How working digitally during the Covid-19 pandemic does not help to transform the public sector: a digital organisational ethnography

by

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Technological progress has merely provided us with more efficient means for going backwards. – Aldous Huxley

Preface

I would never have thought to do an organisational ethnography from my studio in Utrecht instead of from within an organisation. Just a few weeks after I started this research the Covid-19 pandemic forced everyone to work from home, including myself. While this provided me with the unique opportunity to experience "together with" my participants what working digitally means, it was quite boring to never have a change of environment. Frequently drinking cappuccinos with oat milk with fellow students to discuss your latest theoretical discoveries and empirical wonders were surely missed while I sat here day after day.

A cynic organisational ethnographer said in 1997: "In the present climate, Rule 1 for aspiring organization researchers surely has to be: keep away from organizations; fieldwork takes too long!" (S.P. Bate). I am grateful to this master's programme for never teaching me that as Rule 1 and instead encouraging me to go into the field, talk to practitioners and take their problems as the basis for all research you do. Albert Meijer has been much more than a supervisor for me because we also worked together on other projects before, in which he always gave the best and most concrete feedback a student could wish for. Without him I would have never been able to develop my interests and research skills as I did. Merlijn van Hulst taught me to see storylines in everywhere and in everything and inspired me to do ethnographic research in the first place.

I am grateful to the Province of Zuid-Holland for welcoming me with such welcome arms and to my contact person, who always provided insight knowledge and useful reflections when I was pondering over my findings. Special thanks go out to the ten people I followed in their experiences of working digitally, who trusted me enough to share in-depth stories of how their work had changed due to technology. And finally, I want to thank Saar, who had to sustain my endlessly long nights of working on this study, especially when we were temporarily living together in the beginning of the pandemic. Her comments as an outsider to organisational science but as the closest insider to my life have helped me through all stages of this research and provided me with the inspiration I needed to continue learning.

Abstract

The Covid-19 pandemic has forced many public organisations to work fully digitally, which is seen by some as the ideal chance for public organisations to engage in digital transformation. Large-scale organisational change is needed for digital transformation to revise core organisational processes with technology. Using a social constructivist lens to study how technologies used for working digitally are enacted in organisations, this study aims to see to what extent working digitally during the Covid-19 pandemic helps to transform the public sector. A digital organisational ethnography was conducted in a Dutch province in which people were followed for several months to study their use of technology in practice. The results show that working digitally leads to maintenance and reinforcement of existing bureaucratic structures and leads to a lack of richness in communication that is harmful to organisational change. People enact technologies to continue their existing ways of working instead of using technologies for change. This suggests that working digitally does not help to transform the public sector and can even be harmful to digital transformation. More attention should be paid towards material aspects of technology as organisations will most likely choose technologies that fit the organisation they are now instead of the digitally transformed organisation they might want to become.

Keywords: digital transformation, digital work, digital organisational ethnography

Introduction

> It was only when things went wrong, when society came up against the ceiling of the possible, that people turned of necessity to technology, and interest was aroused for the thousand potential inventions, out of which one would be recognized as the best, the one that would break through the obstacle and open the door to a different future…. In this sense, technology is indeed a queen: it does change the world. (Braudel, 1981, p. 435)

The Covid-19 pandemic has significantly altered the way in which organisations work by enforcing people in many countries to work digitally, creating a whole new digital reality for employees. Suddenly organisations faced the challenge of the abandonment of the physical office and face-to-face interactions, with digital communication as the only way to interact with colleagues. Initially most organisations thought things would go back to normal again in a month or two, but that turned out to be futile hope. For example, Google announced that it would keep all employees home until at least the Summer of 2021 (Reuters, 2020). A Dutch survey on working digitally found that 45% of Dutch workers aims to work from home more often even after restrictions will be lifted (Haas, Hamersma & Faber, 2020). While measures aimed at working from home where initially thought to be temporarily, it seems that working digitally is here to stay for the foreseeable future.

Public organisations were especially affected by the measure to work from home, firstly because they had the moral obligation to set a good example by making their employees work digitally and secondly because their service delivery was vital and needed to continue during the pandemic. Numerous practitioners and consultants took the stage to proclaim that this sudden enforcement of working digitally was the ideal chance for the digital transformation of the public sector, because digitalisation was suddenly high on the

agenda and familiarity with technology increased (BMC, 2020; Fearn, 2020; Gray, 2020). Their motto seemed to be: “if not now, when?”, implying that the crisis was the ideal moment for public organisations to set the stage for transformative change.

Digital transformation has become a buzzword to describe change in sectors that were radically transformed with technology, such as the hotel industry under influence of Airbnb and Booking.com. Public organisations do not have the same kind of external pressures to transform, because they are not as much threatened by other organisations that would make their business obsolete. Nevertheless, public organisations also strive to transform their organisations with help of technology to improve service delivery and provide a better experience for citizens (Mergel, Edelmann & Haug, 2019).

Previous research has identified that increased familiarisation with technology can lead to more knowledge on how to pursue digital transformation (Pittaway & Montazemi, 2020). A recent study based on expert interviews with public sector employees finds that new technologies can trigger change and influence organisational behaviour, thus contributing to digital transformation (Mergel et al., 2019). External pressure can also press public organisations to digitise their processes, which helps in the continuous process of digital transformation (Mergel et al., 2019). However, their claims are based on expert interviews and not an empirical study into digital transformation. The argument of external pressure is also widely used by practitioners in the public sector, who see working digitally as an ideal steppingstone to digital transformation because it makes a start with digitizing processes in public organisations (Fearn, 2020).

The enforcement of working digitally led to a unique opportunity to study if this situation really was the ideal chance for the digital transformation of the public sector. Scholars have been researching working from home in organisations for decades, but there

was always a problem of overlapping digital and physical communication for researchers to consider (Akemu & Abdelnour, 2020). Only as a thought experiment we were able to envision what it would mean for organisational work would it be all done without a physical office. Surely there are examples of research on virtual organisations (DeSanctis & Monge, 1999) or on telework (Baruch, 2000; Taskin & Edwards, 2007), but those were all focused on organisations that deliberately chose to have their employees work partly or fully digitally.

In line with how Zuboff (1988, p. xiv) saw a unique research opportunity in the eighties with the introduction of computer into organisations for which "history would only offer a brief window of time during which such data could be gathered", I was curious to see how people in public organisations would make sense of this change of circumstances. My aim was to see how transformative this sudden abandonment of the physical office really was and if it could really help to transform the public sector. In order to achieve this, I studied the usage of technology *in practice* using a social constructivist perspective in an organisation where people worked fully digitally. The research question I set out to answer was:

> To what extent does working digitally during the Covid-19 pandemic help to transform the public sector?

The organisation that serves as field site in this study is the Dutch Province of Zuid-Holland (PZH), mainly because of their political and top-management support for digital transformation and their unique position in Dutch society. Dutch provinces have little direct service delivery to citizens, other than municipalities, but fulfil a regional networking role in the physical, cultural and environmental domain. I expected this to be a "most-likely case" to see whether working digitally could contribute to digital transformation, because the organisation already had internal support at high level and because they previously had had little external pressure from citizens due to their limited direct service delivery.

Because I had started this research already before the Covid-19 pandemic impacted work, I was able to develop a unique research design in three phases. First, I interviewed employees of the PZH on their perceptions of digital transformation. Second, I set out to follow ten employees during several months of working digitally to find out how their usage of technologies and changing work practices could be beneficial to digital transformation. Third, I held a focus group with my initial interviewees to reflect on whether they thought working digitally was helpful or not to digital transformation.

During all these phases of my research I had an inductive and ethnographic approach to gathering data and making sense of it because these approaches both match with own epistemological stance and the research aim of this study. Considering that the use of technology is socially constructed and considering that Covid-19 provides a unique historical moment that could potentially enable large transformational change in the public sector, technology has to be studied in practice. Only then can we understand how people make sense of working digitally and how this can help or hamper transformative change. This fits in a long tradition of social constructivist research into the role of technology in organisational change that I use to develop my theoretical lens (Barley, 1986; Orlikowski, 1992, 2000; Fountain, 2001).

Scientifically this study is important for three reasons. First, ethnographic studies are almost completely lacking in the field of digital transformation and transformational government, which is a similar concept. A recent literature found only two out of 496 studies to be ethnographic in nature, with most studies being either quantitative studies or qualitative case studies (Omar, Weerakkody & Daowd, 2020). This is problematic because only organisational ethnography can describe the day-to-day usage of technology with great depth (Van Hulst, Ybema & Yanow, 2013). Second, this study adds deeper understanding of the

role that work practices, the way in which work is done, play in digital transformation. Current research is lacking in this aspect, because it is either mainly focused on outcomes or not empirical enough (Meijer & Bekkers, 2015; Mergel et al., 2019). Third, this study emphasises the importance of materiality of technology in future research. While certain deterministic aspects of technology have been mainly ignored within the social constructivist tradition, this study finds that boundaries posed by technology are a significant factor in how people use these technologies to maintain or change their work practices and thereby help or harm digital transformation.

On a societal level, this study contributes by providing a counterargument against the hallelujah message that this is the perfect opportunity for the public sector to transform. In fact, working digitally does more harm than good for the digital transformation of the public sector due to the way technology is socially constructed by employees. The mere idea of this crisis as a facilitator of digital transformation is not enough to bring forward change in the public sector. Practitioners should invest in mitigating negative aspects of working digitally because otherwise working digitally will not be helpful for digital transformation. Based on this study I also developed an instrument which teams can use to enrich their collaboration when working digitally, which is freely available for use and adaption by all public organisations.

This study starts with a theoretical chapter in which I define working digitally and digital transformation and outline the social constructivist lens I use to study them in relation to each other. Afterwards, I describe the methods I used to do empirical research, including how I gathered and analysed my data. Then, I discuss my findings based on the three phases of my research. I then discuss these findings through my theoretical lens and reflect on its

implications. I conclude with the answering of my research question and recommendations for future researchers and practitioners.

Theory

> Technological developments, in the absence of organizational innovation, will be assimilated into the status quo. (Zuboff, 1986, p. 392).

In this chapter I discuss the two central concepts to this research: working digitally and digital transformation. I lay forward how we should understand the relationship between working digitally and digital transformation based on recent research by, among others, Mergel et al. (2019). In order to study the social construction of working digitally, I then conceptualise the practice of working digitally as enactment of technology. Drawing on research on technology in organisations by Orlikowski (2000), Fountain (2001) and Leonardi & Barley (2010) I use enacted technologies, materiality and power to discuss my findings later in the discussion.

Working digitally

In the eighties and nineties, the increased usage of personal computers and later the invention of the internet made it possible for large groups of employees to suddenly work from home. This phenomenon back then frequently called telework, remote working or "telecommuting", had significant impact on individuals, organisations and society at large (Ellison, 1999). Telework was found to be positive for productivity, autonomy and mobility of individuals, but could also lead to isolation, marginalisation and increased stress for employees (Di Martino & Wirth, 1990). Managers have always been hesitant to allow telework because of their fear to lose control over employees (Ellison, 1999; Taskin & Edwards, 2007). Perhaps at least partly rightly so, because both in 2002 and in 2020, researchers have found negative effects of working from home for job performance (Bailey & Kurland, 2002; van der Lippe &

Lippényi, 2020). While working from home has been possible for a few decades now, few organisations found that this made the office obsolete.

In this research, I use the term working digitally to refer to employees doing their work from home fully by means of technologies such as video calling. I differ from "remote working" or "telework" because Covid-19 has led organisations to completely abandon their physical offices to work fully digitally. While I just argued that remote working has a long history, this is true mostly for *parts* of organisations that work remotely for specific types of goals, such as teams that are physically distant from each other (Dulebohn & Hoch, 2017; Townsend, DeMarie & Hendrickson, 1998). Most studies researching remote working found hybrid situations of both face-to-face and digital work (Fiol & O'Connor, 2005). Fully functioning digital organisations certainly exist and are becoming more prevalent, especially in the private sector, but most, if not all, public organisations still have a physical office where employees come together (Hannah, 2019). In this sense, working digitally as I use it is a unique concept because research on remote working and virtual organisations often finds only *some* level of working digitally in an organisation (DeSanctic & Monge, 1999; Watson-Manheim, Chudoba & Crowston, 2012).

In line with the aim of this research to see if working digitally can help to transform the public sector, three aspects of working digitally are important. First, the richness of digital interaction when working digitally depends more on the relationship that colleagues have than on what kind of technology is used (Carlson & Zmud, 1999). This also means that the distance that people can feel towards colleagues is mostly socially constructed and depends on many more factors than just the fact that communication is not face-to-face (Wilson et al., 2008). Second, literature on telework suggests that teleworking reinforces traditional bureaucratic structures instead of 'flattening' them out (Taskin & Edwards, 2007). For my research this

means that working digitally would not necessarily alter existing work practices that might need to change for digital transformation to occur. Lastly, the way in which work is organised really changes when working digitally because all communication is mediated through technology (Gibson & Gibbs, 2006). However, tasks and roles of people mostly stay the same while working digitally (Bailey, Leonardi & Barley, 2012). I will reflect on these three aspects of working digitally in the discussion chapter of this research.

Digital transformation

Digital transformation has become a buzzword to differentiate mere digitization of processes and services from big transformational changes that organisations can go through with help of technology (Mergel et al., 2019). The promise of digital transformation for public organisations is that they can transform service delivery, organisational culture and their role towards citizens by using technology (Mergel et al., 2019). For this transformation to take place, core organisational processes must be redesigned from the ground up using technology (Pittaway & Montazemi, 2010). While it is argued that digital transformation can lead to a paradigm shift, most public organisations are not quite there yet. Most changes in public organisations fuelled by technology are digitisation (making a paper form available to download online) or digitalisation (filling out the form in an app) instead of digital transformation (Mergel, 2019). In literature on e-government and the usage of IT in the public sector, these terms are used interchangeably. In order to define digital transformation clearly and set it apart from digitization, I use the following definition proposed by Mergel et al. (2019, p. 12):

> Digital transformation is a holistic effort to revise core processes and services of government beyond the traditional digitization efforts. It evolves along a continuum of transition from analog to digital to a full stack review of policies, current processes, and

> user needs and results in a complete revision of the existing and the creation of new digital services. The outcome of digital transformation efforts focuses among others on the satisfaction of user needs, new forms of service delivery, and the expansion of the user base.

As this definition of digital transformation highlights, large-scale organisational change is key in order to come to a complete revision of current organisational practices. A continuous process of significant changes made by means of technology is needed to accomplish such revision (Vial, 2019). Technologies used for that may include the internet, big data analysis and artificial intelligence, among others (Gong et al., 2020; Mergel et al., 2019). Active engagement is needed from both managers and employees, as transformative changes to the core of an organisation cannot be carried out by only a few individuals (Westerman et al., 2014). Meijer & Bekkers (2015, p. 241) define transformative change in the public sector as "a change that entails the quality of certain social structure". Especially for public organisations, the complex institutional setting and different rationale compared to private organisations make it hard to bring forward such transformative changes (Gong et al., 2020).

As a term, digital transformation is widely used in literature on business management (Berman, 2012; Westerman et al., 2014) and information systems (Matt, Hess & Benlian, 2015; Vial, 2019), often with a positive expectation of what digital transformation can bring organisations. Consultancy firms such as McKinsey and Capgemini publish reports that underline the benefits of digitally transformed organisations, with McKinsey stating: "As [digital technology] continues its advance, the implications for revenues, profits, and opportunities will be dramatic." (Bughin, LaBerge & Mellbye, 2017, p. 1). Scholars and practitioners have predicted such dramatic changes driven by technological development for

decades, which is why a closer look into how these technologies are socially instructed in public organisations are needed (Bretschneider & Mergel, 2011).

In the past year, research on digital transformation in public sector organisations has been getting more attention (Gong, Yang & Shi, 2020; Mergel et al., 2019 & Pittaway & Montazemi, 2020). It is important to understand that these three recent studies, although all are published in Government Information Quarterly (GIQ), build their work on different foundations. Firstly, Mergel et al. (2019) employs a grounded theory approach to interview experts about digital transformation. They mainly use literature on e-government (i.e. Meijer & Bekkers, 2015) and transformational government (i.e. Bannister & Connolly, 2014) for their theoretical arguments. Secondly, Gong et al. (2020) build more on information systems (IS) research (i.e. Vial, 2014; Weerakkody, Janssen & Dwivedi, 2011). Information systems research is often less focused on transformation and more on incremental change (Meijer & Bekkers, 2015). Moreover, IS research has a strong focus on technological structures and less on social structures. Thirdly, Pittaway and Montazemi (2020) base their conceptualisations of digital transformation mostly on both IS research and business management literature such as Westerman et al. (2014). What is missing from these three recent studies is an empirical, social constructivist look at how the enactment of technology, such as when working digitally, can contribute to digital transformation.

Relationship

The practice of working digitally could contribute to digital transformation, because working digitally both familiarises people with technology and provides employees with know-how on how to work with digital technologies (Pittaway & Montazemi, 2020). However, working digitally can also pose challenges to innovation by making communication fully dependent on technology and less dynamic (Gibson & Gibbs, 2006). When external pressure

pushes public organisations to engage in digital transformation, they focus on digitising processes, while internal pressure pushes them to change organisational structure and culture (Mergel et al., 2019). So, when external pressure such as Covid-19 force organisations to work digitally and digitise processes, it does not mean that changes in organisational structure and culture will follow. This means that the potential contribution of working digitally on digital transformation is not understood yet, especially for public organisations that work fully digital.

In line with the goal of this research, the question remains if employees enforced to work digitally during Covid-19 will really be imbued with the necessity for fundamental change that is needed for digital transformation. Mergel et al. (2019) conclude their paper by concluding that: "technology enables change, but this change must be carried out by the organisational itself if it wants to realize the long-term effects of transformation." (Mergel et al., 2019, p. 11). Thus, the enabling role of technology alone is not enough to bring about change. Although the work of Mergel et al. (2019) is empirically grounded, it only covers expert opinions and no study of technologies in practice to see how the use of technology is really connected to the digital transformation of public organisations. Considering this, I will examine if the practice of working digitally can contribute to digital transformation through social constructivist lens.

In the following paragraph I present my social constructivist lens to empirically study the complex relationship between working digitally and digital transformation. Based on Orlikowski (2000), Fountain (2001) and Barley & Leonardi (2010) I present three concepts that I will use in the discussion chapter of this research to reflect on how working digitally can help to transform the public sector: enacted technologies, materiality and power.

How technology can contribute to organisational change

The perspective on the role of technology in organisational change has always been a question of determinism and voluntarism: are actions caused by technological forces or do actors have agency to shape their own environments independently? (Leonardi & Barley, 2010). A rich body of literature on technology and organising exists that has, for decades, focused on how both technology and organisations constantly influence each other (Barley, 1986, 1990; Fountain, 2001; Orlikowski, 1992, 2000; Zuboff, 1988). In the fifties and sixties, the dominant view was that technology, akin to production systems in manufacturing, was a strong determining factor for organising (Perrow, 1967; Woodward, 1958). This view is called technological determinism: "technology acts autonomously upon individuals, social arrangements and institutions" (Fountain, 2001, p. 84). The pitfall of technological determinism is that is reduces human agency and implies that technology causes autonomous social processes beyond our awareness (Leonardi & Barley, 2010). Inspired by Giddens' (1984) structuration theory, scholars broke with the idea of technological determinism from the eighties onwards (Barley, 1987; Zuboff, 1988). This movement is called social constructivism: social dynamics became an important factor in analysing technological change when researchers found that the same technology can lead to different outcomes in organisations (Leonardi & Barley, 2010).

Social constructivist research on technology in organisations holds that organisational change occurs due to ongoing social action in response to both affordances and constraints of technology (Leonardi & Barley, 2010). For example, Orlikowski (1992) argues that structures influence technology by inscribing rules and schemes into technology to make it fit the institutional context. Still, this approach was rather focused on how technologies shape social action instead of the other way around. This falls under the "appropriation" perspective on technology in organisations: do people use technology as intended and if not, how do they alter it? (Poole & DeSanctis, 1992). Patterns of conformation and deviation to a technology's

intended use are the social phenomena under investigation in the appropriation perspective (Leonardi & Barley, 2010). In her later work, Orlikowski (2000) reflects on her use of structuration theory to conclude that we need an approach that looks at how human action "enacts" structures through technology.

Enactment of technology

Enactment was introduced by Karl Weick (1979) in order to emphasise that structures and ideas become real by acting upon them. Organising is an activity and organisations are crafted by humans as they "try to make sense of and respond to their environments" (Leonardi & Barley, 2010, p. 20). Both the perspective of appropriation and enactment use structuration theory as their inspiration, but they differ significantly. The enactment perspective does not focus on confirmation or deviation from what designers ought a technology to be, rather the focus is on *practices* (Orlikowski, 2000). Methodologically this means that usage of technology needs to be studied in practice, as its manifestations present itself to the researcher. Institutionalism is key in the enactment perspective, which looks at how enacted technologies become institutionalised and then at how these institutions can lead to organisational change (Orlikowski, 2000). This perspective can help us understand how the enactment of technology in digital work contributes to digital transformation in public organisations because it employs a practice lens.

Individuals in organisations often enact existing routines and relationships when they use technology in organisations (Fountain, 2001). Enactment here refers to "the way in which IT is perceived and actually used by the actors in a particular organization" (Danziger, 2004, p. 101). Enacted technology differs from *objective* technology: material aspects such as functionality and capacity of technology. Fountain (2001) gives the internet as her main example of an objective technology. But these material aspects are nothing until actors in

organisations use them. This means that both the capability and potential of digital technologies are *enacted* by actors. When objective technology is applied in an organisation, actors enact those technologies with their own perception and boundedly rational reasoning. This builds on Thomas (1927) and March & Simon (1958) who have set out how individuals make sense of their environments withholding their cognitive and social constraints. Often, actors enact technologies in ways that reinforces existing institutional arrangements. Still, the enactment of technologies is not open to all possibilities, because objective characteristics of technologies ensure that we are bounded in how we use them (Orlikowski, 2000). Over time the recurrent enactment of technologies can structure behaviour in such ways that it becomes institutionalised and lead to more significant changes in both structure and power (Fountain, 2001; Orlikowski, 2000).

Viewing the interplay of technology and organisation from an enactment perspective acknowledges the "transformational character of all human action" (Giddens, 1984, p. 117) while at the same time considering the material aspects of technology that bound the way people interact with them. Orlikowski (2000) defines three different types of enactment: (1) inertia, (2) application, and (3) change. Inertia is the enactment of technology by users to maintain the status quo and keep things as they are. Application is when users refine their existing work practices with help of technology, leading to reinforcement and enhancement of the status quo. Change is the third type of enactment, where people choose to use technology in ways that substantially change their way of working. Only with enactment as change, Orlikowski (2000) argues, existing institutions are transformed, leading to organisational change.

A shortcoming of Orlikowski's (2000) practice lens for this research is that it focuses on *why* people are likely to use certain technologies, while working digitally as I study is

enforced upon people which removes the question of why people go and adapt technology to work remotely. This is because she builds on prior theories of appropriation that focus on how users differ from designer's intentional usage of technology (Leonardi & Barley, 2010). Orlikowski (2000, p. 423) argues that a practice lens "assumes that people are purposive, knowledgeable, adaptive and inventive agents [….]. When the technology does not help them achieve those ends, they abandon it, or work around it, or change it, or think about changing their ends.". Thus, while drawing on her insights, I also use the Technology Enactment Framework (TEF) by Fountain (2001) which leaves more room to examine the way technology structures behaviour because of its objective characteristics.

Technology Enactment Framework

The Technology Enactment Framework (TEF) developed by Fountain (2001) in her influential book "Building the Virtual State: IT and Institutional change" helps us understand the impact of technologies through an institutional perspective. Just as with digital transformation, scholars often focus on the outcomes rather than the processes when they study technology in organisations. Fountain's work is therefore seen as innovative because it is grounded in empirical observations and focuses on processes rather than outcomes (Yildiz, 2007). Three key elements are present in her model: objective IT, which are the actual material aspects of technology, organisational forms that shape the context in which technology is used and institutional arrangements that influence behaviour of actors.

Fountain argues that public organisations operate largely as Weberian bureaucracies with a focus on hierarchy, rational thought and rules (Fountain, 2001, p. 49). She was clearly studying organisations that were more influenced by New Public Management than the type of public organisations we have today, although elements of Weberian bureaucracies are of course still present (Mergel et al., 2019). In her model, networks relate mostly to inter-organisational

networks which can both facilitate communication and coordination and be a source of conflict. Institutional arrangements in the TEF include norms, beliefs, laws and cultural understandings that guide and constraint behaviour (Danziger, 2004). Outcomes are defined as the impacts that *enacted* technologies have on structure and behaviour within an organisation. Depending on how a technology is enacted in an organisation, there is a large diversity of possible outcomes.

Technology is not a panacea and the promises of technological change are often not met, because the enactment of technology is influenced by existing institutions (Bretschneider, 2003). Using digital technologies in bureaucratic organisations can even lead to more rationalisation and standardisation. This is because technology can both support and replace aspects of bureaucracy, depending on how technology is enacted (Fountain, 2001). On the other hand, digital technologies can facilitate both the creation and functioning of organisational networks, mainly using the internet, which was still quite novel at the time Jane Fountain published her book (Castells, 1996; Danziger, 2003).

Critiques of the TEF state that Fountain (2001) neglects previous literature on the subject while she overestimates the transformative nature of technology (Norris, 2003). This critique is too easy, because she explicitly chooses to do grounded work in order to shed new light about how technology affects organising and vice versa. While she could have done more to align her work with previous appropriation and enactment literature by Barley (1986) and Orlikowski (1992; 2000), she uses both structuration theory and institutional theories to build her argument. Social constructivist research is also critiqued for assigning *too little* weight to the transformative nature of technology to debunk technological determinism; while there is ample room in the TEF for the potential of technology. Two decades have passed since Fountain (2001) introduced the TEF and now the notion that technology is not deterministic for organisational change is more widely accepted among scholars, which makes room for

nuances within the social constructivist paradigm (Leonardi & Barley, 2010). Therefore, the TEF outlined by Fountain (2001) fits my research aim of finding out whether working digitally can contribute to digital transformation with the addition of two major concepts: attention to materiality and power.

Materiality

In an attempt to debunk mid-20th century notions of technological determinism, which stems from a materialist perspective on social reality, many social constructivist perspectives, including the enactment perspective, have downplayed the role of technology in organisational change. However, materialism does not imply determinism per se, just as idealism does not automatically imply voluntarism (Leonardi & Barley, 2010). The pitfall of taking an idealist/voluntarist view to oppose the determinist/materialist notions of technology in organisations is that we can forget how technology "does things" that we cannot attribute to a social practice. Technologies do not let users do whatever they want; they also constraint them. This does not mean that users are at mercy, but rather that they are forced to adapt (Leonardi & Barley, 2010). Social media is an example of a technology that forces governments to deal with a new, notoriously grim, reality (Zuboff, 2019). When we allow materiality to play a role in our explanations of how technologies can affect social order, we do right to the socio-technical problems that are invasive in everyday life.

Power

Social constructivist researchers have struggled with the role that power plays in how technologies are used in organisations, with a notable exception of Zuboff (1986) who ethnographically examined the role that power played in technology and organising. Most research has focused on the *here and now*, thereby favouring the micro and neglecting the

macro (Leonardi & Barley, 2010). Enactment research faces the same problem because of its focus on technologies in practice and the processes surrounding the enactment of technologies. One can then forget that changes that seem big on a micro or meso level have no impact on a more macro-institutional level within the organisation. A last point of critique, one that I already mentioned specifically about the TEF, is that it overemphasises the intentionality of users rather than other playful actors (Leonardi & Barley, 2010). Human action is also constrained by systems of domination, legitimation and signification (Giddens, 1986). By explicitly incorporating power into research on technology in organisations we can way better bridge the apparent dilemma between determinism and voluntarism in social science research (Leonardi & Barley, 2010).

In the discussion chapter I use the social constructivist concepts of enactment of technology by Orlikowski (2000) and Fountain (2001), materiality and power to reflect on my findings. In the next chapter I outline what methods I used to study working digitally and its relationship to digital transformation in practice.

Methods

> It is precisely at this level of the everyday, at the level of the detailed social processes informing relationships between organizational interests, that the content of organizational culture is continuously formed and re-affirmed. (Young, 1989, p. 201)

In this chapter I describe the methods I used to answer my research question. First, I discuss my research design and my choice for ethnography. Then, I explain how I came to research the Province of Zuid-Holland and give context on the organisation. Afterwards I briefly explain how Covid-19 changed my research design. I then go over my data collection and data analysis in all three phases of my research and the role of theory in my research. I end with an argument on validity and a short note on ethics.

Research design

In order to gain insight into what working digitally means not only for how technology is used, but also for digital transformation, it was necessary to not only study what people do and how meetings take place, but how working digitally is experienced by people. An ethnographic approach fits this aim best and connects to the social constructivist lens I outlined in the previous chapter. To investigate how the organisation conceptualised digital transformation and to see what practices of work were being constructed during the Covid-19 crisis, the research consisted of three phases. First, I set out to conduct open interviews with people with knowledge on digital transformation to discover the meaning behind the concept empirically. Second, I "followed" ten people that worked digitally to understand what working digitally meant for them and for digital transformation. Third, I held a focus group with the same interviewees as in the beginning specifically aimed at asking them whether they found, based on my initial findings, working digitally helpful for digital transformation.

I approached all three phases inductively, which gave me the flexibility and openness needed to constantly redefine my research puzzle (Jorgensen, 1989). This was especially helpful because I started my research pre-Covid-19 with a different research aim focused more on the meaning-making of digital transformation. The focus of my research was on understanding individual experiences to say something bigger about the organisation, not on work-life balance or other micro-aspects exclusive to individual experiences. Dividing my research into three phases enabled me to use triangulation to approach my research question with different data sources (Bryman, 2012; Boeije, 2009). This proved especially useful for the focus group, because participants supported my initial thesis and provided me with extra reflections that I then incorporated into my findings and discussion.

Ethnography

I chose to work ethnographically because by this I could come most close to the work practices of employees while not physically meeting them. Inspired by Geertz's (1973) "doing ethnography", I wanted to have empathy for *the other*. What helped is that I was in the same situation as the employees I followed, being forced to work digitally instead of being at the field site. I used elements of this autoethnographic experiences in the findings of my research because my meaning-making of working digitally also says something about my research question.

Ethnography fits the purpose of this research because technologies and formal and informal work practices need be observed in practice (Bate, 1997; Orlikowski, 2000). Technologies The idea of an informal organisation is invented by anthropologists as early as the 1950's (Dalton, 1959; Roy, 1952). And, as I would see continuously in my research, an ethnographic way of looking allows for the inclusion of "non-work" aspects of work: "More things are going on in organisations than getting the job done. People do get the job done…

but people in organisations also gossip, joke" (Pacanowsky & O'Donnell-Trujillo, 1982, pp. 116-117). Being sensitive to the meaning of these "non-work" aspects helped me understand the themes of working digitally I would later label continuation, decline and progress.

It is important to consider the *digitalness* of my organisational ethnography, because it is to my understanding the first organisational ethnography of a fully digitally working public organisation. Existing literature on digital ethnographies focus primarily on virtual ethnographies or netnographies, whose studies sites are located on the internet (Hine, 2000). For example, a recent study on telework investigated an online debate on the decision of Yahoo! to ban telework for their employees (Boell, Cecez-Kecmanovic & Campbell, 2016). Another even more recent study did focus on digital aspects of organisational ethnography, but their research topic was the overlap between physical and digital communication, while I studied an organisation without any physical communication (Akemu & Abdelnour, 2020). The physicalness of my body in an organisational setting was lacking, but so was that of my respondents. I could not place my body "on the line" as Van Maanen (1996) calls it, but neither could the people I studied. We both experienced working digitally and its influences on our work, making for a unique empirical setting to investigate.

I call the type of ethnography I did *digital organisational ethnography* to differentiate my approach from online-based ethnographies. Murthy (2008) states: "As ethnography goes digital, its epistemological remit remains much the same. Ethnography is about telling stories.", something I have felt during my research as well. As a method, but also as a paradigm, ethnography has helped me make sense of how people worked digitally (Bate, 1997). The sudden Covid-19 crisis has led to a new organisational reality perfectly fit for ethnographers, usually already drawn to the "unexpected, the non-routine, the unusual, the sudden ruptures…." (Van Hulst, Ybema & Yanow, 2013, p. 2). Therefore, there could not have been a better method

to come as close to the lived experiences of people working digitally than approaching them through ethnography.

So as to provide me with rich and detailed descriptions of people's experience, I focused on everydayness in my conversations with people I followed. Young (1989) recommends paying attention to the everydayness because he claims that in the everydayness, organisational culture gets formed. This point is theoretically interesting as well, because if you think about it, what it left of everydayness in an organisation where people are not physically present anymore? I will argue later in this research that precisely these social processes which happen in the everydayness that are not mundane, but vital to making transformational changes. The fact that I was not able to illustrate this everydayness as easy as you would be able to in a physical organisation, already contributes to that point. While I talked about everydayness and witnessed it at set moments, there was no walking around possible for me to engage with it in a way that is recommended for ethnographers (Bate, 1997).

Case selection and description

As I mentioned in the introduction, the field site I conducted research was the Dutch Province of Zuid-Holland (PZH). This organisation fits the aim of this research because it is a public organisation with both political and top-management support for digital transformation. Therefore, I expected it to be a most likely case for finding out more about digital transformation in the public sector, because not every public organisation is explicitly working on digital transformation. Access to the PZH was negotiated through the Datawerkplaats, a collaboration between Utrecht University and several public organisations. As I worked there as a junior researcher during my master's degree, it was easy to negotiate access with them. Moreover, the idea to examine the meaning of digital transformation empirically came from within the organisation, already ensuring the practical relevance of the broad research topic. In

my findings of phase 1, found in the next chapter, I outline how the PZH gives meaning to digital transformation.

Case description

The Province of Zuid-Holland (PZH) is a governmental body responsible for governing the region of South-Holland. Provinces are one of the three governing layers of the Netherlands, municipalities and regional water authorities being the others. Elections are held every four years, as provinces are held accountable by citizens through elected politicians. Dutch provinces are mainly responsible for policies in the physical, cultural and environmental domain and have little direct service delivery to citizens. Their services to citizens are more indirect, such as the provision of infrastructure and maintenance of nature.

South-Holland is the most populated province of the Netherlands, with a total of over 3.7 million inhabitants. It is one of the world's most densely populated areas, with The Hague and Rotterdam as its biggest cities. Challenges of the PZH unique to this area are for example keeping densely populated areas easily accessible while also accommodating enough nature for its citizens.

How Covid-19 changed my research

Ivo, the contact person I was assigned, was helpful during all stages of my research because we frequently held meetings to reflect on my experiences together. We discussed my initial research topic, which would be "something with" digital transformation, and I asked him for ins and outs on the organisation that I should know as an outsider. He explained to me that at various levels, multiple teams were doing "something with digital transformation". To be honest I think he found it difficult to explain it to me as well what the PZH was doing on digital

transformation. This made me decide to start my quest with six open interviews: stage 1 of my research.

I held these open interviews in the last two weeks before the Netherlands went into semi-lockdown because of Corona, in the end of February. I asked them questions such as: "if you discuss DT with your colleagues, what words do you use?" and "what emotions are connected to digital transformation?" to get close to their sensemaking of the topic. What these interviews taught me in relation to my final research question is that a lot of people within the PZH were not familiar with the concept yet and saw no direct link between digital transformation and the work they were doing.

Photography would be my next step. My plan was to ask people to take pictures and use photovoice to try and conceptualise digital transformation in practice (for photovoice see Buchanan, 2001; Ray & Smith, 2012; Warren, 2017). While developing my research proposal, Covid-19 cases spiked in the Netherlands and on March 12th the government announced that everyone in non-essential jobs would have to work from home from no one. That made me wonder the apparent radical change of working digitally would contribute to their understanding of digital transformation, and this idea influenced what would eventually become my research question.

Data collection

My data collection consists mainly of three phases: (1) pre-Covid-19 interviews, (2) following digitally working employees, and (3) reflecting on initial findings in a focus group. Table 1 highlights the different types of data sources I used in each phase.

Table 1

Different types of data sources

Phase	Data type	Frequency
Phase 1	Interview transcripts, recorded	6
Phase 2	Field notes of conversations	23
	Observation notes (of meetings)	9
	Field notes of conversations with my contact person	7
	E-mails	4
	Documents	6
	Short story as reflection	1
Phase 3	Focus group transcript	1

Phase 1

The interviews pre-Covid-19 I discussed already and were focused on making sense of digital transformation. The main part of this research was phase 2: an ethnographic inquiry into how working digitally could help to transform the public sector by looking at if technology use by people could contribute to digital transformation. These people were selected by my contact person Ivo from his personal network based on having a connection to digital transformation. I insisted that he also included people that were confronted with digital transformation in their job, for example in mobility, but not as their main activity. All interviews were recorded and transcribed.

Phase 2

I followed over the course of approximately two months, which means that I held several conversations with them about working digitally, interacted with them through e-mail, attended some of their meetings and in general reflected with them on what working digitally meant. Because working digitally was so novel and the situation in the Netherlands was evolving day by day, I chose to follow a limited number of people over a longer period instead of interviewing more people at one point in time. This allowed me to get to know these people and show real interest in their experiences, which they also appreciated. Many became more open when they realised, I was genuinely interested in their experiences. While some kept saying in the first conversation that these were "only their experiences", I felt that they noticed that this was precisely what I was interested in, no matter what others thought of the meaning they gave to working digitally. Doing this allowed me to understand more deeply what working digitally meant for them and their work. In order to tell the story of how Covid-19 influenced working digitally in the PZH, I also used blogs and documents put on intranet, which I had access to during my empirical research.

As to achieve a diverse group of participants but also to get phase 2 started quickly, I asked both Ivo and another employee of the PZH responsible for digital transformation to send me a list of people out of their personal network that would be interested to participate. I explicitly asked for people that were not engaged with the topic of digital transformation, and a mix in gender, age and role. Out of a list of 27 names I selected around fifteen people, also balancing my own selection with my above-mentioned criteria. Ten people ended up willing to participate.

It must be noted that this way of selecting participants is not neutral, as is every way of selecting people. Time constraints played a significant role in using their personal networks for selecting people, as working digitally had already "started" and I wanted to get in on the action

as soon as possible. Moreover, we thought that for such relatively intensive participation in research it would be better if they could introduce me to people, increasing the chances of people wanting to participate. Everyone that eventually agreed to participate was sent an e-mail by me explaining the purpose of this research and the kind of relationship we would have towards each other, promising anonymity and trust.

I decided that for the conversations I held with people I followed, recording and transcribing would not be feasible due to time constraints. During and after each digital conversation I had with them, I made field notes of what they said combined with my own reflections. Most conversations were done through Microsoft Teams, a video calling program, and some by telephone. All these conversations were open, but I used sensitising concepts that gradually developed over time, such as the form and content of work, informal interactions and spontaneity. It was never my intention to see empirically if digital transformation "took place", but if working digitally proved helpful for continuous process of digital transformation.

In order to ensure that their meaning of working digitally was central, I always began by asking how their days or week had been for them. This allowed me to stay close to their experiences and examples of what they found important. I kept the focus of the conversation on working digitally, but apart from that I invited them to share whatever what was on their mind. During meetings I wrote field notes too, inspired by Emerson, Fretz & Shaw's (2011) book on writing field notes. Once I experimented with writing a short story reflecting on what happened during a meeting, of which I ended up using a part for my findings.

Phase 3

In order to find out whether people would, based on my initial findings, see working digitally as helpful for digital transformation, I held a focus group with five out of seven

interviewees from phase 1. I discussed my initial findings and preliminary thesis to them that working digitally hampers digital transformation instead, to which they agreed (see Appendix B for initial findings). By doing this I had another form of triangulation to strengthen my findings with the reflection of people that had already been involved in the research at an earlier stage. I chose to invite people that I had interviewed in phase 1 specifically because they were knowledgeable on digital transformation which enabled them to reflect well on the relationship between working digitally and digital transformation.

Data analysis

In line with the inductive approach in this research, I engaged with theory mostly after doing my fieldwork. I kept a reflective journal throughout my research to keep track of my thoughts and connections between theory and empirics. This reflexivity also helped me form an "audit trail" of my analysis with all the thoughts and decisions I faced along the way (Nowell, Norris & White, 2016).

Phase 1

The method of naïve reading was used to analyse transcripts of interviews conducted in phase 1, because it allowed for the understanding of text 'as a whole' (Blom & Nygren, 2010). I had experimented with this method in previous research where it proved to work well for deriving stories from text, something I also wanted to do with these interviews. As a result of this cognitive process I ended up with six notes that I then re-read to compile the story of what digital transformation means in the context of the PZH.

Phase 2

Thematic analysis as developed by Braun & Clarke (2006) proved to be a perfect fit between my social constructivist background and ethnographic method. In thematic analysis, you search across your data set for repeated patterns of meaning. As a researcher you acknowledge the active role you play in identifying these themes and reporting on them (Braun & Clarke, 2006). Themes do not "emerge" and do not "just reside" in the data. If anywhere, Braun & Clarke (2006) state, themes reside in our head from our continuous thinking about them. Therefore, my reflective journal proved so valuable, as to keep track of the themes that emerged not in the data, but in my head.

Coding all my field data, including my conversations with my contact person, I came up with a few hundred codes. Rereading both the codes and the material led me to arrive at three larger themes under which I was able to fit all codes: working digitally as continuation, decline or progress. I deliberately choice the word *as* to emphasise that this is how working digitally can "work": both as continuation, decline and progress. Codes that did not fit under these three themes were put in a miscellaneous category for later reviewing, after which I concluded they were too far off from my research question to use. After coming up with these themes, I went through a second stage of axial coding (Boeije, 2009) in which I fit all codes under themes and then sub-themes. Appendix A shows my final code tree.

Axial coding proved the hardest because I had several themes that could be interpreted differently depending on its "activeness", what does it do: is something just being maintained, or reinforced? I solved this problem mostly by differentiating between *maintaining* patterns and *magnifying* problems, with patterns being more neutral. These kinds of analytic problems I encountered mostly during the writing stage, something Braun & Clarke (2006) see as a central part of thematic analysis. It was during this stage that I also rearranged codes into different themes, because writing about them made them seem more fit for another theme.

Constantly asking myself “What does this theme mean?” and “What is the overall story the different themes reveal about my research question?” helped me to always interpret the results of my thematic analysis in relation to my research aim.

I used MaxQDA for bringing order to my data and to code all the material of this phase. I chose not to code my interviews from stage 1 and the focus group of stage 3, because just re-reading them and making notes proved enough to extract their meaning. This way also because of the way more structured nature of stage 1 and 3. For each person I followed, while coding, I wrote a reflexive and summarising note with my thoughts. I used them in later stages of thematic analysis for forming themes and answering important questions about the assumptions underpinning my themes and the overall story that different themes reveal about my research question (Braun & Clarke, 2006).

Phase 3

I chose not to code my focus group transcript because just re-reading it and making notes along the way proved enough to extract its meaning. Doing this allowed me to compile my own story of what this focus group contributed to my findings and overall research puzzle.

Role of theory

Following my inductive approach, I deliberately only started engaging fully with theory on technology in organisations after my data collection was finished. This way I was able to look at the theory both with more fascination and more critically, examining everything in relation to my findings already. It fits my research philosophy of centralising lived experiences of people with technology over theoretical concepts that might have influenced the way I thought about their experiences at them or the questions I asked. Interestingly, this approach is unique to my position as a beginning researcher with limited theoretical background as opposed

to more veteran researchers. For all future research I will do in this field, the Technology Enactment Framework (Fountain, 2001) will be in my head, guiding my ideas on the role of technology in organisational change. It was only at this unique stage in my academic career that I was able to "abuse" my naivety and engage with theory in such an inductive way.

Special attention must be brought to another program that I used for organising my thoughts in a dynamic way: Obsidian. This relatively new app based on the Zettelkasten method by the German sociologist Luhmann (1992) allows for dynamic linking between concepts and notes without hierarchy. Data security is ensured because all notes are saved locally as Markdown text-files. Similar to Wikipedia I was able to write theoretical notes about papers that I read and connect them to each other so that a network of concepts would be formed without hierarchy. Doing this allowed me to conduct my theoretical research in a more dynamic way, linking concepts and articles to each other as I progressed.

Validity

Internal validity for this study is high because I heavily relied on people's experiences and used triangulation to validate my interpretations of experiences with other employees of the PZH. Ethnographical studies such as this one can provide higher internal validity then quantitative studies that rely heavily on proxies and derive their concepts from abstracter forms of knowledge than the lived experiences of people (Lecompte & Goetz, 1982).

I do not strive for statistical external validity in this study, but I do argue that my findings are highly comparable and translatable towards other public organisations because the phenomena I researched are not unique to the PZH. Working digitally can be examined in all public organisations in the Netherlands and many other countries at this time. My findings that working digitally does not help to transform the public sector are also highly transferable,

because digital transformation can be understood as a process of organisational change that could occur in every public organisation.

Nevertheless, I do not wish to condemn the specifics of this case and moment in time that make my research findings partly unique to this study. The culture and history of the PZH certainly influence the way technology is enacted in the organisation, thus making my findings at least partly unique to this case (Lecompte & Goetz, 1982). However, there are bureaucratic structures and other institutional characteristics that are also present in other public organisations, thus transferring the results to other public organisations is possible to a degree that is possible for all ethnographic studies focused on one single organisation.

Ethics

All participants in my research verbally gave permission to use their experiences for academic research purposes and for internal use in the organisation. I ensured full anonymity, such that in this thesis I only use fake names and no background information on all participants. All quotes used were translated from Dutch into English by me.

Findings

> When you work digitally, you look at Outlook first. Everyone's calendars are well organized. So, you are more likely to look at people's calendar first. There is not necessarily something wrong with that, but you are just going to structure a lot. You are now going to plan that spontaneous moment of walking by someone. When that meeting then takes place, your moment of creativity is gone already. – Noah

Central to this chapter are my findings on the extent to which working digitally during the Covid-19 pandemic can help to transform the public sector. I present my findings according to the three phases of my research as outlined in the methods section. Phase 1 consisted of physical interviews with seven people on digital transformation that I conducted at the PZH pre-Covid-19. Phase 2 consisted of following people during their experiences with working digitally to understand the social construction of using technology to work fully from home. Phase 3 consisted of a focus group in which I reflected on my initial findings with five out of seven people that I interviewed in the first phase.

Phase 1: digital transformation according to employees

This section describes the findings from phase 1 of my research, in which I interviewed seven employees of the PZH pre-Covid-19 to find out what digital transformation meant for them.

In six physical interviews I held pre-Covid-19 with seven different employees of the PZH, I continuously heard that digital transformation is not a topic most people in the organisation care about. And when people did care about it, it is because the outside world, rather than internal forces, led them towards digital transformation. Such is the case for the mobility department of the PZH. Future developments like self-driving cars and current

developments such as digitizing all physical traffic assets of the PZH are so central to their work, that digital transformation is connected naturally to the content of their work. People that are responsible for digital transformation on a strategic level struggled with getting the whole organisation on board.

Top management is supportive of for digital transformation, as the concern director is publicly very vocal about the importance of digital transformation. But unless it directly affects people in their work field, regular employees just go on with their job. One interviewee summarises this well: “How do you get from old practices to new practices? Because we are in that old stream of things, that’s just how it is, and how can you add new things to it?” (Anton). Thus, the PZH struggles with getting aboard the biggest group of employees: people who think digital transformation does not concern them.

Based on the interviews I identify roughly three groups that have a different view on digital transformation. The first group concerns people that work with technology and innovation. They believe in the potential of technology and foresee big changes that technology could facilitate, such as using artificial intelligence to transform the service of providing subsidies to organisations within the province. I would put all my interviewees in this group. The second group are people that are forced by the outside world to engage in digital transformation, because their domain itself is changing. As an example, I give the mobility department, which is heavily influenced by market developments. The last and by far the biggest group concerns employees who not feel a direct link between digital transformation and the work they are doing. Without either a big interest in technology due to the nature of their work or the outside pressure to transform, they just keep doing their job without much apparent need for transformation.

Digital transformation is, as Anna said, “happening in society, whether we like it or not”, but it is not a topic that is well defined or well engrained into the organisation of the PZH. In my theoretical chapter I conceptualised digital transformation as large-scale organisational change that fundamentally alters work practices. My findings of the pre-Covid-19 interviews indicate that there is no such change happening yet on a large scale. In the next section of my findings (phase 2), I will discuss different themes that I found while following people in their digital work to see whether working digitally could help the digital transformation of the PZH.

Phase 2: working digitally, how did it go?

This section starts with a short story of how Covid-19 and working digitally unfolded in both the Netherlands the Province of Zuid-Holland in order to better grasp the timeline of events and context of working digitally in the PZH. Afterwards, I will outline three different stories of how working digitally relates to digital transformation.

On March 12 the Dutch government urgently advised everyone to work from home to stop the spread of Covid-19 in the Netherlands. Initially this measure was only supposed to last until March 31st but was soon extended to April 28th. At the time of writing this, the measure to work from home as much as possible is still in effect from September 2020 onwards. The PZH therefore initially saw working digitally as a temporary measure, but it gradually become apparent that the situation would last most longer, if not forever: Dutch Prime Minister Mark Rutte proclaimed that the world from pre-Covid-19 would never return (Van der Aa, 2020).

Within a day after the government measures of March 12th, the PZH set up the online collaboration platform Microsoft Teams for their employees. This could happen so fast

because they had been working on implementing Microsoft Teams for years, although it was initially scheduled to launch later in 2020. The PZH chose Microsoft Teams instead of alternatives such as Zoom because it fitted their existing Micrososft Office 365 digital infrastructure. The functionality of Microsoft Teams allows for intensive online collaboration through file sharing, chatting and open channels, but the PZH mainly used Microsoft Teams to schedule digital meetings.

Many meetings were cancelled in the first few weeks, because expectations were, they could be postponed to a later date at the office again. When it turned out that the crisis would go on for much longer than initially anticipated, people tried to go “back to normal”. Meetings or larger gatherings that were cancelled were now be held online and people searched for ways to continue their work digitally.

The official policy of the PZH strictly followed government advice, which meant that even incidental visits to the office were not allowed during my data collection (April-June 2020). As of writing, the PZH is preparing to partially open its office for a dozen of people in immediate need of a different working place from October 1st, 2020. The head of the PZH writes wrote an internal blog on June 22 saying they want to adhere to government advice as much as possible, as well as protecting colleagues from vulnerable groups more susceptible to Covid-19. Apart from continuously extending the measure to work digitally, the only official policy during my empirical research was a 100-euro budget to buy office-related equipment to use at home.

Doing a thematic analysis of all the data I collected during phase 2 of my research led to me conclude that there are three ways in which working digitally relates to digital transformation: (1) working digitally as continuation, (2) working digitally as decline and (3) working digitally as progress. These three themes are not mutually exclusive: people can

experience working digitally differently depending on what aspects of working digitally they are experiencing.

Working digitally as continuation: The Show Must Go On

When people express that the show must go on, or goes on, they mean that although working digitally poses challenges, it is not significant enough for the show to be cancelled. The curtains still open and the show can still be watched. One of the phrases I jotted down the most after the initial shock was over was: “Oh well, work just goes on”. This really puzzled me because it seems so contradictory with the situation: how can things be normal if everything has seemingly changed so radically? The continuation of work regardless of working digitally is manifested in two ways: (a) maintaining existing problems, and (b) steadiness.

Working digitally is maintaining existing patterns

Working digitally is maintaining existing patterns that were already apparent in the organisation when everyone worked in a physical setting. How people use digital technologies to continue their work has not impacted these patterns in either a negative or a positive way, it has just maintained them.

The biggest manifestation of this is the “meeting culture” of the PZH, with one person mentioning that “everyone just tries to work as they did at the office, being in meetings all day” (Samuel). In the first few weeks there was a small change visible in meeting culture, when many meetings got cancelled, but afterwards it persisted to exist:

> Nothing changes that meeting culture now that it’s digital. Often, I find it useless and too much, sometimes not. It really depends. (Tijn)

Bureaucracy and bureaucratic organisational structures are also being maintained by the way people work digitally. While someone spoke hopeful of the benefits of technology for the abandonment of bureaucratic rule-based working and organisational silos, more people mentioned that they still struggle with bureaucracy while working digitally. Vera, who works with citizen groups that aim to preserve cultural heritage, shared her frustration with the bureaucratic process of loosening organisational rules because of Covid-19:

> It's embarrassing really, and I cannot promise anything because the word of an individual civil servant means nothing. […] Everyone had to have an opinion about it. Several managers and legal professionals are working on it. Well, now we are 9 weeks further. In this digital age I find that really annoying. (Vera)

This quote shows how Vera tried to get some policy adapted because Covid-19 changed the context of the policy. However, she was confronted with bureaucratic procedures and slow processes that frustrated her. Both the meeting culture of the PZH and bureaucracy are not impacted by working digitally in a negative or positive way but have maintained them. Next to maintaining existing patterns, another aspect of *working digitally as continuation* is steadiness.

Working digitally is steadiness

In meetings and conversations people kept telling me that their work "just goes on", often paired with a sigh of resignation. They seem to have contended in the fact that the current situation is unchangeable and just "how things are": both in the office and at home people were able to do their job. Not only did they repeatedly tell *me* this, but they told their co-workers as well. In one meeting with around 25 people from the same department, everyone was given a few minutes to update their colleagues on their work. Almost everyone

started by saying that their work, albeit it less fun without social components, just goes on: ""Work just goes on for me, I do miss the social interactions, though. Work just quietly goes on." (Tijn). Against their expectations, certain aspects of work went well even when working digitally, such as meetings in small groups and "finding" each other digitally. The red thread throughout the theme of steadiness is that although the *form* of work changed significantly, *content* mostly stayed the same. Work could still be performed, the show could go on, but with less verve.

> Face to face contact is really pleasant, that's also what we are used to. […] But do you need it to do your job? No, because work just goes on. But it is less fun. How fun is it to just have little discussions with colleagues? You miss that a lot. And everything can be in place of that yeah, phone calls, video-calls, emails, but it still lacks human contact. (Susan)

Susan describes well how there can be steadiness, but at the same time unease about *working digitally as continuation*. A reason for the reiteration of steadiness can be that the Covid-19 crisis has made people humble for things that are still possible, because at the time of research many restrictions were placed upon social life in the Netherlands and elsewhere. Just as Freddie Mercury sang in "The Show Must Go On": "I'll face it with a grin, I'm never giving in, on with the show." Another possible explanation could be that people employ a narrow definition of work when they say it goes on. Because when work goes on, but it maintains existing problems and is less fulfilling, what is then really going on? In a narrow sense the execution of work-related tasks can maybe go on, but with certain aspects of work missing when working digitally, we need to examine *working digitally as decline* to better understand what continuation really means.

What does working digitally as continuation mean for my research question?

Working digitally as continuation is the perpetuating of current ways of working and in that sense opposite to transformation. The shift from working at the office towards working digitally is not seen in relation to transformational changes, but just as a new reality that must be dealt with after people try to do their jobs just as usual. At most it changed the form of work for employees. Digital tools were not used for different ways of collaboration, but to maintain existing patterns present in working practices. Continuation is not positive, because the patterns that are maintained can also be seen as negative. But even if these patterns were seen as negative, as they were by at least several people, working digitally is still not seen as an invitation to organise work in a different way.

Working digitally as decline: Blue Turns to Grey

Negative aspects of working digitally were prevalent in every conversation that I had with the employees I followed. As such, working digitally as decline is the most prevalent theme in the data. It seems that working digitally leads to decline because work practices either get disrupted or existing bad practices enlarged, while it also asks more of people. "Blue Turns to Grey", the title of a 1965 The Rolling Stones song, means in the context of this research that working digitally removes some of the colour that was present in physical work. Working digitally (a) lacks richness, (b) is more demanding, and (c) is magnifying existing problems.

Working digitally lacks richness

> I see all of you, but I don't feel you. That's the difference." (Person in a digital meeting)

Digital technologies make communication between people not less effective per se, but less rich many contexts. I showed you before that people reiterate "The Show Must Go

On" to emphasise working digitally as continuation. I argue that the way people retell stories of how their work impoverished due to working digitally is a way for them to make sense of how working digitally is also *decline*, even though certain aspects of work 'just go on'. Working digitally means impoverishment of contact, spontaneity, meetings, creativity and work satisfaction.

Impoverishment of contact. People miss physical contact because it is more personal, allows for non-verbal communication and "real connection" between people. What does it matter that working digitally impoverishes contact? It is harder to unravel underlying motives or feelings when having a conversation mediated through technology, because non-verbal cues are missing:

> When people say things like "in principal" or "maybe", there is doubt or something else behind it. Normally I ask what they mean. Digitally that's always harder than live (Joshua).

I noticed this myself too. Until this day I have not physically met any of the ten people I followed during my research. Sometimes I had this gut feeling that, during a conversation, we had only scratched the surface of a certain topic. Pressing further was hard for me because I felt there was less room, or space, both concepts with a physical connotation, to explore further. Physicalness of contact is about making "real connection", a sense of humanity even.

Making a real connection digitally is even harder if you have never met that person before. For Eva, who has known the people in her team for many years, informal contact and connection remained with her colleagues: "I think it matters, when you work with new people, it might be harder. We know each other well and have our own jokes. [Digitally] that works too." (Eva). A form of previous relationship makes real connection and trust between

people easier, Samuel told me, because missing non-verbal cues can be easier filled in by if you know the other person well. This has consequences for work *beyond* mere "continuation" of work, we discussed in the focus group I held, because sometimes you have a question without knowing who to ask it to. If there is no one in your existing network whom to pose the question to, working digitally makes it harder to come across people that could have you answer the question and progress further in your work. Concluding, impoverishment of contact seems to be less with people with whom you already had a previous relationship. However, even with people you know, getting in contact can be a challenge digitally.

The bar for getting in contact with people is higher when working digitally because you must undertake more action: "If you are present physically it is easier to just speak to someone, you just walk by them." (Vera). The analogy of walking by someone's desk is an interesting one, because the PZH already adapted more flexible working spaces with the goal of abandoning fixed workplaces. One young person even told me that when he went by people's desks without an appointment to ask stuff, they all looked very weird at him, after which he quickly learnt to not do that anymore (Noah). Still, people miss at least the *idea* of spontaneous contact, which we will get to in the next paragraph.

Impoverishment of spontaneity. Spontaneous interactions are few and far between when working digitally, something Stef calls the paradox of these times: "We can call everyone at once, but we see each other less. […] It is even more orchestrated, fixed groups at fixed moments.". When removing spontaneous interactions from one's work, structure is what remains, what is to be seen. I imagined my ethnographic work, such as in earlier research I had done, to evolve around canteen interactions and hallway conversations even more than around structured interactions. I missed out on the same two things that

spontaneity in work seems to provide people with: (1) information that would otherwise be missed, and (2) informal non-work-related contact.

Eva often sat in the cafeteria "on watch" so that she would be open to spontaneous interactions with people. Why? Because useful information often comes to us in unexpected ways. Strict structuring and planning of interaction thus leave no room for other ways of receiving valuable information: "Apparently you miss information that you would normally pick up unconsciously or easily." (Joshua). In an e-mail that one of my participants forwarded, a colleague told him that:

> It is by coincidence that we got to speak to each other through this digital meeting. And in hindsight that really came in handy. Because the information that we share now is valuable. You notice that, even though we work in the same department, we *do not run into each other enough* [emphasis by me], such as in the office or the hallway. Let's plan a meeting every 4 or 5 weeks so that we keep in contact with each other. (Colleague of Joshua)

Spontaneity has not disappeared when working digitally, as this quote shows, but it has certainly impoverished. As a response, the person in the quote above suggests structuration to compensate for the lack of richness that working digitally causes. This is a pattern that I see all throughout my data and is further emphasised in the section on magnifying existing problems.

Impoverishment of meetings. Meetings held digitally have less input from its members, push people towards the 'background' and lower the attention span of attendants. This is mainly because participants feel that digital meetings are less suitable for more fluid meetings, thus resulting into meetings often prepared and structured by a chair. A lack of

input in meetings was something my participants not only told me, but I also witnessed numerous times myself. For some meetings I wrote down: “Did not see nor hear five of the participants”. In a reflection on a meeting I took part in, which I called “Eavesdropping the digital room”, I wrote:

> For about 20 minutes the meeting focuses on this document, with the manager talking and the other people staying silent. Except for Paul: “Actually this is annoying me, because I worked on a similar document a lot for the past few weeks and this document does not align to my work at all.” The manager shushes this by saying that “before any frustration arises, do not worry, we are going to fix this”. Although we do not share the same air as we are all at home, I can still feel that the air is tense. We move on. More explaining on the document. No one is responding or giving input. (Own reflection)

After everyone left the digital room, I took time with Paul to reflect on this meeting, who explained to me that a lack of informal contact and micro-alignment had led him to be frustrated during the meeting. Because of a lack of preparation no one had time to read the document beforehand, and the one person that normally would have responded, attended with a baby on his lap and his microphone muted for an hour. This anecdote shows three important things.

First, although it seems that initially the work could continue, a lack of overall richness resulted in a meeting where people left unsatisfied and with questions unanswered. No discussion took place, making it more a sending-receiving focused meeting. Second, people do not pay much attention digitally. At the end of the meeting people just left to go to their next appointment without saying anything or appeared to have their microphone muted or even their sound turned off so they could hear nobody else. Third, people get to the

background more easily, either because they are comfortable in the background (as introverts, i.e.) or because their voice is not amplified by others in control: “There are people that do not want to interrupt others that then think, never mind. If they must battle for attention. Working digitally enlarges some of those things for people.” (Merel) In the meeting that I reflected on this was apparent because there was only one speaker that had no interaction with others.

Digital meetings seem to facilitate some sort of inner-outer circle dynamic in meetings where there is even more focus on people presenting their ideas and others receiving (or not paying attention) to them:

> Meetings are strictly speaking more effective, but sometimes it seems like you have to repeat them three times. It might be more effective, but also more superficial. (Merel)

Flattening out collaboration in such a way is also visible in creativity, which I will get to now.

Impoverishment of creativity. For creativity in collaboration to work you need “energy, a certain state of mind” (Noah) and a “flow” that is hard to obtain digitally (Eva). Creativity was never seen by people as just continuing, like other aspects of work could. Frankly, when people spoke about creativity, they always meant creative collaboration and not individual creativity. Meetings with a creative aim were found to be at the very least harder, needing more preparation and perseverance from its members. Long creative sessions are also draining people more quickly digitally. The keyword for why creativity impoverished when working digitally was: it’s *hard*:

> I think that meetings through [meeting software] are possible when you talk about things point by point: agree, disagree. But really brainstorming is hard. (Susan)

Brainstorming requires flow and rhythm. When collaborating digitally, as we have seen in the paragraphs before, those are hard to obtain: “Short sentences or briefly saying sometimes quickly disturbs an online dialogue.” (Joshua). When creativity is absent, some people mention, outcomes are also more predictable and less potentially transformative. One person mentions how he does not even bother anymore with attending online brainstorm sessions, because his experience has been so negative in the past that he now rather focuses on things that do work digitally. It seems that compensating for loss of flow and rhythm digitally are hard, if not impossible sometimes, resulting in a lack of richness.

Working digitally is more demanding

Working digitally is more demanding, because people perceive it as more exhausting and less efficient and because more initiative is needed from people to “make things work”. People have to organise informal meetings themselves and invest more time in to prepare and reinvent certain work practices that do not work in a digital setting. Adding to that, social contact with colleagues is missing, which makes work less fun and leads to lower work satisfaction. Depending on the home situation of employees the Covid-19 crisis also makes it harder for people with children to create a fruitful work environment for themselves, making work more demanding because of blurring work-life activities (remember the beforementioned employee with his baby on his lap?).

I experienced first-hand how demanding working digitally is when I injured myself during a meeting and I deliberately tried to hide what happened. The meeting lasted 1.5 hours and its goal was for everyone to share what they were doing: a structured meeting focused on missing spontaneous and informal interactions between people. Fifteen minutes into the meeting I still had not had the chance to introduce myself, when this happens:

> When I go to the kitchen during the meeting to grab a glass of water, I hit my back and it bleeds quite a bit. Two minutes later I am asked to introduce myself, and I have to hide the fact that I am in pain because no one saw what happened and I choose not to share. How could I have shared? My connection with them does not allow for it. This could have never happened in real life. The pain intensifies. (Own reflection)

I think my experience is striking because it shows that even in a structured meeting that was deliberately aimed at sharing personal stories, I was too afraid to speak up because my disabled webcam had prevented everyone from seeing what I was going through. Feeling like I had to "go through it" alone I kept my introduction formal and removed from my emotions (pain) from my interaction with others. It is these types of experiences that show how demanding working digitally can be.

A lack of richness in collaboration makes that non-work-related contact suffers both in quantity and quality. Personal life events such as death of relatives or illnesses get shared less easily in digital contact. Work is more than work alone and working digitally seems to diminish some of those non-work aspects of work: "At the office, you can just share some things. So you don't keep walking around with it anymore […]. You cannot really express yourself in that way." (Vera). This shows that people must do more "crafting" in their work in order to fulfil the social needs that were previously met at the office. Crafting is also needed because working digitally needs more initiative to work.

Working digitally, employees are more than ever responsible for initiating and organising work in a way that enables them to either continue or progress in their work. Similar for independent workers without organisational embeddedness, employees must take effort to create a holding environment for themselves (Petriglieri, Ashford & Wrzesniewski, 2019). Craftmanship is needed in order to initiate previously spontaneous interactions. To

compensate for the lack of richness in spontaneous interactions, people set out to initiate these interactions with colleagues themselves by calling or e-mailing them. I will give two examples of this. Joshua "creates his own hallway interaction" by checking the agenda of people and then setting a meeting accordingly. Ivo does the same while emphasising that these interactions are now structured as well: "If your colleague sits next to you, it gives you room to just discuss things. Now you really have to make a call-appointment to sit and talk with someone." This craftmanship removes some spontaneousness while also turning some grey colour into blue again.

Working digitally is magnifying existing problems

Working digitally magnifies existing problems in the organisation, contributing to working digitally as decline. It feeds into two existing paradoxes. First, the paradox between an information overload and lack of alignment. Second, the paradox between wanting to work integrally and structuration. Employees already had to deal with these two paradoxes while at the office. Working digitally has magnified some parts of these paradoxes instead of helping to solve or bridge them, which will be explained below.

Paradox of information overload and lack of alignment. More than ever, people are confronted with an overload of information and attempts to align activities when working digitally. Information overload includes more e-mails, calls and sharing information "just to share it". This overload causes noise. Much of this information sharing is labelled as unnecessary, putting more pressure on employees. In order to understand why this is happening, we have to keep in mind that working digitally lacks richness. Overcompensating for this, people start to share more information:

> We put the whole world in the cc, implying some sort of fake alignment. The appearance that you have included everyone. […] This way we create an overload of feedback. Maybe alignment is a bit our ideal, and politicians would never say so, because alignment is holy, but maybe it's not that good. (Merel)

Merel expresses her annoyance with the information overload and perceived lack of alignment. Digitally we are even less connected to each other, so we share even more. Out of fear of not including people that might be important, more people than necessary are included. Noah mentions this as well: "Often it's not necessary. The shoe pinches between substantive meetings and meetings where people are partly present because of content, but [where people are also present] out of fear that you exclude them because they might belong their hierarchically.". My focus group participants recognise this problem as well. In their discussion they conclude that

The holy grail of alignment has not been dismantled but instead has been met with even more information overload because of working digitally.

Paradox of wanting to work integrally and structuration. Working digitally magnified formalisation of work while the goal of the Province of Zuid-Holland is to work more integrally on broader issues such as a transition towards a more sustainable economy. Let me illustrate this with two examples: reinforcement of (1) structure, and (2) hierarchy.

Working digitally reinforces organisational structures with people feeling more like they are working "on their own island" (Tijn) instead of working integrally. Like the Iron Cage of Weber, working digitally can create a *Digital cage:* "Bureaucracy creates a reality in which you have to fit. Digitalisation creates a similar system." (Stef). He adds to this that it annoyed him that we think technology is always good and helping us forward. In his

reasoning we can see frustration with the changes in the months after March 12th: while the crisis questioned existing work practices in the immediate beginning, leading to more freedom and creativity, people later started to fall back into their old work practices and structures again. The initial liquification of work was immediately met with intensified structuration. In the focus group someone suggests that a way to make people more acquainted with using technology to transform the organisation is to set up a team that actively "visits" departments to talk about this. Their suggestion is met with a strong negative response: "Sorry, but we have tried that five times already.". This anecdote shows the reflex of trying to achieve integral working by structuring.

Physical structures visible at the office are now visible online: informal digital "drinks" are being organised per department, per team, formalised per function. Online collaboration tools are enacted in such ways that they reinforce old structures, even though Noah had hoped that working digitally would have helped in making strong choices to help foster working integrally. I observe that organisational efforts to focus less on hierarchy and more on working integrally on broader issues, are hampered by working digitally because it magnifies existing problems.

What does working digitally as decline mean for my research question?

Working digitally as decline is the impoverishment of work on social, creative, structural and personal levels. These impoverishments get in the way of the organisational change vital for digital transformation. In order to bring about the "holistic effort to revise core processes and services of government" (Mergel et al., 2019, p. 12) that digital transformation entails, it does not help if collaboration suffers from a lack of richness and working digitally makes certain existing problems worse. This theme is also the largest to

have come out of my thematic analysis, leading me to argue that transformation is being hampered by a significant part of how working digitally is socially constructed by employees.

Working digitally as progress: People Have The Power

Never waste a good crisis, right? Working digitally as progress means that there is at least potential for transformation to be found in these digital work practices. Patti Smith ends her famous song "People Have The Power" with:

> We can turn the world around
> We can turn the earth's revolution
> We have the power
> People have the power

This is in line with how I make sense of working digitally as progress: the Covid-19 crisis and subsequently the enforcement of having to work digitally has potential. Key lies in the words *we can*, the possibility for change. I will discuss two themes in which I see working digitally as progress: (1) the crisis offers opportunity, and (2) working from home can be good. Both themes are about the potential for progress that working digitally has and how individuals can make sense of that potential.

The crisis offers opportunity

Because the form of work has significantly changed by working digitally, many people mention the opportunity that this crisis has for organisational change. They do this by saying things like "the reason for change is now here", or "everyone has been placed out of their comfort zone" and "at least systems get used well now". A concrete example of working digitally as progress is the increased visibility of top management. While previously the head

of the organisation was only visible at a few big events throughout the year, webinars were now frequently given that were easy to just join. Another example, which contrasts my earlier observations that people "get to the background" in meetings is someone who mentions the potential of digital whiteboard tools for introvert people because they allow everyone to bring forward their opinion. One could say that traditional whiteboards do the same, but in this case the affordances of the technology, nudging everyone to give input, specifically seem to help introvert people. Still, these were one of the few concrete examples for the opportunity that working digitally poses for organisational change.

What strikes me about these comments is that the nature of most of them is quite abstract. Their argumentation is as follows: this crisis offers an opportunity, because the form of work changed significantly, which leaves *room* for change. But as we have seen earlier, much of that room has already been filled with either reification or magnification of existing practices. And many opportunities are themselves also negative aspects: when Eva speaks of the opportunity of digital technologies to invite whoever you want to a meeting, even last-minute, we are immediately reminded of how this practice can contribute to informational overload and alignment.

Concluding, I argue that while it may seem that people have the power, working digitally has at least not naturally provided the organisation with more than small, abstract opportunities. What working digitally has done, by blurring work-life boundaries, is given people more freedom to transform working from home in an individual productive environment.

Working from home can be good

Especially for people without children and with home facilities to work for longer periods of time, working from home can be good. People mention an increase of (1) effectiveness, (2) efficiency, and (3) concentration when working from home. I explicitly say working from home because some of these aspects are not necessarily connected to working *digitally* per se, something I also address in the discussion. People also indicate that simple, clear-cut tasks are well suited for doing from home: "At home it is fine to just type some things out. I go to the office to meet people, hold meetings, decide things, which I can then just elaborate on from home." (Ivo). Thus, for people with the right circumstances, individual benefits of working from home are making work better for them.

Effectiveness is higher in meetings because they are more to-the-point, with less informal talk, more hierarchy and formality. While I think it is important to discuss this as being progress, one should not forget the other side of the coin:

> I think meetings are more effective, because you do not want to interrupt each other, so you prepare well, tick of boxes. There is less… You can meet a bit more formally, and that is good for some cases. But the whole day formal and up-tempo asks a lot of you, I end up with a headache at night. (Merel)

Efficiency can increase for people because they do not have to travel anymore and have more concentration when working from home. All those spontaneous hallway meetings are gone, so you do the math on how this can save you time day-by-day. Increased personal freedom to divide your own time is also mentioned as being a good aspect of working from home: "[working from home] makes me more effective and efficient, because I keep in charge of my own variety in activities". In short, with the right facilities work can not only be continuation but also progress for people in terms of effectiveness, efficiency and concentration.

What does working digitally as progress mean for my research question?

Working digitally as progress means that there are also aspects of working digitally that do invite people to do their work differently. “People have the power” indicates increased autonomy for people to change their work practices in ways that best suit them. This increased autonomy could be a way for people to change how working digitally maintains patterns and magnifies existing problems. Moreover, the crisis can make people familiar with technology and thus potentially help in the digital transformation.

Phase 3: focus group to reflect on initial findings

A few days after the end of phase 2, I organised a focus group with the goal of asking them whether the aspects of working digitally discussed previously are helping in the digital transformation of the PZH.

In the focus group held just after my last talks with the people I followed, I presented my initial findings to five out of seven people I had interviewed on digital transformation pre-Covid-19. The goal of this focus group was to ask them whether they thought that the aspects of working digitally as just presented are helping in the digital transformation of the PZH. I briefly presented my initial findings, such as that while form changed, people felt that work continued and that working digitally made work less rich and more formal (see Appendix B for the full list of initial findings).

An important point raised in the focus group was that a lack of richness in collaboration also leads to fewer crossovers between content-driven teams and teams explicitly working on digital transformation. Especially because they really see digital transformation as a transformation of the content (such as sustainability, mobility) with help of technology, this lack of richness when working digitally is hampering digital

transformation. The hope everyone in the focus group shared was akin to my theme working digitally as progress: the crisis also is a chance. The digital reality is becoming reality to people, Anna said. Other express that increased familiarity with technology could be helpful to digital transformation if those experiences are positive.

In the end they agreed with my initial conclusion that the negative aspects of working digitally on work practices were doing more bad than good for the digital transformation of the organisation. They mainly agreed because the lack of richness, higher demand and magnification of existing problems are more concretely hampering digital transformation than the *potential* of increased awareness through technology use. This is striking, because all people in the focus group work with technology and innovation daily and are part of the group I identified in phase 1 as the "believers" in the potential of technology to facilitate big changes in the organisation.

I want to end my findings chapter with a quote made by an IT manager present in the focus group who shares his thoughts on how the organisation always wants both change and continuation. It's not technology that can solve this, but a change of mindset that apparently has not taken place because of working digitally:

> I notice that, we want disruption, and absolute control. We want to change everything, and keep doing it the same way. We just keep, it seems like we cannot make a choice and therefore just keep doing the same. That's the question we are facing. And it has nothing to do with technology or its possibilities, but with how free we are in our own mind, and to dare to sometimes think: I'll just do it, you know. (Nout)

What my findings show is that working digitally at the PZH is mainly used to keep doing everything the same way, instead of changing existing practices. Technology is used

not for disruption, but for more control. Working digitally is not used to bring about new forms of organisational change, but rather to keep the existing status quo in check while at the same time making transformation harder due to a lack of richness, more demanding work and magnification of existing problems.

Discussion

Digital transformation in the Province of Zuid-Holland is not a topic all employees care about. If it does not directly concern their work or they are forced by the outside world to change, most people seem to be comfortable with not transforming their work using digital technologies. Although there was top managerial commitment already before Covid-19, no change was happening on a large scale. I set out to research if working digitally could contribute to digital transformation in the PZH by doing digital ethnography, leading me to compose three themes of what working digitally can mean for digital transformation.

The themes of working digitally as continuation, decline and progress teach us three things about to what extent working digitally can help to digital transformation. First, *working digitally as continuation* shows that people enact technologies to continue existing ways of working instead of using those technologies to bring forward transformational changes. Existing patterns such as a strong meeting culture and a culture of bureaucracy are not changed due to technology but maintained. The work continues because people do not see any potential in working digitally to transform their work and would rather just have the show go on.

Second, *working digitally as decline* shows that work is impoverishing on aspects that are crucial to digital transformation, such as collaboration, spontaneous interaction with colleagues and informal contact. In the theoretical chapter, I conceptualised the way to digital transformation as a process of organisational change, for which those impoverished aspects are harmful. I found that people perceive working digitally as decline in most areas of work, while also making work itself more demanding. Even with increased initiative from people themselves, they still struggled to keep in contact with colleagues and organise the informal and spontaneous interactions they deemed necessary for their work. Working digitally also

hampers digital transformation because it magnifies existing problems that are antithetical to transformation. Two existing problems that made it worse were an overburdening of people with information out of fear for misalignment and over-structuring of work while the PZH wanted to work more integrally. Considering digital transformation is a holistic effort for which the whole organisation must work together to rework core processes from the ground up, working digitally is harmful towards this effort by turning blue to grey in many aspects of work.

Third, *working digitally as progress* shows some signs that there are work practices connected to working digitally that contribute to digital transformation. Namely, the increased familiarity and opportunities to arise from the sudden crisis and increased autonomy that gives people the power to shape their own work. It has to noted that the benefits for personal autonomy mostly concern working from home rather than working digitally. The ability to organise your own time has been mentioned as an advantage of remote working for decades, but it has little to do with using digital technologies and more with increased personal freedom that working "on your own" provides. Still, the increase in autonomy is a sign that working digitally allows people to break from previously existing power structures. As such, working digitally has some potential to contribute to digital transformation but the signs I found are still rather weak compared to the negative aspects of working digitally.

Participants of my focus group reflected on my initial findings and came to the same conclusion that working digitally hampers digital transformation more than the potential it carries. All participants were "believers" of technology and innovation and still saw that the lack of richness caused by working digitally led to less crossovers between content-driven teams and people like them who were ought to make the organisation more familiar with

digital transformation. Although they still had hope that increased familiarity with technology and awareness of the "digital reality" would help people see the benefits of technology, overall they concluded that working digitally was not helping the transformation of the public sector.

Theoretical implications

Drawing on social constructivist theories on enactment of technologies, materiality and power that were outlined in my theoretical chapter, I discuss several theoretical implications of my findings.

Enactment of technologies

Employees of the PZH enacted technologies mostly as *inertia*: to keep existing ways of working and maintain the status quo and partly as *application:* to refine their work practices while still reinforcing the underlying status quo (Orlikowski, 2000). Only when technologies are enacted for *change*, instead of inertia or application, existing institutions are transformed in ways that lead to organisational change (Orlikowski, 2000). The sudden external enforcement of working digitally has thus led to enacting technologies to maintain instead of change existing organisational structures, which is antithetical to digital transformation.

When working digitally, institutional arrangements such as norms and cultural understandings influence the enactment of technologies in ways that make digital transformation harder (Fountain, 2001). People experience more distance towards others when working digitally, making work more formal and limiting their agency to collaborate in an open environment (Wilson et al., 2008). My findings describe how I hurt my back until it bled during a meeting specifically aimed at sharing personal things, but I still felt

uncomfortable mentioning it even though I was in pain. This example shows that more macro-level societal norms and beliefs about vulnerability, trust and openness also influence the way in which we make sense of working digitally. The distance people experience towards others when working digitally thus leads to enactment of technology in ways that make work even more distant, formal and impoverished. An enactment of technology in such a way is no fruitful basis for transformative changes, which needs social structures to change in a more supportive way (Meijer & Bekkers, 2015).

My findings have made apparent how important the informal organisation is for work to be more than continuation. Recommendations done by Fayard & Weeks (2007) on how organisations can foster collaboration through informal interactions focus on the *physicalness* that stimulates informal interaction. My findings show that people enact technologies in a way that cannot compensate for the physicalness, turning informal interactions into structured work practices most of the time and resulting into working digitally as decline. Impoverishment of spontaneity is a result of people's effort to compensate for this lack of physicalness in digital work. This increased structuration of work does not enable change but magnifies existing patterns and problems in the organisation. In order to understand this better, I will discuss how materiality stimulates this type of enactment.

Materiality

Technologies such as video calling "do" certain things that we cannot contribute to social practice but are inherent to objective characteristics of video calling (Leonardi & Barley, 2010). When using Microsoft Teams, only a limited amount of people can be visible on screen, which means that the software structures the way you can hold digital meetings. In theory, you could use software such as Microsoft Teams for meeting up with friends or following online yoga sessions, but the bureaucracy of the PZH makes that video calling is

enacted for structured, before-hand planned meetings with colleagues. The way people enact video calling as just a replacement for old-style face-to-face meetings results in outcomes that lack richness, because the objective boundaries of the technology are larger than when meeting physically. This lack of richness, Fountain (2001) would say, on their turn influences institutional arrangements such as norms, beliefs and cultural understandings. People go on to state that it is *just the way it is,* technology is doing that to us, removing their own agency from how technology can be used. When people experience this lack of agency in enacting technologies their familiarisation of technology will not be helpful for digital transformation because it only reaffirms their idea that technology is not something beneficial to their own work: maybe technology is not that promising after all.

The fact that the PZH uses Microsoft Teams as their online collaboration tool shows their enactment of technology to reinforce existing practices. Microsoft Teams is fully built around the idea of scheduled, structured meetings with colleagues, just like you would send a calendar invite to people at the office. The big difference when working digitally is that collaboration then only composes of those structural meetings, while before you had informal, spontaneous interactions due to the physicalness of work. It is not surprising that they chose Microsoft Teams over less bureaucratic and more innovative tools such as Slack, because it fits their institutional logic (Fountain, 2001). Perhaps choosing a tool with a weaker organisational fit could lead to potentially different work practices, but existing institutional arrangements would probably still lead people to work around the tool (Orlikowski, 2000). Bureaucratic organisations choose tools for working digitally that fit the organisation they are now instead of ones that fit the digitally transformed organisation they might want to become.

Materiality of technology thus matters more than previous scholars have considered (Leonardi & Barley, 2010). There are certain things that technology does that are hard to overcome by human agency, especially accounting for our bounded rationality and existing institutions influencing us. Moreover, when people in power control the technology that you will be using, such as the IT department deciding Microsoft Teams over other tools, you are forced to adapt to work with seeing less people on screen because of the objective characteristics of software. This adds to Zuboff (1986, p. 388) who argues that technology "redefines the possible, [but] it cannot determine which choices are taken up and to what purpose". Materiality of technologies used when working digitally can therefore hamper the transformation of the public sector because it can limit the way in which users are forced to step over their boundaries and enact technology in transformative ways.

Power

In a Foucauldian sense, people enact technologies that keep existing power structures in place without deliberately exerting power over others. Power plays a role in a material sense when IT-managers choose tools like Microsoft Teams, but the even bigger role is in the collective maintenance of the status quo through enactment of technologies. People keep each other locked in a system from which they see no escape precisely because there is less *we* and more *me* when working digitally due to impoverishment of many social aspects of work. Organisational change is a collaborative and holistic effort that goes beyond the individual (Westerman et al., 2014). Therefore, working digitally does not contribute to digital transformation, because the way in which technology is enacted does not break with existing power structures but maintains or reinforces them.

It must be noted that my findings suggest working digitally can be progress when it increases autonomy of employees and gives them more agency to do work at their own time.

However, it is highly questionable whether this can be contributed to working *digitally* or is just an aspect of the fact that there is less control and thus more autonomy if you work from your own home. This is bounded by factors such as having a good working spot at home and having or not having young children. Research on teleworking states that this increased autonomy can also lead to isolation, marginalisation and increased stress for employees, all factors that diminish the collective effort needed to bring about digital transformation (Di Martino & Wirth, 1990).

Limitations of this study

This study has three main limitations. First, because I focused fully on the experiences of employees with their changing working practices, this study does not provide insight on what kind of policies surrounding working digitally are successful or perceived as useful for digital transformation. For this research this made sense, mainly because there were barely any official policies on working digitally at time of research. Future scholars could investigate if my findings still hold when working digitally has become even more engrained into organisational culture while the impact of Covid-19 lingers on.

Second, the changing and fluid nature of my research design due to Covid-19 made it hard to connect working digitally explicitly to digital transformation. Because some participants were more tech-savvy and interested in this link than others, it was discussed explicitly depending on the interest of my participants. While all knew the nature of my research, some empirical observations are therefore already more geared towards how working digitally can contribute to digital transformation while others required more sense-making by me to establish the link. I aimed to balance this limitation in phase 3 of my research, in which I explicitly reflected with interviewees from phase 1 on my findings and the contribution of working digitally on digital transformation.

Lastly, this study aimed to follow all ten people working digitally at around the same intensity, which made it impossible to go really in depth with one person, i.e. literally starting and finishing a working day together (see Czarniawska (2018) for a discussion on shadowing in ethnography). With some people I had more interactions than with others, depending on the fit between theirs and my schedule. I was also limited by working digitally myself, as I never had spontaneous interactions with participants but always structured ones. Still, some form of digital shadowing could be interesting to explore in future studies as working digitally continues to be the norm in numerous countries around the world.

Conclusion

Based on my findings and discussion, I can now answer the research question: To what extent does working digitally during the Covid-19 pandemic help to transform the public sector? My findings show that working digitally leads to maintenance and reinforcement of existing bureaucratic patterns and lacks the richness needed to bring forward organisational change, making it harder for organisations to engage in digital transformation. The way in which technologies are enacted to work digitally shows that working digitally is no steppingstone towards change for people, but instead a way to maintain their existing ways of work. Although awareness of what technology can do may be higher when working digitally, when people experience working digitally mostly as decline they will belief even less in the potential of technology for their work. Many existing problems were magnified when working digitally, such as overburdening people with information out of fear for lack of alignment. Working digitally negatively impacts the holistic effort required in digital transformation to revise existing organisational practices with help of technology. Therefore, I conclude that working digitally does not help to transform the public sector and is even harmful for digital transformation.

The findings of this paper are significant to both theory and practice in three ways. First, this study questions the idea that Covid-19 pandemic and the subsequent increased usage of technology in work could also help to transform the public sector. Using an ethnographic perspective, I got to see how people use technology in their work in ways that does not help but instead hampers digital transformation. This study adds an empirical investigation to the work of Mergel et al. (2019) and teaches us that even internal pressures combined with external enforcement of technology use do not necessarily contribute to digital transformation. They claim that the role of technology is “the trigger of change and

influences organisational behaviour" (p. 11), but this study adds that enactment of technology can also lead to inertia and thereby the maintenance of existing structures, not triggering change at all. While Mergel et al. (2019) state that organisations are not influenced by enacted technologies but only by the integration of technology into service delivery, we show that enacted technologies can be negative for the process of digital transformation.

Second, this ethnographic study is unique in a research domain dominated by positivist quantitative or qualitative case studies. Such studies often neglect how people interact with technology to maintain or change their work practices in terms of digital transformation, focusing more on information systems or theories of adoption. A recent literature review on transformational government, which bears much resemblance with digital transformation, found only two ethnographic studies among 496 papers on transformational government from the 1990s to today (Omar et al., 2020). This methodological one-sightedness worsens the divide between voluntarist and determinist perspectives on technology in organisations. This study is an effort to bridge that divide by taking both the determining force of technology and the social construction of it seriously and examining the relationship in practice.

Third, this study finds that materiality and power play an important role in understanding how working digitally can contribute to digital transformation. Organisations will most likely use technologies that fit their existing organisational and institutional logics, making the enactment of those technologies more likely to be maintaining then changing. This is a significant contribution because it highlights a struggle for public organisations that want to use technologies that fits their purpose, but also helps them in their process of digital transformation. When a technology fits existing work practices perfectly, it can make enactment of technology in a transformative way harder. Power structures will be collectively

maintained by employees when materiality of technology partly locks them in their old ways of working. Therefore, public organisations should actively consider digital technologies that fit the organisation they want to be more than the organisation they are now, if they want to transform their organisation with help of technology.

Future scholars of technology and organisational change should be increasingly aware of the fact that especially with forced adaption, enactment of technology will most likely be guided more by the objectiveness of the technology than by agency of users. In my findings this was only contradicted in the beginning months of the crisis, in which disruption was so intense that all previous practices were cancelled. But when people discovered that the objective characteristics of technology (its possibilities) allowed for *continuation*, working digitally ceased to be progress but turned into decline and a burden for digital transformation.

Practitioners should pay special attention to the dark side of working digitally and to how it can be a decline for your organisation rather than bring about change. Not only should they listen to employees demands on providing good facilities to work from home, they should also examine the balance between continuation, decline and progress in their organisation. Managers should ask themselves: is there still enough room to develop or are we merely trying to do what we always did, in a superficial way? If digital transformation is something you want to pursue as an organisation, active interventions are necessary to make working digitally work for you instead of against you. Employees should be actively encouraged to think about how they can enact technologies in ways that does not impoverish but enrich their work practices so that digital transformation becomes possible, while at the same time paying attention to aspects of technology that restrict the agency of employees to work digitally in a fruitful way.

Based on this research I designed a tool for teams to help them work digitally and hybrid in a meaningful way by discussing six key themes derived from my research. The goal of this tool is for teams to balance between effective, inclusive and creative digital collaboration by discussing dilemmas with each other. Usage of this tool is free for all non-commercial applications under the Creative Commons license CC BY-NC-ND 4.0. Practitioners interested in this tool can look up the website of the Datawerkplaats on which the tool will be made available. I believe that this type of interventionist action-driven ethnographies has the future in organisational science. For future scholars trying to make sense of working digitally I would encourage them to give something back to the organisation that goes beyond the mere sharing of a report. Tacit knowledge obtained by engaging with employees in an ethnographic should give you enough fuel to produce a more action-oriented way of achieving impact with your research.

References

Akemu, O., & Abdelnour, S. (2020). Confronting the Digital: Doing Ethnography in Modern Organizational Settings. *Organizational Research Methods, 23*(2), 296–321. https://doi.org/10.1177/1094428118791018

Bailey, D. E., & Kurland, N. B. (2002). A review of telework research: Findings, new directions, and lessons for the study of modern work. In *Journal of Organizational Behavior* (Vol. 23, Issue SPEC. ISS., pp. 383–400). John Wiley & Sons, Ltd. https://doi.org/10.1002/job.144

Bailey, D. E., Leonardi, P. M., & Barley, S. R. (2012). The lure of the virtual. *Organization Science*, *23*(5), 1485–1504. https://doi.org/10.1287/orsc.1110.0703

Bannister, F., & Connolly, R. (2014). ICT, public values and transformative government: A framework and programme for research. *Government Information Quarterly, 31*(1), 119–128. https://doi.org/10.1016/j.giq.2013.06.002.

Barley, S. R. (1986). Technology as an Occasion for Structuring: Evidence from Observations of CT Scanners and the Social Order of Radiology Departments. *Administrative Science Quarterly*, *31*(1), 78. https://doi.org/10.2307/2392767

Barley, S. R. (1990). The Alignment of Technology and Structure through Roles and Networks. *Administrative Science Quarterly*, *35*(1), 61. https://doi.org/10.2307/2393551

Baruch, Y. (2000). Teleworking: Benefits and pitfalls as perceived by professionals and managers. *New Technology, Work and Employment, 15*(1), 34–49. https://doi.org/10.1111/1468-005X.00063

Bate, S. P. (1997). Whatever Happened to Organizational Anthropology? A Review of the Field of Organizational Ethnography and Anthropological Studies. *Human Relations, 50*(9), 1147–1175. https://doi.org/10.1177/001872679705000905

Berman, S. J. (2012). Digital transformation: opportunities to create new business models. *Strategy & Leadership, 40*(2), 16–24. https://doi.org/10.1108/10878571211209314

Blom, B., & Nygren, L. (2010). Analysing written narratives: considerations on the 'code-totality problems'. *Nordic Journal of Social Research, 1*(1), 1-20.

BMC (2020, June 26). *De coronacrisis als versneller van digitalisering.* Binnenlands Bestuur. Retrieved from https://www.binnenlandsbestuur.nl/bestuur-en-organisatie/kennispartners/bmc/de-coronacrisis-als-versneller-van-digitalisering.13681682.lynkx

Boeije, H. (2009). *Analysis in qualitative research.* London: Sage Publications.

Boell, S. K., Cecez-Kecmanovic, D., & Campbell, J. (2016). Telework paradoxes and practices: the importance of the nature of work. *New Technology, Work and Employment*, *31*(2), 114–131. https://doi.org/10.1111/ntwe.12063

Braudel, F. (1981). *The Structures of Everyday Life: Civilization and Capitalism 15-18th Century.* New York: Hamper & Row.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bretschneider, S., & Mergel, I. (2011). Technology and public management information systems. In D. C. Menzel & H. J. White (Eds.), *The State of Public administration: Issues, Problems, and Challenges* (pp. 187–203). M.E. Sharpe.

Bryman, A. (2012). *Social Research Methods (Fourth edition).* Oxford: Oxford University Press.

Buchanan, D. A. (2001). The Role of Photography in Organization Research: A Reengineering Case Illustration. *Journal of Management Inquiry*, *10*(2), 151–164. https://doi.org/10.1177/1056492601102018

Bughin, J., LaBerge, L., & Mellbye, A. (2017). The case for digital reinvention. *McKinsey Quarterly, 2,* 1-15.

Bughin, J., LaBerge, L., & Mellbye, A. (2017). The case for digital reinvention. *McKinsey Quarterly, 2,* 1-15.

Carlson, J. R., & Zmud, R. W. (1999). Channel expansion theory and the experiential nature of media richness perceptions. *Academy of management journal*, *42*(2), 153-170.

Castells, M. (1996). *The information age* (Vol. 98). Oxford: Blackwell Publishers.

Czarniawska, B. (2018). Fieldwork techniques for our times: shadowing. *In Qualitative Methodologies in Organization Studies* (pp. 53-74). Palgrave Macmillan, Cham.

DeSanctis, G., & Monge, P. (1999). Introduction to the Special Issue: Communication Processes for Virtual Organizations. *Organization Science, 10*(6), 693–703. https://doi.org/10.1287/orsc.10.6.693

Di Martino, V., & Wirth, L. (1990). Telework: A New Way of Working and Living. *International Labour Review*, *129*(5), 529-554.

Dulebohn, J. H., & Hoch, J. E. (2017). Virtual teams in organizations. *Human Resource Management Review*, *27*(4), 569–574. https://doi.org/10.1016/j.hrmr.2016.12.004

Ellison, N. B. (1999). Social impacts: New perspectives on telework. *Social science computer review*, *17*(3), 338-356.

Fayard, A. L., & Weeks, J. (2007). Photocopiers and water-coolers: The affordances of informal interaction. *Organization Studies, 28*(5), 605–632. https://doi.org/10.1177/0170840606068310

Fearn, N. (2020, June 16). How coronavirus has accelerated the digital transformation of Britain's public sector. *ITPro.* Retrieved from https://www.itpro.co.uk/business-strategy/public-sector/356081/how-coronavirus-has-accelerated-the-digital-transformation

Fiol, C. M., & O'Connor, E. J. (2005). Identification in face-to-face, hybrid, and pure virtual teams: Untangling the contradictions. *Organization science, 16*(1), 19-32.

Fountain, J. E. (2001). *Building the virtual state: Information technology and institutional change.* Brookings Institution Press.

Gibson, C. B., & Gibbs, J. L. (2006). Unpacking the concept of virtuality: The effects of geographic dispersion, electronic dependence, dynamic structure, and national diversity on team innovation. *Administrative science quarterly*, *51*(3), 451-495.

Gray, R. (2020, June 22). How COVID-19 is kickstarting change in the public sector. *Raconteur.* Retrieved from https://www.raconteur.net/digital-transformation/digital-transformation-2020/public-sector-transformation

Haas, M., Hamersma, M & Faber, R. (2020). Nieuwe inzichten mobiliteit en de coronacrisis. *Kennisinstituut voor Mobiliteitsbeleid*. Retrieved from https://www.kimnet.nl/publicaties/brochures/2020/07/21/nieuwe-inzichten-mobiliteit-en-de-coronacrisis

Hannah, F. (2019, July 5). The firm with 900 staff and no office. BBC. Retrieved from: https://www.bbc.com/news/business-48879976

Hine, C. (2000). *Virtual Ethnography*. London: Sage.

Jorgensen, D. L. (1989). *Participant observation: A methodology for human studies* (Vol. 15). Newbury Park, CA: Sage.

Lecompte, M. D., & Goetz, J. P. (1982). Problems of Reliability and Validity in Ethnographic Research. *Review of Educational Research*, *52*(1), 31–60. https://doi.org/10.3102/00346543052001031

Maanen, J. V. (1996). Commentary: On the Matter of Voice. *Journal of Management Inquiry*, *5*(4), 375-381.

March, J.G. & Simon, H.A. (1958). *Organizations*. New York: John Wiley and Sons.

Matt, C., Hess, T., & Benlian, A. (2015). Digital Transformation Strategies. Business & *Information Systems Engineering, 57*(5), 339–343. https://doi.org/10.1007/s12599-015-0401-5

Meijer, A., & Bekkers, V. (2015). A metatheory of e-government: Creating some order in a fragmented research field. *Government Information Quarterly*, *32*(3), 237–245. https://doi.org/10.1016/j.giq.2015.04.006

Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly, 36*(4), 101385. https://doi.org/10.1016/j.giq.2019.06.002

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, *16*(1). https://doi.org/10.1177/1609406917733847

Omar, A., Weerakkody, V., & Daowd, A. (2020). Studying Transformational Government: A review of the existing methodological approaches and future outlook. *Government Information Quarterly*, *37*(2), 101458. https://doi.org/10.1016/j.giq.2020.101458

Orlikowski, W. J. (1992). The Duality of Technology: Rethinking the Concept of Technology in Organizations. *Organization Science*, *3*(3), 398–427. https://doi.org/10.1287/orsc.3.3.398

Orlikowski, W. J. (2000). Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organizations. *Organization Science*, *11*(4), 404–428. https://doi.org/10.1287/orsc.11.4.404.14600

Perrow, C. (1967). A Framework for the Comparative Analysis of Organizations. *American Sociological Review, 32*(2), 194-208. https://doi.org/10.2307/2091811

Petriglieri, G., Ashford, S. J., & Wrzesniewski, A. (2019). Agony and Ecstasy in the Gig Economy: Cultivating Holding Environments for Precarious and Personalized Work Identities. *Administrative Science Quarterly*, *64*(1), 124–170. https://doi.org/10.1177/0001839218759646

Pittaway, J. J., & Montazemi, A. R. (2020). Know-how to lead digital transformation: The case of local governments. *Government Information Quarterly*. Advance online publication. https://doi.org/10.1016/j.giq.2020.101474

Ray, J. L., & Smith, A. D. (2012). Using photographs to research organizations: Evidence, considerations, and application in a field study. *Organizational Research Methods*, *15*(2), 288–315. https://doi.org/10.1177/1094428111431110

Reuters. (2020). Google to keep employees home until summer 2021 amid pandemic- WSJ. Retrived from: https://www.reuters.com/article/health-coronavirus-alphabet-google/google-to-keep-employees-home-until-summer-2021-amid-pandemic-wsj-idUSL3N2EY33J

Rijksoverheid (2020). De Nederlandse maatregelen: basisregels voor iedereen. Retrieved from https://www.rijksoverheid.nl/onderwerpen/coronavirus-covid-19/nederlandse-maatregelen-tegen-het-coronavirus/gezondheidsadviezen.

Scott Poole, M., & DeSanctis, G. (1992). Microlevel structuration in computer-supported group decision making. *Human communication research*, *19*(1), 5-49. https://doi.org/10.1111/j.1468-2958.1992.tb00294.x

Taskin, L., & Edwards, P. (2007). The possibilities and limits of telework in a bureaucratic environment: lessons from the public sector. *New Technology, Work and Employment, 22*(3), 195–207. https://doi.org/10.1111/j.1468-005X.2007.00194.x

Taskin, L., & Edwards, P. (2007). The possibilities and limits of telework in a bureaucratic environment: lessons from the public sector. *New Technology, Work and Employment*, *22*(3), 195–207. https://doi.org/10.1111/j.1468-005X.2007.00194.x

Thomas, W. I. (1927). The behavior pattern and the situation. *Publications of the American Sociological Society, 22,* 1–14.

Townsend, A. M., DeMarie, S. M., & Hendrickson, A. R. (1998). Virtual teams: Technology and the workplace of the future. *Academy of Management Executive*, *12*(3), 17–29. https://doi.org/10.5465/ame.1998.1109047

Van der Aa, E. (2020, April 1). Rutte: Wereld van vóór coronacrisis keert niet meer terug. *Algemeen Dagblad*. Retrieved from https://www.ad.nl/binnenland/rutte-wereld-van-voor-coronacrisis-keert-niet-meer-terug~a539c80e/.

Van der Lippe, T., & Lippényi, Z. (2020). Co-workers working from home and individual and team performance. *New Technology, Work and Employment*, *35*(1), 60–79. https://doi.org/10.1111/ntwe.12153

van Hulst, M., Ybema, S. B., & Yanow, D. (2013). Ethnography and organizational processes. In H. Tsoukas & A. Langley (Eds.), *The Sage Handbook of Process Organization Studies* (pp. 223–236). Sage.

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, *28*(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003

Warren, S. (2017). *Photography in Qualitative Organizational Research: Conceptual, Analytical and Ethical Issues in Photo- Elicitation Inspired Methods*.

Watson-Manheim, M. B., Chudoba, K. M., & Crowston, K. (2012). Perceived discontinuities and constructed continuities in virtual work. *Information Systems Journal*, *22*(1), 29–52. https://doi.org/10.1111/j.1365-2575.2011.00371.x

Weerakkody, V., Janssen, M., & Dwivedi, Y. K. (2011). Transformational change and business process reengineering (BPR): Lessons from the British and Dutch public sector. *Government Information Quarterly, 28*(3), 320–328.

Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Press.

Westerman, G., Calméjane, C., Bonnet, D., Ferraris, P., & McAfee, A. (2011). Digital Transformation: A roadmap for billion-dollar organizations. *MIT Center for Digital Business and Capgemini Consulting*, *1*, 1-68.

Woodward, J. (1958). *Management and Technology*. London: H.M.S.O.

Yildiz, M. (2007). E-government research: Reviewing the literature, limitations, and ways forward. *Government Information Quarterly*, *24*(3), 646–665. https://doi.org/10.1016/j.giq.2007.01.002

Young, E. (1989). On the Naming of the Rose:* Interests and Multiple Meanings as Elements of Organizational Culture. *Organization studies*, *10*(2), 187-206.

Zuboff, S. (1989). *In The Age of the Smart Machine: The Future of Work and Power.* New York: Basic Books.

Zuboff, S. (2019). *The Age of Surveillance Capitalism*. New York: PublicAffairs.

Appendix A. Coding tree

Working digitally as continuation

- Maintaining existing problems
  - Structure is maintained
  - Bureaucracy is maintained
  - Meeting culture is maintained
- Steadiness, it is what it is
  - Work just goes on
  - We just adapt
  - Working digitally works too

Working digitally as decline

- Lack of richness
  - Impoverishment of contact
  - Impoverishment of spontaneity
  - Impoverishment of meetings
  - Impoverishment of creativity
- Working digitally is more demanding

Emotional / social contact is missing

Work is less fun

Working from home is less efficient

Working digitally is tough

More initiative needed to make things work

More preparation needed

Need to organise informal interactions yourself

Magnifies existing problems

Paradox information overload / alignment

Structure / hierarchy

Working digitally is progress

Crisis is an opportunity

Technology can help introvert people

You can easier invite people

Working from home is better

More efficient

More concentration

Some tasks are easier to do

Appendix B. Initial findings as presented in my focus group on June 2nd

1. The form of work changes, not content
2. You can work in your pyjamas, but work becomes more formal
3. You can reach people easier and invite them for every meeting, but at the same time networks of people shrink and little new contacts are being made
4. Work 'just goes on', but new changes in content happen not more often than normally
5. Creativity is less because form changes and there are less unplanned interactions
6. Some people are drowning in meetings, more than normally, because they get involved in everything out of fear for lack of alignment.