07.2019) vil alle data slettes. Du vil ikke kunne bli gjenkjent i en eventuell publikasjon.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Prosjektet skal etter planen avsluttes 01.07.2019. Da vil alle data vedrørende personopplysninger og opptak slettes.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg,
- å få rettet personopplysninger om deg,
- få slettet personopplysninger om deg,
- få utlevert en kopi av dine personopplysninger (dataportabilitet), og

- å sende klage til personvernombudet eller Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Handelshøyskolen BI har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- *Handelshøyskolen BI* ved Tom Rosendahl (tlf. +47 464 10 751), Sindre Strømmen Odden (tlf. +47 959 05 968), eller Ingvild Sveier Ottemo (+47 415 99 827)
- Vårt personvernombud: personvernombud@bdo.no
- NSD – Norsk senter for forskningsdata AS, på epost (personvertjenester@nsd.no) eller telefon: 55 58 21 17.

Med vennlig hilsen

Sindre Strømmen Odden
(Masterstudent)

Ingvild Sveier Ottemo
(Masterstudent)

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet *Digitalisert Endring i Revisjonsbransjen* og har fått anledning til å stille spørsmål. Jeg samtykker til:

- å delta i intervju

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet, ca. 01.07.2019

(Signert av prosjektdeltaker, dato)

Appendix 4: Approval from NSD**NSD** NORSK SENTER FOR FORSKNINGSDATA**NSD sin vurdering****Prosjekttittel**

Endringsledelse og digitalisering i revisjonsbransjen

Referansenummer

912157

Registrert

22.02.2019 av Sindre Odden - Sindre.S.Odden@student.bi.no

Behandlingsansvarlig institusjon

Handelshøyskolen BI / BI Oslo / Institutt for ledelse og organisasjon

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Tom Rosendahl, tom.rosendahl@bi.no, tlf: 4746410751

Type prosjekt

Studentprosjekt, masterstudium

Kontaktinformasjon, student

Sindre Strømmen Odden, sindre.odden@gmail.com, tlf: 95905968

Prosjektperiode

01.03.2019 - 01.07.2019

Status

27.02.2019 - Vurdert

Vurdering (1)

27.02.2019 - Vurdert

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet med vedlegg den 27.02.2019, samt i meldingsdialogen mellom innmelder og NSD. Behandlingen kan starte.

MELD ENDRINGER

Dersom behandlingen av personopplysninger endrer seg, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. På våre nettsider informerer vi om hvilke endringer som må meldes. Vent på svar før endringer gjennomføres.

TYPE OPPLYSNINGER OG VARIGHET

Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 01.07.2019.

LOVLIG GRUNNLAG

Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake. Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

PERSONVERNPRINSIPPER

NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

- lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen
- formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke behandles til nye, uforenlige formål
- dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet
- lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: åpenhet (art. 12), informasjon (art. 13), innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18), underretning (art. 19), dataportabilitet (art. 20).

NSD vurderer at informasjonen om behandlingen som de registrerte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER

NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

OneDrive er databehandler i prosjektet. NSD legger til grunn at behandlingen oppfyller kravene til bruk av databehandler, jf. art 28 og 29.

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og/eller rådføre dere med behandlingsansvarlig institusjon.

OPPFØLGING AV PROSJEKTET

NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til med prosjektet!

Kontaktperson hos NSD: Kajsa Amundsen
Tlf. Personverntjenester: 55 58 21 17 (tast 1)