UMEÅ UNIVERSITY

FROM ABRUPT CHANGE TO DAILY ROUTINES

The organizational effect of one year with COVID-19

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Abstract

The way we work has changed rapidly since the COVID-19 pandemic turned the world upside down. Remote work and telecommuting have become the new norm, a trend many of us have not asked or wished for. In this sense, this research is a reassessment of how IT companies in Sweden approached and managed the sudden transition to working remotely. With the support of previous literature on the topics of crisis management, organizational routine dynamics, and telecommuting, a set of seven semi-structured interviews were conducted to better understand the long-term challenges companies face during a crisis-induced shift into remote work. Our research reveals that organizations manage to quickly adapt the core business routines and operations, while social interactions and communication issues seem to be the biggest bottleneck when moving entirely remote. This leads to a perceived loss in overall productivity and the suffering of the work-life balance among all our respondents and their teams.

Keywords: remote work, crisis management, telecommuting, COVID-19, routine dynamics, organizational change

1. Introduction

Due to the COVID-19 pandemic, companies and employees have been forced to suddenly shift into working remotely, whether they prefer it or not. The abrupt shift has pressured companies to rapidly implement and evolve telecommuting systems to enable distance work (Kuruzovich, Paczkowski, Golden, Goodarzi, & Venkatesh, 2021). Just a few months into the global pandemic, it was estimated that by July 2020 39.6% of the work carried out by European employees was done from home office (Ahrendt, Cabrita, Clerici, Hurley, Leončikas, Mascherini, Riso, & Sándor, 2020), while only around 5.4% have done so between 2009-2019 (Milasi, González-Vázquez & Fernández-Macías, 2020). Among these workers, the vast majority are employed in IT and other communications businesses. Sweden is one of the European countries with the biggest share of employment in such knowledge and IT-intensive fields (Milasi, et al., 2020). As a result, Sweden also has the largest proportion of workers who began telecommuting following the pandemic (Milasi, et al., 2020). To facilitate remote work, organizations need to make use of digital infrastructures and technologies, such as communication systems, video meetings, platform sharing software, etc. Although these types of technologies and infrastructures have been put into place in most work environments already, the usability and feasibility in actual remote work have been questioned (George, Lakhani, & Puranam, 2020). As face-to-face cooperation is diminished, results might prove more important than behaviors, but at the same time collaboration, cooperation and innovation are bound to suffer (George, et al., 2020). Thus, the impact of the COVID-19 pandemic sheds light on a need for organizations to be able to manage rapid and temporary

transitions to remote work, but also to develop and maintain temporally sustainable structures that support flexible distance working.

In terms of what has been established by prior research, studies on how to manage a crisis suggest that organizations could minimize the risk and vulnerability by preparing across a "portfolio" of different crises which might occur (Pearson & Mitroff, 1993). By diversifying and preparing across a portfolio of different crises, the organizations would benefit similarly to an investor spreading risk in a financial portfolio. Further, it has been argued that although two different crises may share similarities, every crisis is often unique in a sense and that similar types of crises may appear and affect organizations completely differently (Pearson & Clair, 1998). However, in terms of the crisis caused by COVID-19, all organizations face the same crisis, with the same characteristics and threats. The effect of COVID-19 makes the situation special as it forces organizations to suddenly change to working remotely. Thus, both the reason for the crisis and the consequence is unusually obvious and clear for all organizations. Instead, what remains uncertain is the effect it might have on the business, and how firms should adapt to manage the situation and continue their operations.

Regarding working remotely, the concept of *telecommuting* is often used to describe the situation when employees are working from other locations than a common office. Although the concept of *telecommuting* has been around for 30-years, the past year and outbreak of COVID-19 have led to a massive increase and adoption among companies and organizations (Kuruzovich, et al., 2021). To facilitate remote work, organizations must ensure to provide technology and *telecommuting systems* so that the routines and operations can be performed at distance. However, when *telecommuting* is implemented as an action to manage a crisis, the abrupt and sudden shift puts pressure on organizations to rapidly establish the required tools and technology. Normally, *telecommuting* is offered through a well-established plan and structure to facilitate distance work. Therefore, when organizations are forced to abruptly shift into remote work, they must rapidly ensure that their routines and operations can be performed at distance and digitally. The challenges of such a transition are most often looked at from the perspective of the employee, through concepts such as work-life wellness (Como, Hambley & Domene, 2021). Employees are shown to express both advantages and disadvantages regarding remote work, sometimes even simultaneously. In this sense, workers exhibit wildly different individual values as opposed to normalized team values an office team or department would otherwise exude. Further issues with the improvised home office space, the environment's distractions, and improper technologies are all potential risks to work performance, often interweaving during operation. What arises again is the need to investigate how these factors evolved during the prolonged remote work imposed by the pandemic. (Como, et al., 2021)

While the transition to remote work was initially proposed only as a temporary measure, it has now become the standard way of working for most companies more than a year into the pandemic. Remote work is something not everyone fully expected or asked for but came as a necessity for companies in order to remain competitive. Thus, this study aims to develop knowledge that is useful for organizations that seek to successfully transition to remote work in times of crisis. Specifically, we aim to contribute with knowledge that may assist in making an initial transition and adaptation. To that end, we turn our attention to how organizations

have experienced the shift to remote work during the ongoing pandemic, how they have adapted their business and the role that digital technology has played during this shift. The explicit research question guiding our research is: *How can organizations adapt to manage crisis-induced shifts to remote work?*

To answer this research question, we have conducted a qualitative study based on seven interviews. In our analysis of the results, we draw upon the concepts from the field of crisis management, telecommuting, and routine dynamics. The findings of our study indicate that organizations manage to adapt the routines and core operations smoothly and without affecting the core business. However, problems regarding communication, social interaction, and motivation have been found to suffer as the organizations struggle to find new routines to uphold interaction, culture, and motivation.

2. Theoretical Frame & Related Research

In this chapter, we will present models, concepts, and theories from previous research regarding crisis management, routine dynamics, and telecommuting. The purpose of this chapter is to develop a better knowledge of the subject of our study and provide a better understanding of the topic and our research question.

2.1 Managing the COVID-19 crisis

The COVID pandemic struck out of nowhere and forced organizations to make swift adaptations without the ability for any extensive preparations. From one week to the next, organizations were forced to transition into remote work. This resonates well with the definition of an organizational crisis, defined as *"a low probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution as well as by a belief that decisions must be made swiftly"* (Pearson & Clair, 1998, p. 60).

The concept and theory of crisis management has been studied and explored by many authors in different contexts over the years (Pearson & Mitroff, 1993; Lagadec,1997; Darling, 1994; Spillan & Hough, 2003; Pearson & Clair, 1998; Darling, 1994). As a crisis may arise from a wide variety of reasons, ranging from *computer tampering* to *executive kidnapping,* to *diseases* and *health problems,* the broad spectrum of reasons makes it problematic to generalize and draw conclusions that suit all types of crises (Pearson & Clair, 1998; Pearson & Mitroff, 1998). From a managerial perspective, the study by Pearson & Mitroff (1998) establishes that managers consider crises to consist of five dimensions; *high magnitude, require immediate attention, an element of surprise, the need for taking action*, and a*re outside of the organization's complete control.* In addition to defining what classifies as a crisis, researchers have also argued regarding the meaning of organizational crisis management and what the concept refers to in terms of organizational impact and processes. For example, it has been argued that the concept of crisis management refers to both management during a crisis but also before and after the actual event (Caywood & Stocker, 1993, referred to by Simola, 2005) and that the concept includes the elimination of risk and uncertainty as well as planning and preparing for a potential crisis (Fink, 1986).

As the definition of a crisis may be broad and include a wide variety of scenarios, researchers have found several factors and characteristics which may differentiate one type of crisis from another. In order to categorize a crisis, Pearson & Mitroff (1993) suggest a two-dimensional approach (Figure 1), where one dimension refers to the differentiation between a crisis that is perceived as primarily technical/economical in its nature or primarily human/social. The second dimension refers to the initiation of the crisis and classifies the crisis as either 'normal' or 'severe' depending on if the crisis occurs from a relatively normal, everyday, event, or if it is the consequence and result of a more unusual or unexpected event. In the middle of these extremes lies a category of "Occupational, Health, Diseases", as these types of crisis concern both technical and human/social factors, as well as both normal and unexpected events. Although there are several sources and reasons for a crisis to occur, this categorization with two primary dimensions shows that some types of crisis may share common features. By gathering different types of crisis into categorizations, it enables organizations to understand the nature of certain crisis types and thus plan for a suitable action if needed (Pearson & Mitroff, 1993). Familiarizing and understanding the key issues when dealing with each of the six types of crisis may increase the organizational ability to manage another crisis within the same category. Meaning that an organization that has been through one type of crisis could transfer the knowledge and experience gained and be better prepared if another crisis within the same category occurs.
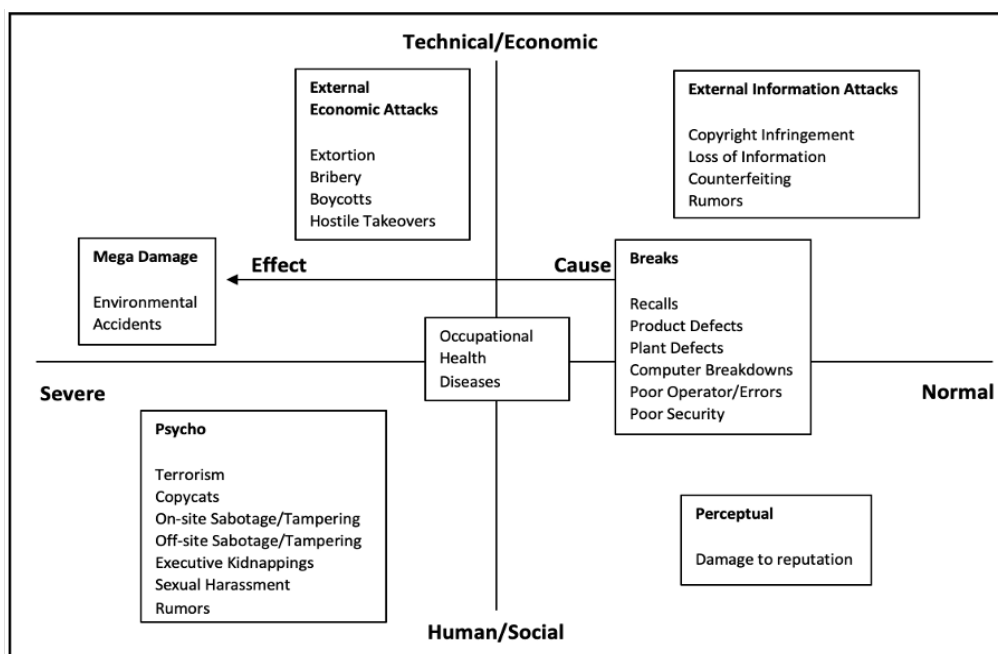
Figure 1 – Illustration of different types of crisis and the dimensions.
Reference: Pearson & Mitroff (1993).

In order to minimize the risk and potential damage of a sudden crisis, organizations would benefit from preparing across a "portfolio" of different crises (Pearson & Mitroff, 1993). The benefit of diversifying and preparing across a portfolio of different crises appears just like an investor may benefit from spreading risk in a financial portfolio. The aim and purpose of establishing a portfolio of different crises is to minimize the vulnerability by planning across different crisis types (Pearson & Mitroff, 1993).

Besides categorizing crises and understanding the characteristics and elements of the different types, nearly all types of crises go through some sort of timeline consisting of different stages or phases (Pearson & Mitroff, 1993; Darling, 1994). Pearson & Mitroff (1993) suggest a series consisting of five stages starting *with* 1) *early warning signals*, and are followed by 2) *preparation/prevention*, 3) *containment/damage limitation*, 4) *recovery*, and lastly 5) *learning* (Figure 2). The process suggested by Pearson & Mitroff (1993) is somewhat developed and based on the work of Fink (1986, referred in Darlin, 1994), who suggests a process of four phases. However, what differs the two suggestions is that Pearson & Mitroff (1993) include more detailed and specific events as well as emphasizing on the importance of *learning* from the occurred crisis.
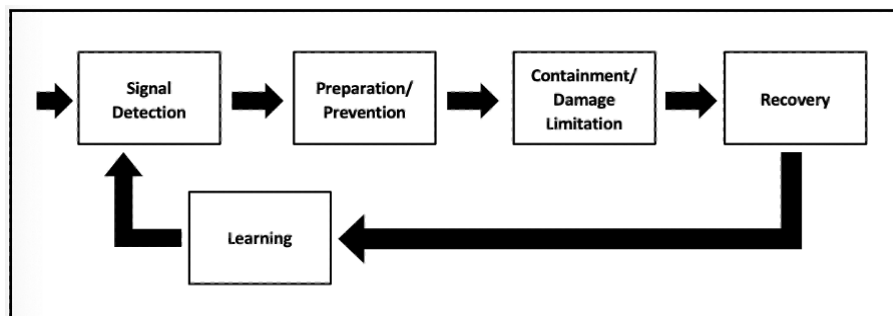

Figure 2 – Illustration of the five phases of crisis management.
Reference: Pearson & Mitroff (1993).

Looking closer at the presented timeline, there are most often several warning signals to be detected and noticed at the beginning of a crisis. However, these warning signals tend to be overseen and ignored by management and organizations (Pearson & Mitroff, 1993). Thus, the organizational challenge of this initiating phase is to learn how to separate and detect important signs of a potential crisis. The following phase, *preparation/prevention*, refers to the importance of systematically scanning for risks and threats before the damage becomes severe. However, Pearson & Mitroff (1993) underlines that the importance of this stage is not to prevent all types of crises, but rather to effectively manage those which still occur despite all actions taken. Yet, even with well-established routines for detecting early warning signals and preparing and preventing according to plans, some crises will inevitably occur as they lie outside of the organization's control. Thus, the stage called *"damage limitation"*, refers to limiting the effects and damage (Pearson & Mitroff, 1993). The aim of this phase should be to secure vital activities and operations in order to keep the business going.

After the crisis has occurred, follows the stage of *recovery*. The importance of this phase is to identify critical operations needed to recover and conduct normal business as well as identifying key activities to maintain strategically important customers and clients. In terms of technical factors, this stage also includes activities such as establishing alternative workplaces and securing needed hardware and software. Lastly, the phase of *learning* focuses on the importance for managers and organizations to reflect and critically examine the past event and the lessons learned (Pearson & Mitroff, 1993). This phase is often ignored by organizations as many believe that the crisis was a one-time event that will not occur again. However, studies have shown that the best performing organizations in crisis are those who take time to reflect on what contributed to their performance, as well as what went well and what could have been

done better. In terms of learning, organizations should also be aware of the fact that two different crises may share similarities, and thus it is important to reflect and learn from every event although one might think that the same crisis will never occur again.

Considering the research that has been done regarding managing the particular crisis forced by COVID-19, studies have highlighted the effect of crisis-induced remote work on an individual level, such as the perceived balance between work life and personal life and the potential stress effects (Arendt et al., 2020). Generally, some employees might experience difficulties with overworking and the inability to switch off from the mental state of working, while others appreciate the flexibility of combining work with household activities. Further, a study by Blumberga & Pylinskaya (2019) on Russian organizations reveals that 23% of respondents often experienced more downtime and a bigger need for self-management while the manager started paying less attention, or rather, the executives not having the proper tools to manage their reports.

Thus, the research has primarily been focused on how individuals experience the current state of COVID-19, i.e., working remotely, and the advantages as well as the disadvantages. What is lacking is an overarching understanding and knowledge of how organizations have acted from the origin of the COVID-19 crisis, and more specifically how organizations have adapted their routines and operations to enable remote work. We are lacking an understanding of how a crisis-induced shift into remote work can be established, and how the routines of the firm are affected by such sudden and drastic change. To generate this knowledge, we need to understand the transition that organizations have been undergoing as manifestations of crisis management and we need to understand the concept of routines, as well as how they change, in order to get a better understanding of these issues.

The following section aims to introduce and understand the concept of *organizational routine dynamics.* As the sudden actions of crisis management strongly affect the routines of an organization, it is important to understand the foundation of routines, what they consist of and how they change. In addition, the concept of *telecommuting,* i.e., remote work, will be presented to develop an understanding of the factors which might have an impact on the organizational routines.

2.2 Organizational Routine Dynamics

The concept of organizational routines is well established and discussed within organizational management. According to Feldman & Pentland (2003), organizational routines are key features of organizations and are commonly used as an explanatory phenomenon in established research and theories. In terms of how to define organizational routines, a widely accepted definition refers to organizational routines as *"repetitive, recognizable patterns or independent actions, carried out by multiple actors"* (Feldman & Pentland, 2003). Further, it has been established by prior research that organizational routines are critical reasons to why organizations accomplish much of what they do (March & Simon, 1958; Nelson & Winter, 1982).

Although it has been proven that organizational routines are a common reason for inertia and inflexibility (Hannan & Freeman, 1983; Weiss & Ilgen, 1985), organizational routines also serve as a source for change and flexibility (Feldman & Pentland, 2003). In fact, every

organizational routine could potentially serve as a cause for change simply by its constant performance. The phenomena related to change caused by routines are often referred to as adaption (Cyert & March, 1963) or mutation (Nelson & Winter, 1982). Even though organizational routines are usually known as recreating past events, the performance of routines could also include adapting to a situation that requires particular or continuous change as well as considering the reason for future events. Thus, this contradicting description establishes the fact that organizational routines are complex and dependent on the situation as well as a variety of factors.

The purpose of organizational routines is often referring to promoting efficiency. However, it also includes self-reflective and other reflective behavior (Feldman & Pentland, 2003). Further, the authors argue that organizational routines consist of both the resulting performance as well as the understanding and reasons of these performances. Considering the basic foundation of routines, it has been argued that routines must contain both action and actants (Feldman, Pentland, D'Adderio & Lazaric, 2016). Meaning that without an action there is no routine, and in order to perform the action, actants must be involved.

Looking closer to what constitutes organizational routines, it has been argued that it consists of two related parts; one part which contains the abstract idea of what to be done, i.e., structure, and another part consisting of the actual performance and execution of the routine by specific people, at a certain time and place (Feldman & Pentland, 2003). Based on previous literature, Feldman & Pentland (2003) present three dominant metaphors which together create a consistent explanation of the nature, causes, and consequences of organizational routines. The first metaphor compares organizational routines to individual habits, meaning that an organization is similar to an individual, where the people within the organization become its arms and legs. Further, the metaphor refers to habits as automatic actions that do not require any thought or consideration. The second metaphor states that organizational routines can be seen as programs or scripts. These programs require more thoughts than habits and could include certain choices that need to be done by the performer. The last metaphor likens routines to genetic material. Referring to evolutionary theory, this metaphor insinuates that routines are a *"persistent feature of the organism and determine the possible behavior"* (Feldman & Pentland, 2003).

As mentioned above, it is argued that organizational routines consist of two aspects; one part containing the structure and abstract idea, and one part consisting of the actual performance. These aspects are defined as the *ostensive aspect* and *performative aspect,* where the ostensive aspect refers to the abstract and ideal form of routines, and the performative aspect refers to the specific actions made by people (Feldman & Pentland, 2003). Thus, the ostensive aspect forms the perception of what the routine is in terms of norms or standardized operating processes while the performative aspect contains the actual actions being done to fulfill the ostensive aspect. Further, the ostensive aspect often acts as a template for behaviors or goals. Together, these two aspects form the general understanding of an organizational routine which consists of an idea and structure as well as an action and performance.

In terms of how routines change, it has been established that change in either one of the ostensive or performative aspects, does not necessarily lead to a change in the other (Feldman

& Pentland, 2003). Further, organizational routines are sometimes related to absorptive capacity which refer to the organization's capacity to acquire, assimilate, transform, and exploit knowledge (Pentland, Feldman, Becker & Liu, 2012). However, it has been argued that change of routines does not occur by itself, rather it must be forced or induced by an action or deviation (Pentland, et al., 2012). Meaning that an autonomous routine will not induce a change once the routine has been established. Instead, it would require a variation or deviation in the performance to potentially induce a change. For example, meaning that the existing routine could not be completely performed or performed at all for any reason. The deviation or variation could then lead to a drift in the patterns of actions. Depending on the history of a routine, a routine can be changed or established rather quickly if the history is relatively short. Thus, as the history of a routine increases, it requires more effort to establish a new routine. However, despite the variation or deviation in the action of a routine, the drift and change will not be permanent unless it is decided by the performers (Feldman, et al., 2012).

By developing this knowledge about organizational routines, we can better understand what happens to the organization during a crisis-induced shift to remote work. As research about crisis management argues that securing and maintaining core operations of the business is a critical part of managing a crisis, it implies that the routines of the firm play a crucial part in both maintaining the core operations, as well as adapting to the circumstances. Thus, to be successful it is important to understand the foundation of routines and their dynamics to realize *how* to act and *why,* i.e., the consequences of it.

2.3 Telecommuting

The concept of *telecommuting* is often used when referring to working remotely. An early transportation-centered definition of the concept suggests that a key aspect is the elimination of commute trips, i.e., the transportation to and from an office or workplace (Handy & Mokhtarian, 1995). In terms of the elimination of transportation and commute trips, the elimination must depend on the fact that work is performed in another location than the work's usual site. Although the concept of *telecommuting* has been around for 30-years, the past year and outbreak of COVID-19 has led to a massive increase and adoption among companies and organizations (Kuruzovich, Paczkowski, Golden, Goodarzi & Venkatesh, 2021). The abrupt shift has pressured companies to rapidly implement and evolve telecommuting systems to enable distance work (Kuruzovich, et al., 2021). However, suddenly adopting the concept of telecommuting includes several challenges for organizations to overcome in order to be successful. For example, Kuruzovich, et al. (2021) argue that the previous experience with telecommuting, as well as the organizational levels of IT capabilities, are decisive for successful adoption and transformation.

To facilitate telecommuting a combination of enabling technologies such as hardware, software, and networking is required to establish a connection with the central office. This group of enabling technologies are referred to as *telecommuting systems* (Kuruzovich, et al., 2021). The use of telecommuting systems in order to connect with the organization is thus referred to as *telecommuting system use.* As some jobs may require employees to work completely independently, while others may include conferences and meetings with clients and customers, the degree of telecommuting system use may vary as well as the importance of a

solid telecommuting system. As the specific tasks of employees may require them to connect with others in the organization through a telecommuting system, that telecommuting system becomes a critical link for the firm and its operations (Kuruzovich, et al., 2021). Thus, in order for firms to sustain productivity, efficiency, and quality while working remotely, it is important that the telecommuting system upholds a certain standard and quality. However, the quality of the software is not only important for maintaining productivity and quality in job assignments. Research by Venkatesh & Johnson (2003) found that employees' motivations to use the provided telecommuting systems were related to the quality of the software. Meaning that software that enables higher levels of social presence and telepresence increases the employee's motivation to use the telecommuting system as intended.

The terms *social presence* and *telepresence* are used to describe and determine the user experience when using a telecommuting system in terms of social and interactive factors. The term *social presence* refers to the affective social outcomes when using telecommuting system software (Short, Williams & Christie, 1976; Lombard & Ditton, 1997). Further, social presence describes the degree to which the software supports interpersonal relationship outcomes of communication. Meaning that a software that enables high levels of social presence, possesses the ability to convert understated expressions and signals to create an emotional connection between users and individuals (Short, et al., 1976). Thus, a high qualitative telecommuting system that allows for a high degree of social presence provides an environment that encourages the type of relations and interactions that normally are limited to face-to-face interactions at the workplace.

The second term used to describe the user experience is called *telepresence*. As social presence refers to the communication and interaction as well as sharing of emotions, telepresence focuses on the ability of the telecommuting system to stimulate a feeling of being present at a remote location (Lombard & Ditton, 1997; Slater, Usoh & Steed, 1994). To exemplify software like *Slack* or *Skype for Business,* used for interactive collaboration, allows users to easily indicate the current ability to communicate and interact by choosing a status representing their present activity (Kuruzovich, et al., 2021). An important difference between social presence and telepresence is that social presence involves interaction with others, while telepresence may refer to interacting solely with the telecommuting system by e.g., setting a *status* to represent one's current activity. In order to create a higher degree of telepresence, a telecommuting system can create a greater sense of presence by facilitating an experience of non-mediated communication (Held & Durlach, 1992), e.g., by the use of high-speed video and audio to reduce the feeling of technology mediation. Another strategy and tool to increase the telepresence is a shared virtual space (Lanier & Biocca, 1992). The purpose of a shared virtual space would be to create a genuine feeling to simulate real and relevant actions, such as entering and leaving a chat room just like one might enter and leave a conference room or physical room at a workplace. This type of feature is often used in applications for communication as one can indicate that you are available for a chat or video conference with colleagues and thus facilitating a sense of being in the same location (Kuruzovich, et al., 2021).

In order to achieve both a high social presence and telepresence, Venkatesh & Johnsson (2003) found that a software and virtual workplace with the intent of simulating real-life actions on a workplace, e.g., arrival and departure, will enhance and improve the user's

experience. However, as social presence and telepresence generally co-exist and complement one another, the term *telecommuting software quality* is normally used to describe the quality of how well a system provides social presence and telepresence in order to support telecommuting (Kuruzovich, et al., 2021).

Looking at the outcomes of telecommuting and the potential effects on organizations, research has indicated that telecommuting was positively related to task and contextual performance (Gajendran, Harrison & Delaney-Klinger, 2015). In addition, studies have also shown that telecommuting may have a positive effect on employee satisfaction and job performance (Vega, Anderson & Kaplan, 2015; Golden, 2006). However, even though studies indicate positive effects in terms of satisfaction and performance, other studies have also shown that telecommuting may have a negative influence on work exhaustion (Windeler, Chudoba & Sundrup, 2017; Sardeshmukh, Sharma & Golden, 2012). Despite the research indicating a negative influence on work exhaustion, Maruyama, Hopkinson & James (2009) discovered that telecommuters valued the possibility of managing working hours or time flexibility as a major importance, as it contributed positively to their work-life balance. However, in terms of overall consequences of telecommuting, studies have shown that the key factors affecting the favorable outcomes of telecommuting are the reduced communication with colleagues, the manager's trust, and support as well as the suitability of working at home (Nakrosiene, Buciuniene & Gostautaite, 2019).

3. Research methodology

The following chapter aims to describe and clarify the research methodology which we chose and used to conduct our study. The chapter is initiated by a discussion around our choice of research design and approach. We will then explain how our literature review was conducted an provide a description of how our data has been collected and analyzed. Lastly, we will shortly discuss ethical principles which have been considered throughout our study.

3.1 Research approach

In terms of the research approach, we chose to adopt the interpretive perspective. The reason for adopting the interpretive perspective relates to the formulation of our research question and the scope of our study. As we intend to examine how firms have experienced the adaptation to the pandemic situation, our study relies on the subjective interpretation of firms and their experience of the situation. The interpretive perspective is grounded in the concept that knowledge is subjective and based on the individual conception and understanding (Bryman, 2018). Further, it is argued that within the interpretive perspective, there is no right or wrong, or objective truth, to what knowledge is (Myers, 2013). Therefore, we argue that the interpretive perspective is suitable and appropriate for our study as we will rely on subjective thoughts and conceptions from firms and respondents. In terms of an alternative to the interpretive perspective, another option could be to adopt the positivistic perspective instead. The positivistic perspective is more related to studies that examine relations, patterns, and settings that are measurable and quantifiable (Bryman, 2018). Thus, as mentioned above, we

argue that the interpretive perspective is more suitable for our study as it corresponds to our purpose and research question.

3.2 Research design

In order to conduct our study, we chose to apply a qualitative research method. The choice of method is based on the purpose and research question of our study. Since we aim to develop knowledge and understand how firms have experienced the shift to remote work during the ongoing pandemic, how they have adapted their business and the role that digital technology has played during this shift, we argue that a qualitative method is most suitable and relevant. Also, the qualitative method is considered to be most related to the interpretive perspective and focuses on the understanding of the respondents' subjective thoughts and values (Bryman, 2018). The qualitative data aims to understand and describe the motivation and actions of people, and also the surrounding context (Myers, 2013). Thus, the choice of qualitative method is well in line with both our research question and purpose as well as our choice of perspective and therefore a relevant design for our study. Looking from an opposing perspective, it could also be argued that a quantitative method is not an appropriate method for our study. According to Bryman (2018) and Trost (2010), a quantitative method should be applied if the research question and purpose are formulated to examine how *often,* how *many,* or how *common* something occurs or is. Further, the quantitative method relies heavily on numbers and numerical measurements, while the qualitative method relies on words and expressions (Bryman, 2018). Thus, as the answer to our research question is accessed through words and narratives, rather than numerical measurements, we argue that the quantitative method is not a suitable choice of method for our study.

Even though we argue that the qualitative method is most suitable for our study, there are of course both advantages and disadvantages with our method of choice. One advantage, which we briefly mentioned above, is that the qualitative method seeks an explanation and a deeper understanding of a problem, which matches the purpose and research question of this study. However, an issue that is often highlighted within the field of qualitative research is that the results may be difficult to generalize to a bigger setting than the one being explored (Bryman, 2018). Further, as the qualitative data is often based on relatively small samples, the generated results are not statistically representative for the rest of the population (Myers, 2013; Trost, 2010). We are aware and agree with this criticism, while still arguing that the critique is not relevant for our study as our purpose is not to draw statistical conclusions for a whole population. Another area of critique, which is often discussed in qualitative research, is the lack of transparency (Bryman, 2018). The criticism about lack of transparency implies that qualitative research methods tend to be rather diffuse and unclear in terms of how respondents may have been selected for an interview. Furthermore, the critique regarding lack of transparency is also aimed towards the analysis of qualitative data, meaning that the analysis tends to be vague since it is rarely presented, in detail, exactly how the analysis has been conducted or how the conclusions have been generated (Bryman, 2018). In relation to the quantitative method, where the data analysis is often thoroughly described, presented and detail, the analysis within qualitative studies has been criticized for not upholding the same standards as within quantitative studies. The issue which occurs when the method tends to be

unclear and diffuse is that the difficulty of a recreation of the study increases, which may lead to doubts regarding the validity, reliability, and trustworthiness of the generated results. In terms of the critique regarding transparency, we are fully aware and understand the reasons behind it. However, in order for us to counteract this criticism, we will in the following sections, as detailed and precisely, describe our method of choosing respondents, our choice of data collection, and analysis. We will use tools, procedures, and methods that have been previously used by other researchers within the same field, in order for us to increase our transparency and thus the trustworthiness of our study. Although it has been argued in the research methodology literature, that such clarification and description is not equally transparent as the descriptions within quantitative studies (Bryman, 2018), we argue that it is important to clarify our methodology, to the best of our ability, in and strive for as much transparency and understanding of how the results of our study have been generated.

3.3 Literature review

Finding relevant literature regarding related and previous research is essential to establish a solid foundation to base our study on. In order to find relevant literature, we have primarily relied on databases and resources available through Umeå University Library, as well as Google Scholar. Through the university library, we could access databases such as Emerald, EBSCO, and JSTOR, which provide access to numerous research papers and scientific journals. In our review, we have primarily searched for articles and literature regarding crisis management, working remotely, and telecommuting. The reason for reviewing these subjects and areas relate to the purpose and research question, and the fact that we find these areas relevant and needed in order to generate a solid result. Some of the most frequently used key terms in our search has been *"crisis management", "remote work", "telecommuting", "pandemic"* and *"COVID-19",* and similar. These terms have also been combined in different variations in order to ensure a well-covered and grounded review, but also to narrow the search down and get a more focused search. The selection of which articles to include was not only based on the relevance to our study, but also how many times the article and authors have been cited, and in which journal it had been published. To increase the reliability, credibility, and trustworthiness of our study, a criterion for selecting an academic paper as a source of our literature collection, was that it had to be peer-reviewed. With the peer-review criteria, we argue that we increase the relevance and credibility of our review and study as a whole.

The approach we used to gather our literature could be described as a combination of *narrative* and *snowballing* (Bryman, 2018). A narrative literature review implies that the researchers are searching rather broadly and widely with the purpose of gathering a solid foundation of material to use. The gathered material has then inspired and pointed us in the direction towards relevant topics and areas. Meaning that by reading one article which we find relevant, we have been able to leverage the references on which the article is based on and retrieve those articles for further collection. This method is often referred to as *snowballing* and can also be used in reverse, i.e., searching for other articles which have been quoted and cited to the current one. By relying on this combined approach, we have managed to build a solid foundation of previous and related research, which will be useful for us in order to answer our research question.

3.4 Empirical data collection

For qualitative studies, interviews are considered to be the most important and common method for gathering data (Myers, 2013). Interviews intend to understand the thoughts and emotions, the experiences, and the context of the respondent (Trost, 2010). Interviews are also considered to be an appropriate data collection technique when the research question is formulated with the word "*how*" (Kvale & Brinkmann, 2014). Thus, we choose to rely on interviews for our data collection technique, as it relates to the formulation of our research question and the purpose of our study.

In terms of qualitative interviews, there are generally three types of structures and techniques through which the data can be gathered. The techniques are known as *structured interviews, semi-structured interviews,* and *unstructured interviews* (Denscombe, 2018). In our study, we have used the technique of semi-structured interviews, which means that we prepared a list of questions and topics to discuss during the interview. However, the central characteristic of semi-structured interviews is the room for flexibility. Meaning that the interviewer is somewhat free to change the order of the questions as well as asking additional follow-up questions. By doing so, the chance of getting relevant and accurate answers increases, as the respondent may elaborate more freely and develop the answers. A structured interview, on the other hand, would essentially mean that the respondent answers a questionnaire with pre-decided answers to choose from (Denscombe, 2018). Opposite to structured interviews are unstructured interviews, which means that the interviewer only prepares themes and topics rather than formulating questions (Denscombe, 2018). Within unstructured interviews, the interviewer should just support the respondent briefly, and let the respondents elaborate and develop their thoughts and answers without being pushed in a certain direction or order.

As mentioned, we gathered our data through semi-structured interviews and interviewed seven respondents about the change caused by the pandemic at their workplace. To ensure that we gathered relevant data for our study, we established sample criteria based on our research question which the respondents had to fulfill in order to be selected. Thus, in order to be selected, the respondents had to work at a company with strong connections to IT and technology. Another criterion was also that the company should recommend and advise their employees to work remotely, and that actions to enable that due to the pandemic, should have been taken. Based on our criteria, we used a combination of *snowball* and *convenience sampling* to find respondents for our interviews. Through the use of our network, we reached out to potential companies and asked if we could interview them for our study. Through this approach, we managed to get seven respondents from different companies and a variety of roles such as; *project manager, operation manager, ERP-specialist, CEO,* etc. (see table in appendix A). The average company size centers around 10-30 employees per company. However, one company stated that they currently have about 300 employees. Six out of seven companies stated that their main company language is English, while one stated that Swedish is the most common language used. All companies had a clear and strong connection to IT in their business as they were working with software development, ERP-systems etc. The selection of IT-related firms was a choice based on the assumption that organizations with strong IT-connection would be more used to, and familiar with, IT. Thus, the lack of knowledge

and experience of using IT and software, would not be considered the main issue when working remotely and relying on IT. Instead, the respondents could focus on other, more relevant factors, rather than only the knowledge of how to use IT. The mix of roles and companies provided us with a good mix of perspectives and insights, which generated valuable and extensive data.

All of our interviews were held online through video chat and took around 20-35 minutes. Before conducting our interviews, we established an interview guide with questions and themes to cover during the conversations. The interview guide was inspired by our previous literature review and was used as a support to ensure that we asked relevant questions. However, as we relied on semi-structured interviews, the interview guide was used more as a support rather than a script meaning that we encouraged the respondents to elaborate rather freely. By letting the respondents elaborate freely, it meant that some questions were skipped or replaced by other follow-up questions. By doing so, we often managed to create the sense of having a conversation rather than an interview, which is argued to be positive as the respondent might feel more secure and confident to answer more honestly and with more emotions and opinions (Trost, 2010).

3.5 Data analysis

To analyze our empirical data, we applied a method known as thematic analysis. To use thematic analysis means that the analysis is conducted by seeking patterns and themes within the collected data (Braun & Clarke, 2006). In our process of analysis, we started by reading through the transcriptions from the interviews several times while coding the material and grouping the codes into bigger themes. By reading the transcriptions, we familiarized ourselves with the data and developed a good overview of the data which we had collected. After familiarizing ourselves with the material, we started to code the data and highlighted parts, sentences, and paragraphs of particular importance to our study. The development of codes was based on finding relevant material in relation to our research question. Once all the material was coded, we began the process of reviewing the codes and grouping them into bigger themes. The phase of reviewing the codes and grouping them into themes is a critical part of the analysis process which requires careful consideration and reflection. To minimize the risk of missing out on important codes and themes, we came up with codes and potential themes individually. The purpose of doing so was to not get affected by each other in the process and miss out on important parts because of "group thinking". After the individual work, we compared our findings and combined our codes and themes. As it turned out, we had very much similar codes and themes, although sometimes with different definitions. When developing the themes, we did it by comparing the codes with our previously gathered literature in order to find suitable, relevant, and well-describing themes. The final themes which we decided on are presented as the headlines in the analysis chapter.

By using the framework by Braun & Clarke (2006) as a support in our analysis we managed to establish a clear and efficient structure. The structure helped us handle the data and follow a clear process in terms of analyzing the material and establish concrete results (Braun & Clarke, 2006). By following a previously agreed and accepted process, we countervail the

criticism mentioned earlier regarding lack of transparency and unclear methods of analysis within qualitative research.

3.6 Ethical principles

When conducting research, there are some basic ethical principles that the researcher should follow. The most common principles to follow are known as; *information requirement, consent requirement, confidentiality requirement,* and *useful requirement* (Bryman, 2018). The information requirement refers to the importance of informing the people involved about the purpose of the study, their role, and how the data will be used. The consent requirement means that the participants may decide themselves whether to participate or not. Further, the confidentiality requirement implies that the information regarding the participants should be treated with confidentiality. Lastly, the useful requirement means that the information and data collected only will be used for the current research and its purpose (Bryman, 2018).

Throughout our study, we have, to the best of our knowledge and capability, strived to follow these principles. In order to do so, we have always made sure to inform the respondents about their participation and how their answers will be used. We have also made sure to uphold the consent requirement by sending an initial request with a potential respondent, asking if they would be willing to talk with us. Further, the data gathered during our study has only been available to us within the study and treated confidentially to ensure anonymity for the participants. In terms of the *user requirement*, the data gathered from our data collection will solely be used for the purpose of this thesis and not shared with any external part. By taking these requirements into consideration, we have managed to conduct a study of a high standard while ensuring safe conditions for the participants as well as us as researchers.

4. Results

In the following chapter, we present our findings and results from the interviews. From the interviews, we got insights into the thoughts and remarks from several people at different positions and companies. Throughout the answers, we could identify major similarities and themes which we have decided to cover in the subsections contained in this chapter.

4.1 Communication as the digital bottleneck

Our conducted interviews reveal a great unanimity that communication has been the most prominent challenge for managing and implementing a suitable remote work environment. Issues that otherwise would have been solved through short conversation now have to span across multiple messages back and forth or be scheduled as an additional video meeting at a specific time that also has to fit all the participants' schedules. Frustrations, limitations, and delays with meetings were echoed by all respondents which are highlighted by the following comments by different respondents.

1) *"For every small thing, I have to schedule a meeting. Before that I could just walk to people's desks and have them show me their progress, technically I need to have way more meetings over the day."* (Respondent 4)

2) *"[…] everything requires a meeting/call/IM conversation, whereas earlier, a quick 3-minute discussion at someone's desk might've sufficed."* (Respondent 6)

Due to the added barriers to effectively communicate, misunderstandings and errors can arise more frequently and may stay undetected longer, which could lead to preventable hiccups and additional reviews in a project circle. The delay in communication may cause an individual to follow their own intuition instead of seeking consultancy and support from their respective manager. Many of the respondents often do not receive complete status updates and reported that they have a harder time tracking the progress of a task or project.

3) *"I can not just straight walk up to people's desks anymore and have them show me their progress. I believe errors and misunderstandings arise from this which stay longer undetected."* (Respondent 5)

Other important notes were made when it came to the way of communicating in remote work. One respondent mentioned that he: "[…] *can not see the eyes of the person*" (Respondent 5) he is talking to, as people often do not directly look in the camera, and even if they do, the eyes would never meet as they would in a real conversation. Another interesting comment was made in regards to feeling disconnected by not being able to read the body language of the dialogue partner.

4) *"It makes me feel like I'm losing touch, as I consider body language as an important factor when communicating."* (Respondent 5)

Another big disadvantage was summarized under the term "technology dependence". All interviewed companies rely on a steady working internet connection as well as the tools they are using. Since they are using online services, such as Slack or Discord, to communicate, they rely on their availability. The probability that issues arise is perceived as very high, as every staff member is working on their own internet connection which increases the chance that someone might be unavailable due to internet downsides. Another point regarding this is that often voice tools do not work properly, as they cause blurriness in screen sharing, lag might arise or even the hardware, such as microphones and cameras, do not work properly.

Lastly, one respondent pointed out the slight shift in power dynamics when dealing with video group calls. Because of the delay in communication, it often appears that multiple people start talking and interrupt each other at the start of sentences, and for a more reserved participant it can be difficult to get their voices heard.

5) *"The only thing I can think of is that doing meetings online, you need to be much more mindful that everyone gets to speak since slight delays make this a lot more difficult than it would be in person."* (Respondent 3)

4.2 Social Aspects & Work-Life Balance

Another common theme is centered around social interactions, company culture, and the decreased morale due to it. It was commonly agreed that the transition to remote work would not only bear challenges on the business side but also on the interpersonal side. Every respondent mentioned to us that the missing social interaction with fellow colleagues, which

remote work inevitably causes, would leave its effects on them personally and on their team alike. Some respondents mentioned the feeling of being alone or feeling separated from the team, which causes distress, motivation loss, and frustration among the staff.

6) *"I miss the interaction with my colleagues and sitting at home makes me feel alone."* (Respondent 4)

7) *"Before you had a nice team and worked on a project together, but now the whole team atmosphere is somehow gone."* (Respondent 4)

All companies approached this matter in different ways. Some started to introduce staff surveys to better understand of their employee's feelings and provide aid where needed. In turn, others started to introduce more "one on one meetings" with their staff to discuss concerns and thoughts directly in a separate call. In one case, a rise of mental issues among their staff was detected. If those measurements were not taken, those issues may have otherwise gone unnoticed.

8) *"We had staff surveys to check how everyone was feeling."* (Respondent 4)

9) *"Also, we noticed that the pandemic has impacted employees' mental health, due to the restrictions of meeting people, going out and going on holidays."* (Respondent 3)

As a result of the problems listed above, most of the interviewed companies started to develop online events or digital coffee breaks to strengthen the team culture and to enable the staff to interact with each other more often again. Those events were often described as "voluntary digital team days" where the company could meet in online video chats to play games, such as party games or quizzes, or to watch movies via watch parties together.

10) *"The only "new" type of meeting was the digital coffee breaks, just to get some social interaction."* (Respondent 1)

11) *"We have tried to arrange a lot of activities such as music quiz, digital coffees, game night, etc."* (Respondent 2)

In terms of company culture, some participants mentioned that they struggle to build and keep an intact company culture up, which also goes hand in hand with the decreased team interaction in home office. Respondents describe that the morale of the employees might go down which also affects the overall productivity and efficiency of their staff.

4.3 Transfer, Work Environment & Flexibility

We approached our interviewees with the question of when they started moving the daily business to fully remote. Our results show that every company had taken measures way before the pandemic was officially declared as such. Most companies moved to home office solutions around February 2020 and the beginning of March 2020. When asked why these actions were taken early, every respondent would first recognize the health risks of their employees and their families over the effects and risks it could have on the business itself.

12) *"It was impossible to predict how likely it would be that someone would get sick, [...]. People would be harmed, and the business, as well."* (Respondent 6)

13) *"We wanted to minimize the spread by sending our team home. We did not want to*

endanger our staff members nor their family by making them commute to the office."
(Respondent 7)

Six out of seven interviewees shared with us that they did not have a crisis plan at hand when the pandemic hit. Only one participant mentioned that they had taken precautions and prepared a crisis plan that he executed when moving the business to remote.

14) *"I had a plan, and I think it worked out quite well. [...] I went ahead and planned the change, taking the news into consideration; leadership is to take one step ahead. I would rather be wrong later, instead of pointlessly endangering my team."* (Respondent 5)

When asked how the transition was perceived and executed, every participant described the process as "smooth" or "easy". The reasoning for this is that the staff in all cases was already very well equipped at their homes. All they needed was a working computer, the necessary software installed and a steady internet connection which was available for everyone. For whatever tool, software, or hardware that was missing, the companies would ensure to provide it immediately.

15) *"The transition itself was quite smooth [...]."* (Respondent 2)

16) *"Everyone got the hardware that they required provided by the company [...]. Any peripherals (screens, gamepads, even chairs or webcams) were also provided."* (Respondent 6)

An important topic to highlight is the perceived merge of work and free time. The respondents described their personal experience as well as the perspective from their teams about how working from home affects the work-life balance in a negative way. Different interviewees mentioned that the border between work and personal time vanishes over time as it becomes more difficult to draw the line between "what is work" and "what is personal time". Managers and staff alike report that they sometimes work outside the set core hours and think more often about work.

17) *"There is no separation between work and home. I sometimes work outside of work hours, and it becomes worse and worse. I see myself even checking on the weekends now, which I had not done at the start of the pandemic."* (Respondent 5)

18) *"Some employees found it more difficult to maintain a good work-life balance and "not thinking about work" when work mostly happens when you're at home."* (Respondent 3)

A clear reason for this could not be identified but the respondents describe not having a dedicated workspace at home as a problem. Most of the interviewees live in smaller apartments where no room for an extra workspace could be freed.

19) *"The majority of employees do not have a dedicated home office room in their living space, and some share their room with partners who are also working in the home office."* (Respondent 3)

Another interviewee responded to this with the note of having family and their children close by at all times. It is harder to draw the line as family tends to interrupt the work time and therefore, the focus on work tasks likely gets lost. Hence, they feel the need to compensate for the lost time while working outside of the core hours.

20) *"I have two young kids at home and often they want to play with me when I need to focus on work."* (Respondent 5)

In contrast to that, two interviewees mentioned that they have an easier time concentrating on more difficult tasks when being in home office, as they are not getting interrupted as much as they would in an office space.

21) *"There are certain phases in a project that are easier to handle from the quiet at home […]."* (Respondent 6)

But the change was also perceived as an opportunity to enable more flexibility when it comes to how the teams could work in the future. In some cases, flex hours were offered, and company core hours were adjusted. Employees can choose from which location they work as long as they can ensure access to their tasks and get their work done as scheduled. It also enabled companies to rethink their company structures and to consider possible future home office days. In one case, a company revamped the hiring process. Instead of focusing only on regionally available candidates, they started hiring new staff members from different locations, intending to keep them fully remote even after the pandemic is officially declared as over.

22) "[…] *we started hiring people who are not living in the area."* (Respondent 3)

4.4 Productivity Perception

This section revolves around whether the respondents think their companies' productivity decreased, increased, or stayed the same since they transitioned to home office. Every participant responded with personal feelings, rather than founded knowledge about this matter. It turns out, none of our participants had taken measures to compare the productivity numbers from before moving to home office and being in home office for a set period. Therefore, the following statements were solely based on personal impressions by the interviewees.

23) *"I would say that we have a good efficiency and that it has not decreased during corona."* (Respondent 2)

24) *"I personally think that in general, the productivity decreased since more meetings need to take place to communicate, […]."* (Respondent 3)

In total, we had two interviewees saying that they do not believe that the productivity of their teams and company has been affected, either positively or negatively. The other five respondents however described that the home office situation negatively affects the overall productivity.

4.5 Interview Summary

It is apparent how the shift of remote work implied new forms and means for how

organizations handle a sudden change in their working routines. Our results show that the communication aspect seems to be the biggest bottleneck that arose from this change. In general, more and longer meetings need to be scheduled in order to receive approximately the same information. The lack of physical proximity was described as challenging, time-consuming and problematic resulting in misunderstandings, errors, and possibly not receiving the necessary information.

The second major challenge centers around the social aspect and work-life balance. Not being able to communicate in person bears risks not only on the business side but on the social sphere as well. Our interviewed companies all noticed a decrease in social activities and thus took measures to counteract with new opportunities for digital gatherings. This is of course not perceived as a replacement for physical interactions but is nonetheless seen as a solution to the current situation. The intent is not only to increase the feeling of unity but also to strengthen the team's overall working morale. Working from home for prolonged periods of time can cause frustrations and mental health issues like the feeling of being alone and losing touch set more and more in.

While the transition to remote was surprisingly perceived as unproblematic, the way on how the teams work was not. It was often mentioned that work and personal time merge, with people tending to work or think about work outside of the set core hours. Since many do not have a dedicated working space, the rate of being interrupted by family, etc. was described as more present.

As a result of the findings described above, we learned that most of the respondents claim the overall productivity of their teams has decreased ever since remote work began. A possible explanation for this could be based on the fact that more time needs to be freed for meetings and planning which was not needed to that extent before the pandemic hit. Also, the team morale seems to be greatly affected as the teams were not given a choice whether they want to work from distance or not. For some, this might be a great new way of working, while others may consider a dedicated office to be more suitable.

5. Analysis and Discussion

In this chapter, we present our analysis which is based on the research question and aim of our study. Further, the discussion in this chapter compares and likens the thoughts and experiences of our respondents to the previously established research regarding crisis management, routine dynamics, and telecommuting.

5.1 Managing an emerging crisis

A key observation in this thesis is that organizations' shift to remote work during the pandemic may be usefully understood as instances of crisis management. To successfully manage a crisis, organizations need the ability to act both timely and productively, which in turn relies on the ability to identify and decide when to do what.

When analyzing the answers from our respondents' transitions to remote work, we saw how they followed a trajectory of crisis management similar to what was described in Pearson & Mitroff (1993). First, in the phase of *signal detection*, it can be argued that the increased spread

of COVID-19 served as a clear warning signal. Second, in the phase of *prevention/preparation,* only one firm implied that they had a previously established plan to implement. Instead, the majority of the answers imply that the plan was developed as the crisis emerged. Further, when the crisis became a fact and the organizations were forced to shift into home offices, the phase of *containment/damage limitation* began. Without having a prepared plan for these types of situations, the firms managed to adapt rather quickly and smoothly. As the shift to home office was done relatively quickly, the respondents describe how they quickly tried to establish and adapt routines to return to *"business as usual".* This could be related to the phase defined as *recovery,* meaning that organizations establish new workplaces and secure both software and hardware needed to run their business and operations. For the phase of *learning,* it could be argued that this phase is yet to come for the organizations. For now, it would seem like the organizations are still adapting and testing alternatives to overcome challenges. Once the results of the adaptation and implemented counteractions have been confirmed, the process of reflection and evaluation could initiate, thus leading the organizations into the phase of *learning.*

Looking closer at how the process looked like for our respondents, it was clear the phase of *signal detection* contained obvious warning signals. In previous research regarding crisis management, the process of detecting warning signals has been argued to be complicated as the signals are often difficult to detect but also because it can be challenging to evaluate the risk or likelihood of a crisis to emerge. However, as the spread of COVID-19 affected the society as a whole, the issue was not related to detecting a potential threat or warning signals. Instead, the issue was related to the great uncertainty of *how* and *when* COVID-19 was going to have an impact on the organizations.

Despite the relatively clear warning signals, there was not much for the organizations to do in order to prevent the crisis. As the emerging crisis was outside of the organizations' control, they could only observe how the crisis became more and more inevitable. Further, because of the great uncertainty, the preparation and planning to manage a potential impact was problematic, as they could not know how it would affect the operations of the organization.

Instead, as the crisis proceeded, the organizations were suddenly forced to move into home offices and remote work. An interesting factor highlighted by our respondents was that keeping the business running and sustaining the core operations was not considered an issue when suddenly moving to home offices. Instead, what turned out to be problematic for all organizations was to uphold the culture, motivation, and social interaction. As the previous research about crisis management mostly focuses on the impact of the business, the core operations, and productivity, it could be argued that the effects on employees and the organizational culture should be considered an important aspect, as was highlighted by our respondents. As our results indicate, crisis management should not be limited to the effects on core business, rather it should also include how to sustain motivation and engagement among employees. When deciding how to act, our result indicates that organizations should consider the perceived effects on employees. By doing so, in the phase of *prevention/preparation*, firms should establish a plan and routines to maintain motivation, culture, and social interaction.

5.2 Routine dynamics

Despite suddenly shifting into working remotely, our observations indicate that the shift was done relatively smoothly. In fact, all respondents indicate that no significant change was required in terms of their daily routines. However, they essentially performed the same routines remotely and digitally instead of at a physical workplace. Relating to the concept of crisis management and the importance of maintaining critical activities to keep the operations running, our answers indicate that the organizations managed to secure their operations by adapting their routines to be performed digitally and remotely. In addition to adapting existing routines, our result also implies that organizations may need to establish new routines for activities that normally could be performed spontaneously at the office.

Regarding what drives change in organizational routines, Pentland et al. (2012), suggest that in order for new routines to establish, variation and removal of an existing choice must occur. Similarly, it could be argued that the option for organizations to work remotely has always been available in theory. Yet, the option has not been fully exploited until the crisis forced the change. The change induced by the crisis, meaning that the option of working from a common workplace was removed, could thus be likened with a variation and removal of choice, which activated the new routine of working remotely.

Looking closer to how the organizations managed to adapt their routines to be performed digitally. It could be argued that the *ostensive aspect,* i.e., the abstract idea and structure (Feldman & Pentland, 2003), remained constant. Instead, it was the *performative aspect,* i.e., the actual performance, which was changed into being performed digitally. As the organizations had established the required *telecommuting systems,* there was no need to change the ostensive aspect of the routines. Instead, enabled by the telecommuting system, the organizations simply adapted the performative aspect, which was perceived as relatively smooth.

Although the change was perceived as smooth, the new way of performing the routines was highlighted as time-consuming and ineffective for the communication. Instead of spontaneous meetings and conversations at the office to discuss work-related things, the respondents describe how they now must book meetings with colleagues to talk and discuss their thoughts and potential problems. This procedure was perceived as time-consuming and rather inflexible, similar to the findings from Hannan & Freeman (1983) as well as Weiss & Ilgen (1985), who established that routines can be a common reason for inertia and inflexibility.

Thus, in terms of how organizations can adapt in crisis-induced shifts to remote work; the challenges and issues identified refers to internal communication, rather than securing core activities, resulting in a lack of social interaction and motivation. Consequently, it could be argued that even if the shift to remote work was smoothly enabled through a change and adaptation in the performative aspect of the routines, there seems to remain a tension or struggle between the ostensive aspect and the performative aspect. It would appear that keeping the ostensive aspect constant and changing the performative aspect has caused a friction which the employees experience as issues regarding communication. While the organizations were focused on maintaining the core operations of the firm, securing and keeping the ostensive aspect was the primary focus when the crisis occurred. Consequently, the performative aspect had to change. However, as this friction harms the motivation,

engagement, and social interaction, we argue that organizations must address this friction. A potential solution, based on our analysis, could be for firms to develop and establish new, *ostensive,* routines to find standards and structures to resolve the tension. As the current ostensive aspects of the organizations, don't seem to include nor consider the damaged communication and perceived effects on employees, we argue that the organizations must look for new routines, *ostensive and performative,* to complement the core operations and resolve the current tension. Only adapting the performative aspect appeared to work well initially as it enabled a smooth shift. However, we argue that it is not sustainable in the long term and that the organizations must complement with additional routines. Thus, as the crisis occurs and the core operations need to be secured, maintaining the ostensive aspect and changing the performative is a short-term solution. Once the securing of core operations has been successful, and the organizations enter the phase of *recovery*, they should initiate the development of new complementary routines to solve the friction between the ostensive and performative aspects of the core operations, as it is not sustainable in the long run. Indeed, an optimal scenario would be if organizations already had this planned as an action to *if* a crisis-induced shift to remote work would occur. However, it should be noticed that some organizations have tried to establish routines for social interaction and to uphold communication. Yet, these attempts have not been perceived as entirely successful or complete substitutes. In those cases, it could be argued that the organizations have developed a routine and an ostensive aspect, while still searching for a suitable and correct performative aspect.

5.3 Working remotely

As mentioned above, the immediate response and action taken to manage the crisis was to move into home offices and work remotely. The concept of remote work, *telecommuting,* has been practiced for a long while, however not to the same extent and by as many firms as during the past year. Further, working remotely, and *telecommuting*, has previously been carried out through a well-established plan and structure. Also, telecommuting has mostly been offered as a voluntary option or as a benefit for employees, not as a sudden response to a crisis. An interesting observation from our results indicates that the transition to suddenly working remotely went relatively smoothly and maintaining core operations was not considered an issue. However, other factors related to telecommuting, such as interaction, communication, and motivation were highlighted as an issue. Thus, the answers from our respondents indicate that organizations should ensure high quality in terms of *telecommuting systems* to uphold standards and promote communication.

The answers from all of our respondents highlighted issues related to communicating digitally. It was stated that the social interaction was affected negatively by working remotely and that the communication was not as effective. However, all organizations ensured that the employees would have appropriate tools and aids to communicate in terms of both hardware and software, yet the digital communication was still considered an issue. Thus, it could be argued that all organizations followed the principles and recommendations established by previous research and provided *telecommuting systems* to enable remote work (Kuruzovich, et al., 2021). However, as Venkatesh & Johnson (2003) argues, the motivation of employees is related to the quality of telecommuting systems. This would imply that even though

requirements were met in terms of providing necessary software and hardware, it is vital for organizations to evaluate the quality of the telecommuting systems and make sure that appropriate quality is maintained.

Furthermore, in terms of telecommuting software quality, i.e., the *telepresence* and *social presence,* it could be argued that the negative experience regarding social interaction and communication is related to the software's ability to simulate in-person interactions. Although using modern software for communication as well as webcams and video meeting for interactions, it could be argued that there was a lack of both social presence and telepresence, resulting in the perception of communicational issues and lack of social interactions. Although the telecommuting systems enabled the organizations to perform their work and tasks, the lack of spontaneous interaction and conversations were emphasized as a negative consequence. This perception of issues regarding social interactions with colleagues has also previously been proven by Nakrosiene et al. (2019), who highlighted reduced communication with colleagues, as well as reduced trust and support from manager's, as negative aspects of working remotely. Even though the software enables spontaneous interactions and informal conversations, it could be argued that a digital spontaneous conversation requires a much bigger effort to initiate, compared to simply talking to a "desk colleague" or running into a colleague by the coffee machine. Thus, we interpret the effort required to initiate a digital conversation to erase the perception of spontaneity, resulting in a lack of incentives as the required effort does not match the perceived outcomes.

Relating to the research question and aim of our study, it could thus be argued that when suddenly shifting to remote work as a response to an ongoing crisis, the issues are first and foremost not related to performing work tasks and assignments. Instead, the issues highlighted referred to communication and lack of social interaction, implying that to maintain motivation and engagement among employees it is vital to find substituting solutions to overcome the challenges and risks.

6. Conclusion & Future Work

In the following chapter, we present our conclusion in regards to our research question. Furthermore, we present proposals for future research to expand on the field.

6.1 Conclusion

In our research, we sought to develop knowledge and understand how firms have experienced the shift to remote work during the ongoing pandemic, how they have adapted their business and the role that digital technology has played during this shift. For this purpose, we gathered theoretical data regarding crisis management, telecommuting and routines, as well as empirical data by conducting a total of seven semi-structured interviews with executives of different companies.

The initial question that arose was whether organizations would be able to successfully transition to remote work given the abrupt nature of the change. This led us to investigate the literature on organizational crises, of which our studied one is a textbook case. A crisis is often limited to only one firm, and although a similar type of crisis may occur in another firm, the

reasons behind are often different. Thus, what is unique for the crisis caused by COVID-19 is that it is the same force and crisis which affected all organizations. Furthermore, prior research has argued it can be difficult to compare the process of managing a crisis because of vital differences in the crisis, but the one crisis caused by COVID-19 has the same characteristics, threats, and uncertainty for all organizations.

Our results reveal strong similarities between our respondents who all acted fast in response to the pandemic and relocated to remote work. Both in an effort to not risk the health of employees and their families, but also to save the company from potential setbacks in the event that many of the workers would have fallen ill. Furthermore, the results show that every respondent considered the transition to remote work as unchallenging as the teams were by default well-equipped to continue working from their homes due to the technologically intensive nature of the IT sector.

When being forced into remote work because of a crisis, organizations should not only focus on maintaining the core operations of the firm, but also consider the effects on employees, company culture, and social interactions. It is important to ensure high qualitative telecommuting systems to enable communication, both formal and informal. Furthermore, organizations should also ensure to develop routines and events to uphold social interaction and to build and strengthen the company culture. This is not only necessary to keep the motivation of the employees up but also to increase the engagement with one another. In this sense, we can consider that although the *action* component of organizational routines has been successfully translated to the remote work environment, the *actant* component often still struggles with it. The work tasks themselves are still being carried out, but workers undergo not only communication bottlenecks but also a noticeable degree of perceived social isolation. As a result, many respondents displayed a perceived decrease in productivity, although it would appear that no organizational assessments were done in this regard, neither during nor before remote work.

This aspect coincides with Pearson & Mitroff's (1993) statement about the *learning* phase of organizational crises being often overlooked. Indeed, organizations are capable of transitioning to remote work, but the majority of our respondents expressed thoughts about identical suboptimal processes they experience. In regard to our research question, we believe that placing emphasis on gathering more knowledge about the undergoing crisis is a first step to better manage crises-induced shifts to remote work. Documenting and preparing for crises is vital in our opinion, especially since "there is [...] no guarantee that this stability will maintain itself in the long-term, especially as severe additional waves of the disease are occurring." (Como et al., 2021, p. 46)

However, this recommendation is to be taken with a grain of salt. It may very well be that organizations already conduct such learning activities, with no clear solution to be found for the main issues of remote work: the communication bottleneck, social isolation, and the merge between work and personal time. Nonetheless, managers need to take a more proactive role and not just contain and resolve difficulties on a day-to-day basis. Technologies to better facilitate communication might loom just on the horizon, and alternative working configurations may soon become feasible. Here we are reminded of Kurland and Bailey's (1999) different types of teleworking, the satellite offices or the neighborhood work center.

Lastly, the unique nature of the COVID-19 crisis affecting all organizations, in the same manner, opens up a promising opportunity for them to collaborate in finding new ways of managing remote work.

To answer our research question *"How can organizations adapt to manage crisis-induced shifts into remote work?"* we conclude that when a crisis is occurring, organizations should not only focus on the core business and operations of the firm, as suggested by previous research. Instead, we argue that organizations must consider how to maintain motivation, social interaction, and communication among employees. In order to do so, it is not sufficient to only provide employees with tools for digital communication and interaction. Thus, our findings indicate that organizations must establish and develop routines, practices, and standards to uphold the social interaction and motivation of employees. If not managed properly, the motivation and engagement among employees risk to suffer, which could lead to decreased productivity and a decreased working morale. As the effort of engagement and interaction digitally could be seen as bigger, compared to in-person, organizations must ensure that the perceived value of engaging exceeds the effort required. Therefore, the telecommuting systems must uphold high standards and quality to facilitate seamless and efficient interaction.

6.2 Future work

Concerning future work, we see different approaches to further expand on our study. We feel that other methods of data collection could bring about new insights, participant observation, in particular, strikes our interest here despite it not seeming appropriate due to the situational context of the pandemic. Complementing either of these methods with the use of an organization's documents, where permissible, can also prove fruitful. Following this train of thought, it would be interesting to learn through empirical research if the productivity of organizations during the crisis indeed increased, decreased, or stayed the same. Although perhaps limited by the scope of our study, we did not find whether performance metrics from before the pandemic were or could have been used in the context of crisis management. Finally, one other promising idea to expand upon is the future role of remote work and how organizations will look back to the COVID-19 pandemic once it has been officially declared over. In the aftermath, we could witness yet another massive change in how organizations approach ways of working, such as a possible permanent installment of hybrid work.

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Appendix A - Interviewee Table

Interviewee	Gender	Role	Length of interview
Respondent 1	Female	ERP-Specialist	25 Minutes
Respondent 2	Male	Operating Manager	35 Minutes
Respondent 3	Female	Chief Operating Officer	30 Minutes
Respondent 4	Male	Project Manager	30 Minutes
Respondent 5	Male	CEO	35 Minutes
Respondent 6	Male	Project Manager	20 Minutes
Respondent 7	Male	Project Manager	25 Minutes

Table 1 - Summary of interviews.

Appendix B - Interview Guide

Generals:
- Company Type
- How many employees do you currently have?
- When was the company founded?
- Which language do you consider your main company language?
- What's your current job title and how long have you been with the company?

Before COVID-19 / Home office
- Have you worked in home office before the COVID-19 outbreak happened? (working full time, halftime, partly - flexible?)

If yes:
    Since when have you introduced the option of home office?
    Has this required a throughout plan to establish?
    Were there any (managerial) challenges / difficulties you can think of while being in optional home office?
    How do you value the home office option in your company? (rate between bad 1-10 great). Briefly explain why

If no:
    Have you thought about establishing it? Why was it not established?

Specific COVID
- Tell us about how you're working today (describe a normal workday) (routines etc.)
- How has your workday changed since the COVID-19 outbreak? Has it at all?
- How was the transition from working in the office to working at home?
- Which measures were taken, if any: how was the change perceived? (what went well, what went bad)
- How has the pandemic affected the work at the company? (did it delay processes? did it make the communication harder?)
- Is there any sort of task you can't execute/perform at home and only in the office?
- Has your productivity/efficiency improved/decreased?
- What digital tools/solutions or software are you using to enable remote work? Did you have that software before?
- What do you consider to be the biggest challenge with digital tools/solutions/software?
- Please briefly explain your answer.
- Considering hardware: did you need to provide extra hardware for your employees? (as in buying new?)

- Has your hiring process changed during the pandemic? Is it less, more, the same? (no change, paused hiring, resumed hiring at a later date)

- What would you say are the advantages and disadvantages of moving the company into remote work?
- Have you had a plan to introduce a full-time home office for your company?
- What were your motivations to move into home - office even though it wasn't forced by the government?
- How is the workload managing teams compared to before the pandemic?
- When did you move into home office?
- How was the change perceived by the staff and you (at first) and has this changed over time? (were you excited at first? Were you concerned?)
- Did you invent new routines over time that you felt were necessary in order to adapt properly? (e.g. extra meetings, staff surveys, etc.)

If yes:

Have you tried those new routines, work processes, or similar? (at the start of the home office situation) Have they proven unnecessary or not working? Which ones were they? Have you adopted new processes into the work routines that have been proven successful? Why do you consider it a success?

- If you could choose, would you work at home or at the office?
- Anything else you would like to mention?