

Bureaucracy Meets Innovation

Contradictions at the Municipality of Trondheim



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ABSTRACT

Digitalisation and innovation are two terms that have become increasingly more popular in discourse related to the welfare state in Norway. Digital technology has been accredited (and fetishized as) a one-size-fits-all solution to the welfare state's issue of efficiency. However, innovation and bureaucracy can be said to hold contradictory values. In this thesis, I investigate what happens when a bureaucratic institution such as the *kommune* takes on the project of innovative digitalisation. My findings were informed by five months of fieldwork at the municipality of Trondheim's Digital First Choice program (*Digitaltjørstevalg*): a body responsible for carrying out and implementing digitalisation projects at the municipality. My informants were consultants (hired through private acquisition) and municipal employees in different roles (including developers).

What I found was that organisational contradictions emerged. Innovation was conceptualised as a central aim of the program, yet the bureaucratic structures of the municipality which framed the program impeded the risk-taking practices tied to innovation. So, through different performances and practices, the actors at the Digital First Choice program attempted to create distance from the bureaucracy they were a part of, while at the same time positioning themselves closer to the competitive information and technology industry. Faced with organisational contradictions that impeded the work they wanted to do, the actors at the program used the concepts of digitalisation and innovation to imagine a utopian bureaucracy where innovation was not only welcomed and encouraged, but allowed. Thus, they used these concepts as tools to navigate the perceived inflexibility of bureaucracy.

These prevalent contradictions gave shape to uniquely positioned digital technologies, opening up to a myriad of questions concerning which biases, values, and preconceptions were embedded in these digital tools that carried out the responsibilities of the welfare state.

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CHAPTER 1: Introduction

In June 2019, the municipality of Trondheim was awarded a national innovation prize. The prize was awarded by the Ministry of Local Government and Modernisation (*Kommunal- og moderniseringsdepartementet*, KMD going forward), and was handed out each year to a municipality that excelled at innovation. Innovation, they write, is about experimenting and taking risks (Digitaliseringsdirektoratet 2019a). Because paving the way has a cost, the prize was meant to acknowledge those who go out on a ledge, and was meant to inspire the force of innovation in the municipal sector across the country (ibid).

The municipality of Trondheim was awarded this prize based on a project called *Ledelsesskolen* (School of Leadership). In this project, the municipality had worked holistically and systematically to motivate innovation. The gist of it was that managers across the whole municipality carried out the process of innovation individually and only in the end presented the project to their supervisors. This, the jury thought, was a new and exciting way of working with innovation. The jury commended the municipality for their ability to increase the capacity of innovation across the organisation.

In relation to the prize, KMD made a video about the municipality of Trondheim (Digitaliseringsdirektoratet 2019b). The video opens with a drone shot over Nidelva (Nidelva River) flying towards one of the many bridges in the city. A metallic dubstep beat can be heard in the background as the voice of the main jury member opens saying, “sometimes a whole organisation needs to loosen up a little, maybe make room to draw with the ones you wouldn’t normally include in the conversation? Jumpstart that creativity that most of us have, if only we are allowed to”. The scene cuts to a montage of different people standing in different places, looking into the camera and letting go of pieces of paper with their roles written on them. “*Rektor*”, “*rådmann*”, “*rådgiver*”, “*student*” (“dean”, “chief executive”, “adviser”, “student”). Then, the image changes, and a speaker starts talking about *Universitetskommune* Trondheim 3.0 (The University Municipality, TRD 3.0.). TRD 3.0 is a cooperative project between the Norwegian University of Science and Technology (*Norges teknisk-naturvitenskapelige universitet*, NTNU) and the municipality of Trondheim.

Overlapping this image the “adviser” asks, “how can we as individuals and as organisations make internal changes in order to be able to create change?” His question is answered by a whole new group of actors with abstract roles such as “international manager”: “by learning, changing patterns, looking at the whole picture, and exchanging knowledge systematically”. The camera again pans over landmarks in Trondheim, such as the iconic red and brown boat sheds that line the sides of Nidelva River, the iconic Old Town Bridge, and the Nidaros cathedral. This is immediately followed by a long shot of the university’s main building’s stone facade.

Inside the university, the dean, a professor, and a number of students explain how they would go about it: “by cooperating with us, because research happens here”. The chief executive then says that new challenges require new solutions that must be created across disciplines. What they need to do is to unite the municipality and the scientific community. TRD 3.0 attempts to do exactly that, the project manager explains, followed by the municipal director (*kommunaldirektør*) who explains that the aim is that “the people” will get more precise and wholesome services. Here is the first time, in fact, that the role of the municipality, to give the citizens services, is mentioned.

I choose this video as a springboard for a discussion about what the concept of innovation means in Norwegian public discourse today. Essentially, the municipality of Trondheim was awarded this prize for taking risks for the sake of innovation. This, in spite of the fact that bureaucratic organisations essentially attempt to *decrease* risk through laws that regulate bureaucratic practices. Above all, one would think that the role of the municipality is to redistribute public goods and services to the citizens, yet this event makes it clear that the central government is *rewarding* risk taking if it is tied to innovation. Furthermore, in the video, innovation is framed as a way to give the citizens better services. This would become a prevalent discourse during my fieldwork at the municipality of Trondheim, and it was invariably tied to digitalisation.

Before going into my fieldwork at the municipality of Trondheim, I failed to recognize the significant inquisitive space that innovation would hold, rather approaching digitalisation as

my main topic of interest. After some weeks, it became apparent that the concept of innovation held a lot of weight in my field. Innovation, and the values and practices that are associated with it, jumped out at me, drawing my attention to the paradoxes that were created in this contested site.

Throughout this thesis, I address the following research questions: what happens when a bureaucratic institution such as the municipality meets innovative digitalisation? Which contradictions arise? How do the actors that drive digitalisation navigate these contradictions? And how are these contradictions reflected on the digital technology being produced?

Setting the Stage

This thesis is a study of how a state project of digitalisation becomes implemented by one of the most significant bureaucratic institutions in Norway: the *kommune*. The findings in this thesis are based on fieldwork carried out at the municipality of Trondheim's Digital First Choice program from January to June of 2019. I chose to locate my study in Trondheim *kommune* because this municipality has positioned itself as a central hub of knowledge and progress given its close link to a number of education institutions (such as the distinguished Norwegian University of Science and Technology as well as SINTEF, one of the largest independent research organisations in Europe).

Throughout this thesis, I will deal with the themes of bureaucracy, innovation, and digitalisation, but before I dive deeper into the theoretical framework that shaped this project, I would like to introduce the *kommune* as an analytical space. This section could shed some light on the characteristics, and the significance of, the municipality in Norway, and give some context for readers not familiar with the Norwegian system of local government.

Local Government in Norway

In order to be able to place this thesis in the context of Norway, it is important to point out some characteristics of this nation's public administration. In general terms, Norway is a wealthy Scandinavian country with around 5.3 million citizens (Statistisk sentralbyrå 2020).

Norway is parliamentary, democratic, and a constitutional monarchy (Thorsen 2020)¹. Norway also has a quite comprehensive universalist welfare system, where all citizens are equally entitled to welfare goods (Christensen and Berg 2019). The authority of the central government Storting is passed on to *fylker* (counties, of which Norway has 11) and *kommuner* (municipalities, of which Norway has 358) in the form of laws and regulations (Hansen and Thorsnæs 2019). These systems contrast for example the United States where each state has authority over their own laws (ibid). But how did the *kommune* come to be? And what makes it such an interesting site of analysis?

A central name in the anthropological study of the welfare state in Norway has been Halvard Vike. With titles spanning 30 years, he has written at length about hierarchies of power, and trust in politics and the state based upon extensive fieldwork in the public sector. In his writing, Vike attributes the origin of the Norwegian welfare state to the small, homogenous population of Norway who also had a history of a prevalent feeling of equality (*likhet*) and a historically small, politically weak elite, leaving much of the political power to grassroots mobilisation (Vike 2004, 15). Vike argues that the Norwegian welfare state is supported by a strong and trusting (*tillitsfull*) optimism from the population, who rely on the state's ability to do (and to *want* to do) what is best for the citizens (Vike 2004, 50). This, he argues, is done through bureaucratic organisations, of which the *kommune* is among the largest (Vike 2017, 23).

The kommuner were created in 1837, based on the old church ways of dividing the land into parishes (Thorsnæs and Berg 2019). At that time, the scope of the *kommuner* were limited. There already were independent and autonomous agencies dedicated to public services such as the *fattigkassene* and *skolekassene* which administered over half of the localities'

¹ A comment on the validity of some of the sources in this section. A lot of the descriptive elements of the Norwegian political organisation and public sector are taken from an online encyclopedia called *Store Norske Leksikon* (SNL). SNL is owned by a group of organisations, among others the University of Oslo. The encyclopedia is a second hand source, and one of the biggest resources for communicating research to the public in Norway. Much like Wikipedia, anyone can contribute to the articles on this site. Unlike Wikipedia though, the authors must be listed with their full names and the articles are largely written by experts in their field. Changes to the articles are listed and easily accessed. Each subject also has an academic adviser who moderates and reviews changes to the articles. In the case of the subject "local government administration" the moderator is Tore Hansen who is a professor emeritus of political science at the University of Oslo. Because of this, I deem SNL to be a reliable enough source of information in order to describe and give an introduction to the local government administration of Norway.

resources, so that at first *kommuner* were dedicated to the upkeep of technical infrastructure such as roads (Thorsnæs and Berg 2019). Since then, the responsibilities of the municipalities have only increased.

The responsibilities of the *kommune* are in fact not specified in the constitution (Thorsnæs and Berg 2019). Some of them are outlined in the Local Government Act (*kommuneloven*) but *kommuner* are able to take responsibility for any assignments that are not explicitly put on other administrative bodies (ibid). In Norway and in other Nordic countries, the *kommune* ends up having a large role as a public organisation, especially in social, health, education, and infrastructure sectors (Hansen and Thorsnæs 2019). So the *kommune* received more, and more complex, responsibilities both from the citizens and from the state. This, Vike explains, caused a problem of capacity, in turn tied to a challenge of efficiency (Vike 2004, 13). This “ambitious welfare state” has led to a constant struggle for the municipality to provide better services for less money (Vike 2017, 118). This leads to a discrepancy between what people expect and what the state actually can deliver.

Vike pointed out the challenge of capacity that an increasingly larger welfare state faces. In my field, one central way in which this challenge to deliver came to light was concerning the expectations that the population had to receive more and better **digital** services. My informants often commented that people lived in an increasingly more digitalised world, and so their expectations to the municipality reflected this. As small yet powerful institutions that administer welfare goods and services, and sites where the populations’ expectations and hopes are stored, the Norwegian *kommune* becomes an interesting category of research. I ask the reader to keep these challenges in mind going forward in this thesis.

Chapter Overview

In chapter 2, I present the theoretical framework that supported my thesis and informed my research questions. One of the largest themes in my thesis is bureaucracy, so I go into detail about the different theories I have used to approach the analysis of a bureaucratic institution such as the *kommune*. I also describe my theoretical position in relation to the study of the digital, as well as temporality and planning. In this chapter, I will

also clarify how my decisions related to constructing my field site, and choice of methods came about. I will also reflect over my own position in the field and discuss the ethical implications tied to my research.

In chapter 3, I start investigating my main research question, “what happens when bureaucracy meets innovative digitalisation in the context of the Digital First Choice program?” by looking at how the Digital First Choice program organised their space and their time. Taking the term *kommunegrått* (municipal grey) as a point of departure for my argument, paying attention to how the offices look and the use of the space, I analyse the emergent “municipal aesthetic”, and discuss what these choices are trying to communicate. Likewise, looking at the use of stand-up meetings, I discuss which practices are valued by the program as efficient and desirable. I argue that, through the performance of a specific aesthetic, and the practice of agile work methods, the program becomes a site where the contradictory values of traditional bureaucracy and of innovative work are contested. What happens is that, through aesthetics and practices, the Digital First Choice program creates distance to a bureaucracy that is imagined as slow, ineffective and incompetent, while creating closeness to the information and technology industry, which is associated with efficiency and innovation. Yet these strategies were not always successful, and rather highlight the incompatible characteristics of bureaucratic work and of innovative work practices.

In chapter 4, I address my next research question: how are the contradictions between bureaucracy and innovation navigated by the actors that drive digitalisation? I start by describing two central concepts tied to the Digital First Choice program: innovation and digitalisation. Asking what these concepts mean to my informants, I argue that innovation and digitalisation are fetishized. At face value, digital technology is imagined as limitless and infinitely flexible, offering a solution to problems of efficiency, while innovation is fetishized as virtuous and progressive. These approaches to digital technology and to innovation are not realistic in the context of the municipality. Although software may be able to do “anything” imaginable, the municipality has temporal and economic limitations. Likewise, innovation is tied to risk, and a bureaucracy rather strives to minimize risk. Thus, I argue that the concepts of digitalisation and innovation are used to conjure utopian ideals that are deployed by

different actors at the municipality in order to navigate the perceived inflexibility of bureaucratic work.

In the following chapter, I build upon the points made in chapters 3 and 4. With the theoretical approach that digital technology is socially embedded, both being shaped by its creators' values and biases and also shaping the users, I ask how these contradictory values and practices are reflected in the digital technology being produced. In order to address this research question, I analyse how the concept of "the user" was verbalised, how the user groups were made legible, and how they were taken into account during the production of the digital technology. I argue that the concept of the user was also thoroughly wrapped up in contradictions. Being verbalised as both a citizen and a client, the concepts spoke to two different contexts: the state and the free market. Further, the user was made legible through documentation (such as requirement specifications (*kravspesifikasjoner*)). Documents that simplify and standardize are tied to how states make citizens legible, the problem though was that these documents were not informed by data from all user groups, but rather based on guesses made on the part of the employees. The issue with this approach became even more apparent when looking at how the actors at the municipality put themselves in the shoes of the user, allowing the biases tied to their individual level of digital skill to inform how the welfare tools would function. This way, I underline the importance of investigating the values and biases that go into creating the digital tools in the public sector that will only become more and more significant.

CHAPTER 2: Theory and Method

Theoretical Framework

This thesis touches upon many themes within the field of anthropology. Taking the simple question of “what happens when the municipality digitalises?” as a point of departure, I will now present the theoretical frameworks that informed my approach to studying the municipality of Trondheim.

Studying Bureaucracies

Ideal Type Bureaucracy

In chapter 1, I presented that the municipality (*kommune*) can be seen as one of the most significant bureaucratic institutions in Norway. Norwegian citizens will be involved with municipal services for their whole lives. I start my theoretical approach to bureaucracy by looking into Max Weber’s work. Max Weber developed bureaucratic theory among the social sciences. He described bureaucracies as constituting “the most efficient and formally rational way in which human activity can be organized” (Swedberg and Agevall 2016, 20). In Weber’s writing around domination, bureaucracy represents one of three pure types of legitimate authority. Weber described the second type of authority as charisma and the third as tradition (Weber, Talcott, and Henderson 2012, 328). But the first, formal authority, is the concept I am interested in.

Weber tied formal authority to bureaucracy, writing that bureaucracy is the authority of rules and offices, and explained that it included authoritative positions that do not depend on personal qualities, but rather on an impersonal rational (rule-based) system (Weber, Talcott, and Henderson 2012, 328). According to Weber, formal authority exerts power that is legitimized because it is accepted as legal, and the leaders are considered deserving of their ability to exert dominance. This gives the formal holders of this authority, such as politicians and bureaucrats, legitimate domination over a population because their power is related to laws and regulations that allow it to be like that. In other words, citizens accept the authority of bureaucracy because it is seen as rational and fair. Weber went on to describe six

characteristics of an “ideal type of bureaucracy” (Weber, Talcott, and Henderson 2012, 225). In *The Max Weber dictionary: key words and central concepts* (2016), Swedberg and Agevall summarize these characteristics as follows:

(1) it covers a fixed area of activity, which is governed by rules; (2) it is organized as a hierarchy; (3) action that is undertaken is based on written documents (preserved as files); (4) expert training is needed, especially for some; (5) officials devote themselves entirely to their work; and (6) the management of the office follows general rules, which can be learned (Swedberg and Agevall 2016, 20).

What I find productive about these characteristics that Weber assigned to an “ideal” bureaucracy is what they tell us about the values that are associated with bureaucracy. These values could be said to make bureaucracy into a system that is effective, fair and disinterested. Bureaucracy can be said to be democratic, predictable and traceable due to documentation and different attempts at transparency. Documentation in turn also sets precedence, which can give citizens an idea as to how bureaucracy will work in the future. It allows for continuity as although local governments may change hands, routines and procedures are in place in order to allow for offices and governments to continue much of the same work without disruption. These are valuable advantages when it comes to fair and democratic redistribution of goods and services. These characteristics, and the values they point to, is an aspect I take with me into the field and into analysis, asking then whether (and how) these values were replicated at the municipality of Trondheim.

It is important to note here though that these characteristics belonged to an “ideal type” bureaucracy. Across his writing, Weber also refers to bureaucracy as a machine. And indeed, his definition and his characteristics describe bureaucracy as a system - yet bureaucratic employees in Norway today are not cogs. For bureaucratic theory on an individual level, I turn to Pierre Bourdieu. Bourdieu wrote that bureaucratic action and discourse imposes a certain vision of the state which is in line with the interest and values of the actors who produce them (1993, 3). Bourdieu argues that bureaucratic performance forms a specific type of actor and that the actors again reproduce the values communicated. Following Bourdieu, I look at how bureaucratic action is produced by actors and formed to their likeness, and how these structures reproduce a specific type of actor. This leads me to ask, what values and ethos informs the “bureaucratic performance” of the bureaucrats at the municipality of Trondheim? Do they resemble the values tied to Weberian bureaucracy? And what does this bureaucratic

performance in itself look like? Does their performance structure perhaps a new kind of bureaucracy? In order to answer these questions, I turn to theories on performance.

Bureaucratic Performance

In *Gender Trouble*, Judith Butler wrote about a new way to understand gender. She wrote that rather than understanding gender as a passive designated identity, gender could be seen as produced by performativity and completed by practices (Butler 1990, 25). She wrote,

(...) acts, gestures, and desire produce the effect of an internal core or substance, but produce this on the surface of the body, through the play of signifying absences that suggest, but never reveal, the organizing principle of identity as a cause. Such acts, gestures, enactments, generally constructed, are performative in the sense that the essence of identity that they otherwise purport to express are fabrications manufactured and sustained through corporeal signs and other discursive means. (Butler 1990, 136).

Butler explains that identity is suggested through the body's performances and acts. Although Butler writes about gender identity, I suggest that identity otherwise can be analysed through performativity in the same way: by looking at the practices, language, gestures and movements that actors use to communicate. I find that this approach can be compared to Erving Goffman's role play (1959). He defines performance as "all the activity of an individual which occurs during a period marked by his continuous presence before a particular set of observers and which has some influence on the observers" (Goffman 1959, 13). Framing social interaction metaphorically as playwright, he categorizes "performances" in terms of front and backstage. Frontstage are the intentional or unintentional actions which one does in front of others, or when being observed. Frontstage includes the set, scenery and props (furniture, decoration, layout, background items), as well as the costume and character traits (ranking, clothing, sex, age, posture, and appearance) (Goffman 1959, 14). As I am attempting to look at bureaucratic performance, I find that investigating the "intentional and unintentional actions", as well as the "set, scenery, and props" can be a productive space for me.

This approach informs the way I can investigate performativity: as the enactment of identity through room and decoration, practices, speech patterns, and physical appearance. This is interesting to me because analysing the aesthetic through the lens of performance can tell me

something about the way the different actors at the municipality communicated a specific form of identity. Based on this I look at what is being performed through aesthetic, organisational practices, and discourse.

Screen-level Bureaucracies

Bourdieu's approach to actor-level bureaucracy has some similarities to Michael Lipsky's "street-level bureaucracy" (2010). While both Bourdieu and Lipsky turn to the individual bureaucrat as the object of analysis, Bourdieu still writes about the significance of structures in producing and reproducing values. Lipsky, however further emphasises the significance of the actors. In the 2010 publication of his 1980 book, Lipsky proposes that bureaucratic decision making simply comes down to the discretion of each individual bureaucrat who works directly with citizens (Lipsky 2010). Although he writes from a uniquely American point of view, arguing extensively about how the poor who cannot afford services from the private sector must receive aid from the state, I would argue that his approach to the responsibilities of bureaucrats, how their decision making takes place, and which consequences it has can be applied also in the case of municipal local authority officers (*saksbehandlere*) in Norway.

He explains that street-level bureaucrats have an impact on people's lives as they "determine the eligibility of citizens for government benefits and sanctions" mediating the relationships between citizens and state (Lipsky 2010, 4). Street-level bureaucrats must make decisions immediately based on complex policy and laws (ibid, 13). This means that, as the decisions are taken in the moment, they will be based on personal, irregular interpretations of the law. Lipsky called these interpretations "their discretions" (Lipsky 2010). This then has consequences as to how public goods and services are redistributed to each citizen. So I ask, how did these "discretions" play out at the municipality? In addition, how does this theory adapt to technological changes, when bureaucracies become increasingly more digital?

Building upon Lipsky's term, Mark Bovens and Stavros Zouridis (2002) address the changes that technological advancement brings to street-level bureaucracy. They write that while bureaucratic actors used to make decisions about how to enforce laws and regulations when

meeting citizens, this is now disappearing, and leaving in place system-level bureaucracy - where information technology tools now implement laws (Bovens and Zouridis 2002). In their article, Bovens and Zouridis bring up a case explaining the consequences of this process at the student aid office of the Netherlands. The employees made decisions as to whom would receive aid based on sometimes subjective matters such as if they drove a car to the meeting. These subjective elements had less and less significance as the student aid office became a “screen-level” bureaucracy and students started filling out information on a computer, which would then be analysed by employees at the student aid office (Bovens and Zouridis 2002). They no longer met the students face to face, so personal inferences about the neediness of the students became irrelevant. The final development into a system-level bureaucracy came about when a software would analyse the applications. The change from screen-level into system-level meant that routine cases were handled automatically, without involvement from public employees (Bovens and Zouridis 2002, 178-180). The decisions were made by a program and were based upon measurable parameters. The applications were only analysed by an employee if a student made a complaint about the result.

What is significant here is that, although the personal biases and values of the bureaucrats (what Lipsky called their discretion) no longer play a role, the biases of the actors that create computer systems do, because they are embedded in the code (Bovens and Zouridis 2002, 181). As the personal biases of the employees no longer appear to play a role in these processes, the algorithms and computer processes may seem as the “zenith of legal rational authority” (ibid), but they are still very much socially embedded. At the municipality, there were a number of actors that had a hand in shaping the digital tools that would implement policy. It is precisely because their individual values are embedded into the digital tools and services that it is crucial to investigate what they are and how they are being produced and reproduced through the implementation of system-level bureaucracy. Central to Bovens and Zouridis’ approach is the premise that it is the actor that produces bureaucratic systems, and with this in mind, I find it productive to study the participants that had a hand in shaping these systems. Therefore, I ask: who (and what) goes into creating digital tools for the municipality? In addition, I wonder: how does the adoption of digital solutions change bureaucratic practices? And which paradoxes and contradictions arise?

Bureaucracy and Innovation

Although I failed to anticipate the significance that the concept of innovation would have on my study before doing my fieldwork, it came to be a central theme in this thesis. It is an especially interesting topic when looking at how bureaucracies innovate. In the introduction to their book on innovation in the public sector, social scientists Bo Enquist, Lars Fuglsang, and Rolf Rønning write that there is a difference between innovation in the public and private sectors (2014). In the public sector, innovation is framed by the rules and values of democracy and bureaucracy, this sets limitations and requirements for how innovation can take place (Enquist, Fuglsang, and Rønning 2014). This brings up the question of what happens when the municipality, a bureaucratic organisation in essence, sees innovation as their mission. I wonder, what is innovation when applied in the public sector? Norwegian sociologist Anne Marie Berg writes that “bureaucracy and innovation are often conceived as contradictory features of organizational behaviour” (Berg 2014, 139). How, then, can digitalisation and innovation, and bureaucracy be consolidated? What contradictions arise?

Bureaucracies, Optimism, and Utopianism

The anthropological study of bureaucracies has also focused on the shortcomings of these institutions, such as the structural violence, inefficiency, and corruption within them (Bear and Mathur 2015) (Billaud and Cowan 2020) (Vike 2017). Writing for *Social Anthropology*'s special section on the bureaucratisation of utopia, Julie Billaud and Jane K. Cowan explain that, although international bureaucracies² function as places where dreams for a better future for all human beings are articulated, the bureaucratic labour necessary to achieve the values of “justice, transparency and accountability” also triggers frustration and disillusionment (Billaud and Cowan 2020, 9). It becomes apparent that bureaucracies can be seen as sites of contradictions. In a special issue on the anthropology of bureaucracy, Laura Bear and Nayanika Mathur argue for the study of bureaucracies as institutions of the public good (2015). This aspect has not been of interest, in spite of it being a central difference between bureaucracies and other modern institutions (Bear and Mathur 2015, 18). I find it useful to turn to the study of bureaucracies in the context of how they enact public good within the organisation. This approach informs a new way to look at bureaucracies as it “brings into view more than the projects of bureaucrats and their individualized ethos,

² The cases on this special section are all from international bureaucracies.

personas, goals and techniques” (Bear and Mathur 2015, 18). The study of bureaucratic institutions can afford to be more nuance, so I embrace looking at the noble ethos of bureaucracy as well as the contradictions that they make visible. But what else can this idea of “the public good” refer to?

In a similar way, Mathur defines utopias as “imagined, desired spaces – normally of the future, though this temporality can and does vary” (2020, 112). She calls for the study of bureaucracies based on the utopian ideals within them, rather than on their shortcomings (Mathur 2020, 112). In the context of bureaucracies, looking through the lens of utopianism can uncover how contradictions are navigated and contested in a bureaucratic site. Therefore, I wonder how utopian thinking played out at the Digital First Choice program? And which contradictions arose?

In this section, I have presented different themes within the theory of bureaucracy that I will be addressing in this thesis. There are in addition two other theoretical approaches that I will discuss: digital technology and temporality.

Digitalisation, Technology and Infrastructure

Digital Anthropology (2012) edited by Heather A. Horst and Daniel Miller is one the most prominent books to compile theoretical approaches to the anthropology of the digital. Looking at the contents of the book, it appears as though digital anthropology has very much concentrated on how digital technology is used by people in order to be social, or to participate in different communities. This is not the approach to digital anthropology that I will be using in my thesis. Given my field of interest is digitalisation in the public sector, it is more relevant for me to look at the material aspect of the digital, the ways in which it can be build, used, and seen as a technology, and as part of a wider infrastructure.

Miller and Horst define the digital as “all that which can be ultimately reduced to binary code but which produces a further proliferation of particularity and difference” (Miller and Horst 2012, 3). They write that as anthropologists focus upon lived life and its many complexities, the digital too should be studied holistically by looking at the wider context (ibid, 4). In my

thesis, I embrace this approach. As a point of departure, I concentrate in how the digital embeds itself between actors, and how it at times facilitates, and other times impedes cooperation at work. At the same time, my informants had a direct hand in imagining, forming and shaping digital solutions. By looking at what values and practices go into *creating* the digital I am able to place these governmental digital tools in a wider context of bureaucracy.

In addition, I found it interesting study the social and technological relations that go into creating digital technology. This can be done without putting the digital in centre, using the “non-digital-centric” approach described in *Digital Ethnography* (Pink et al. 2016). With this, they mean that the digital can be studied as “part of something wider” rather than situating it at the centre of the work (Pink et al. 2016, 11). I adopt this approach in order to study the contexts that create digital technology, the conditions that allow these digital infrastructures to come into being. This raises the question of how digital infrastructures are shaped by employees at the municipality. Writing on infrastructure, Hannah Appel, Nikhil Anand, and Akhil Gupta (2015) remark that infrastructure can make the social structures that frame their existence visible. At the same time, infrastructures also produce and form certain social forms among citizens and users. This leads me to ask who these infrastructures are designed to serve. Do they reflect the populations’ needs? And what kind of relationship does digital infrastructure create between the municipality and the citizen?

Temporality and Planning

Temporality was a recurring theme across my thesis. Concerning time, I approach it not only concerning how time passes and is perceived, but rather, following Simone Abram and Gisa Weszkalnys (2011), look at what time management and time planning can tell me. Planning, they explain, “is a way of conceptualising space and time”, and as such, it looks towards the future (2011, 3). By looking at time as normative and constructed by the social context it exists in, this gives me a way to look at how time is perceived both in a positive and negative light depending on the context. For example, by paying attention at how the municipality is perceived as delayed this can indicate what being “on time” (Abram and Weszkalnys 2011) means to the actors in the municipality. Likewise, bureaucratic planning

also says something about the actor's notion of temporality. What kind of context does the planning at the Digital First Choice program conjure? Which wider contexts does it speak to?

So far, I have shown how the theoretical framework that addressed the overarching themes in my thesis has helped me further develop an initial (and simple) research question into more complicated and theoretically informed research questions. I will now show how I constructed my field site, and give an introduction to the physical and social spaces it encompassed.

Constructing the Field Site

The discipline of anthropology has distanced itself from the idea that the arrival to a far-off oriental site (such as an island) automatically marked, defined, and limited the field site. Anthropologists rather agree that the field is no longer a given, but a construct. The field site comes into being through a process of reflection that is informed by geographic location, place and time, social relations, theoretical approaches, and analysis. Some of the decisions taken are not even up to the researcher herself, but have to do with the institutions and actors that she interacts with. In the introduction, I wrote that I carried out my fieldwork at the “Digital First Choice program” at the municipality of Trondheim. So, what did this entail?

Access

During my first semester of the master program, I determined that I wanted to look at how the process of digitalisation was carried out at a public organisation. I started contacting different institutions through contact information found online. I called and emailed people at multiple municipalities, as well as different local offices for the Norwegian Child Welfare Services (*Barnevernet*) and the Norwegian Labour and Welfare Administration (NAV). The municipality of Trondheim was among the few that showed an interest. Seeing an interest on their side, I started looking into the role and position digitalisation had there, and soon learned about the Digital First Choice program.

Since 2007, the central government in Norway started publicising their intention that all communication between citizens and public services would at some point become electronic (digital). This is known as the “Digital First Choice” policy. This policy is (still today)

advertised as a way to make public services more efficient and less costly by for example cutting down the length of welfare applications, and to make better services for the users who are used to a more digital daily life (Digitaliseringsdirektoratet 2020). In 2012, the Digital First Choice program was designed by the Agency for Public Management and eGovernment (*Direktoratet for forvaltning og ikt, Difi going forward*)³ to help public and private organisations implement more, and more adequate, digital solutions. The program's aim was to help organisations lead, manage, and complete digitalisation projects. In their website, Difi provides a large number of resources and online courses surrounding the topic of how to get started with digitalisation projects, how to carry out projects, and how to implement solutions. Difi's program is free and optional, and it is up to each institution whether they want to implement it and to what extent.

In 2016, the municipality of Trondheim's IT-unit created the Digital First Choice Program. The program worked with individual projects, each tied to different units at the municipality, and became the implementing body of the "Digital First Choice" policy at the municipality. Given my interest in the topic of digitalisation in the public sector, this program appeared as an excellent site in which to see how digitalisation projects were executed and implemented. After an initial meeting with the leader of the program Janne, I had to fill out a form in order to start the process of getting permission to do research at the municipality. I had to outline the aim of the project and confirm that I would apply for formal confirmation from the Norwegian Centre for Research Data (NSD). However, weeks had gone by and I had not heard back. I suspected that my research proposal had to be confirmed by key stakeholders. When I followed up with the municipality concerning my application, I quickly received an email confirmation that I could be there. Had my application been forgotten? Or did they maybe not have a routine in place to deal with these kind of requests? This was my first introduction to the kind of bureaucratic suspense that I would trace for the next months.

It is central to note that leadership at the IT-unit were from the start eager to have me there. I want to mention this because I believe that the personal willingness to learn and become better that I witnessed among the many people I encountered there was a contributing factor

³ Difi is an agency under the Royal Norwegian Ministry of Local Government and Regional Development (*Kommunal- og moderniseringsdepartementet, KMD*).

to me gaining access to this fascinating experience, and I am very grateful for that. I believe it speaks to the attitude of transparency and improvement that they fittingly prided themselves with. Even though the choice of Trondheim was pragmatic, it turned out that it was a very interesting location for my chosen topic.

The Digital First Choice Office

Based on the research questions I had produced, I needed to find spaces that would allow me to find answers. As a first step I found that I needed to be with the program participants where they worked in order to see exactly what (and who) went into leading these digitalisation projects. Therefore, when I started my fieldwork, I spent most of my time at the office for the Digital First Choice program (*Digitalt førstevalg*, DF going forward). The offices were located on the fourth floor of the shopping centre Trondheim Torget, locked off from the rest of the shopping centre by heavy automatic doors. DF's desk area was situated in a larger open-plan office, yet appeared somewhat separate because they were placed against a corner. The rest of the rooms in that area of the fourth floor were occupied by the IT-unit's other groups, such as the IT-help desk.

DF was made up of two main employee groups: municipal employees and consultants. There were around 15 DF participants whom I saw weekly, of whom six were municipal employees and nine were consultants hired temporarily through a framework agreement (*rammeavtale*) with the municipality, limiting the hiring pool to five main consultant companies⁴. Among the participants at DF, there was a clear male majority. At DF, and across the IT-unit in general most, if not all, of the employees I met were white Norwegians. While municipal employees had a tendency to be older, the consultants would average 40 years old. Apart from the program manager Janne, and one employee who helped with administration, all other participants worked directly with the digitalisation projects, whether as project manager, as deputy project managers, or as part of the project team. Across the board, most DF participants had a background with information and technology (such as software engineering, project management, and technology management).

⁴ The consultant agencies included in the framework agreement are not public knowledge, and I decide therefore not to name them. However, some examples of consultant agencies that provide services for the public sector in Norway are EVERY, Deloitte and PwC.

My informants at DF spent most of their time either at the DF office or at meetings, but mostly within the same building. On two occasions, I left the building with my informants in order to participate in meetings that happened elsewhere, but otherwise we stayed put.

After the first month at the municipality, it became clear that although the employees at DF were central to the digitalisation effort, they were far from the only ones that had a hand in shaping these tools. I found out that there was a team of developers at the IT-unit who worked with projects tied to DF: Trondheim's Integration Platform (*Trondheim Kommunes Integrasjonsplattform*, TIP going forward).

Trondheim's Integration Platform Office

After receiving permission from leadership, I started spending 2 days a week at TIP, although some weeks, I spent every day with them if a significant project was about to be completed. Trondheim's Integration Platform worked mainly with integrating services developed through other providers into the municipal servers and archives. With integrating, I mean that they tweak the services and solutions so that they will cooperate and communicate better with other existing digital solutions. TIP also had their own office, which allowed them to work and cooperate in a more public and intimate manner than the participants at DF. Towards the end of my fieldwork though, they received increasingly more and bigger commissions, going beyond integration and into creating digital technology.

During my fieldwork, the team was made up of six developers, one of whom was a student. One of the developers was a woman, while the rest were male. This participant group was also significantly younger than the ones at DF, as over half of the team were below 30 years old.

Method

Incorporating the theoretical framework outlined as a point of departure, I wondered how the contradictions and paradoxes that arise when a bureaucratic institution takes on a

project of digitalisation could become visible. How could I investigate the way these contradicting values played out at a workplace, and the consequences it had for the digital technology being produced?

Finding Ways to Observe, Finding Ways to Participate

While planning my projects, I had stated that I would be carrying out participant observation as my main method. In his book *Participant observation*, anthropologist James Spradley writes that participant observation is the process of carefully watching what everyone does in order to become an ordinary participant (1980, 54). Spradley writes that one cannot participate and observe at the same time, but rather, the researcher alternates between an insider and outsider perspective (1980, 56-57). As my field site was a workplace, I struggled to gain this balance. Having often heard of the “hanging out” kind of fieldwork, this advice appeared unproductive to me in my situation because no one else was just hanging out, all of my informants led very busy work-lives. One of the main measures I took was to be where my informants were. I came to “work” at a similar time as they did, at 8:00, and stayed until they left (around 16:00) from Monday to Friday. I sat at the desk in front of my computer if they did, and I tried to go to lunch when they did too. However, during work hours most people worked by themselves, with headphones in. In the beginning, I was very much on the outside looking in. How does one observe and participate in work that is mostly done individually through a computer?

Following Projects

My adviser had suggested I should follow different projects as a way to get insight into how people at DF worked. Janne, the program manager at DF, had given me similar advice, and together we decided I would follow five of the digitalisation projects. Each project had one project manager who was employed at DF, and each project also included actors across different units at the municipality. This gave me a gateway into different constellations of participants inside and outside of the program. This way, I was able to see how the project participants interacted with each other, and I was able to observe how the projects developed over time.

As the projects I followed were all at different stages, I was able to achieve a more holistic point of view concerning the process of digitalisation at the municipality. I will now shortly introduce the projects in the form of a table, so that the reader can easily find this guide during further reading. In the table below, I present the name of the projects, which other units at the municipality the projects concerned, and describe the main (and most relevant) aims of each project. Going forward in this thesis, I will be referring to the projects by their abbreviated names. Some of the details of the projects have been omitted or simplified in order to reflect the parts of the project that most centrally concerned my fieldwork.

I was not able to find a suitable translation for the municipal unit called *Eireskapsenheten*, so I will instead describe the unit's responsibilities. The municipality of Trondheim is "the city's largest landowner" (Trondheim kommune 2020a). The *Eierskapsenheten* is responsible for the strategic investment, administration, and development of municipal land (ibid).

Project Name	Municipal Unit	Aim
OAS (Oppvekstadministrativt system, System for School Administration)	The Early Childhood and Education Office	To create (1) a portal for school and daycare (<i>barnehage</i>) employees to plan the school year and to enable communication with caregivers, (2) a portal for caregivers to apply to daycare, (3) a portal that would give caregivers insight into extracurricular activities, and (4) a decision-support tool (<i>løsning til saksbehandling</i>) that would allow the local authority officers (<i>saksbehandlere</i>) employed at the municipality to process daycare centre applications and billing.
Min Side (My Page)	Communication Unit	To create a dashboard/landing site for all municipal services a citizen would need. It would act as a portal to access them. Among other things, citizens would be able to apply for children's school and daycare, pay bills, look at library card information, and look over properties owned in the municipality. In essence, a large solution that would integrate municipal services into one platform.
e-plan (Digitale Planprosesser, Digital Urban Planning)	Unit of Urban Planning	(1) To create a solution for citizens to apply for building regulations, (2) to create a portal through which citizens could give feedback on building projects in their area, (3) to renew the decision-support tool (<i>løsning til saksbehandling</i>) for processing feedback on building projects.
SSS (Salgs,- serverings- og skjenkebevilling, Food and Alcohol Service Licenses)	Eierskapsenheten	To create (1) a portal through which citizens and companies could apply for food and alcohol serving permits, (2) a portal through which to apply for service tests.
AKS (Digital Aktivitetskalender, Digital Activity Calendar)	Integration Program	To develop (1) an activity calendar for the participants of the integration program (refugees and their families), (2) a way for integration program participants to autonomously register their attendance, and (3) some usability for the employees of the integration program.

Meetings

Addressing the research questions I had written I needed to find ways to observe how digital solutions were formed, as well as which values and biases went into these digital technologies. As contradictions between bureaucracy and innovation became significant, I also had to look at ways in which bureaucratic practices were performed. Meetings became important sites to observe these aspects. Meetings, preparing meetings, and discussing what had happened at meetings took a large amount of time out of my participants' days. They were a chance for participants to discuss issues and tackle problems that were verbalised in a way that would not have been natural in any other situation. In my position as a researcher, they worked as windows through which I could peer at the deeper discussions and meanings that shaped the digitalisation effort at DF, so I tried to attend as many meetings as I could. By being there when issues were discussed, this gave me the basis to ask follow up questions or ask for explanations, enriching and contrasting the impressions I had made during quiet observation.

Looking at Code

The participant observation I carried out at TIP was very different from the strategies I used at DF. The first days of observing TIP participants at work showed me that their work was more easily visible and legible, if I could understand what they were doing. In addition, they worked cooperatively talking to one another and discussing their work along the way. The way I practiced participant observation at TIP was by sitting by their side and asking them to narrate what they were doing. In essence, I shadowed them. I would ask follow up questions and discuss why they made certain decisions over others while writing code.

This type of participant observation was not possible among project managers at DF for many reasons. First, in a larger open landscape office setting, it would have disturbed other employees. In addition, the TIP developers were much less often called into meetings, which meant that they were for the most part sitting at their desks for most of the day, making it easier for me to “hang out” with them. This kind of “hanging out” contrasted the outsider position that “hanging out” at DF put me in. At TIP, it allowed me to get closer to my informants. As another detail, on a few occasions I was invited to hang out with TIP participants after work, while I did not meet the DF participants socially.

Semi-structured Interviews

Towards the end of my fieldwork, I carried out a series of semi-structured interviews. The aim was to ask direct, pointed questions that would clarify or elucidate impressions and observations I had made throughout the past months. James Staples and Katherine Smith write that interviews can “elicit information that would otherwise not be discussed in everyday life and conversations” (2015, 2). They explain that this insight brought about in the context of an interview can tell us something about the wider social situation, and make certain aspects more visible (Staples and Smith 2015, 13). The aim of these interviews was exactly that: to take my participants out of their context, and allow them to reflect together with me over the actions they took in their day-to-day life. By creating this inquisitive space together, this allowed us to discuss the broader themes that their jobs addressed.

The interviews were centred on a theme, such as “innovation” or “the user”, and I went into the situation with the intention that I would let the interlocutor trail off to other topics if it felt natural to them. This allowed me to uncover connections that may not have been apparent to me before. Staples and Smith also allude to the fact that interviews can be an imaginative temporal space for participants, allowing them to imagine the future (2015, 2). As I was also looking to make sense of utopian ideals at the municipality, interviews became a site where municipal futures and passed could be addressed.

Writing

Writing field notes can be seen as the first step in the process of analysis (DeWalt and DeWalt 2011, 159). Writing every day gave me the opportunity to start reflecting over what happened in the field. I wrote field notes every day in a notebook. Throughout the day I noted who was at the office and what they were doing, what they talked about, and how they divided their workday. During meetings, I attempted to note discussions or conversations verbatim in order to be able to refer back as accurately as possible. I would also note personal feelings and struggles in the same notebook. I aimed to transcribe my notes into a digital file every day in order to be able to reread and reflect over what had happened during the day, and to plan for the next weeks. Sometimes this was not possible, and I noticed that I would not remember the details as clearly the next day, so I tried to be as rigorous as possible about

transcribing. While writing, I would get ideas about which wider topics the events could allude to, as well as ideas about what I should ask about next time and whom to talk to. I was careful to note these observations and preliminary analysis in another font, in order not to confuse analysis with data collection. If I was not sure about the cause or context of something, I noted it and asked follow up questions to the relevant people.

As an additional element, I would like to comment on writing after doing fieldwork. The analytical chapters in this thesis grew first and foremost from ethnographic stories that my adviser asked me to write. Having heard through my education in anthropology that analysis starts with empirical observations, I do not think I truly understood what that was like until I started writing myself. I can now say that the analytical elements of this thesis mainly came through writing out memorable, interesting, uncomfortable, and also mundane cases based on my field notes.

Language

Although I am fluent in Norwegian, I was prepared for language to be a bit of a challenge in the context that I was not so familiar with the *trøndersk*⁵ dialect. As it turns out, it was more of a challenge than I expected. While some of my informants spoke the colloquially named “*bokmål-trøndersk*”⁶, many spoke in a way that was difficult for me to understand. I was careful to ask for clarification and for an explanation of words or expressions I was not familiar with, but I am sure some context has sadly been lost in translation.

Bureaucratic and highly technical language also posed a challenge. Looking back, I should have been able to foresee that this would be a struggle, and I would have indeed benefited from doing more research on this, as I am sure I have missed interesting details in my first weeks due to my lack of knowledge around technical language.

⁵ Meaning from Trøndelag, the county Trondheim belonged to.

⁶ This refers to bokmål, one of the official written languages in Norway, but in this context rather alludes to speakers who pronounce words in the *Trøndersk* dialect in a clear manner rather associated with the upper class.

Positioning and Ethics

Me, an Anomaly

Since before the start of my fieldwork, I was unwillingly put into a category that was assigned to me. During my first days, people were curious about which nationality I had. For clarification, I am light skinned and Argentinean with dark eyes and dark hair. I speak Norwegian fluently but have an obvious accent as my native language is Spanish. I had no problem telling this to people, until some of my participants started introducing me as “Magali from Argentina” to other people at the municipality. Soon enough it became clear that people struggled to place me both ethnically and socially.

One comment I got often was that I spoke “very good Norwegian”, which rather felt like a micro-aggression than a compliment for a naturalized citizen who has lived in Norway for 12 years such as myself. I came to understand that a misunderstanding had happened. Their comments were in fact rooted in the fact that they thought I was a social anthropology student in Argentina, who had come all this way to study the municipality of Trondheim. Even more people thought that I was an exchange student from Argentina at the University of Oslo who had in the past year gained fluency in order to carry out fieldwork here. I felt the stinging shame of unprofessionalism when I understood that the impression I wanted to give had completely gotten away from my control.

As anomalies came, I was in fact an intersectional one. I was a foreign person in a white Norwegian majority workplace, a woman with mostly male informants, and a social scientist in a science, technology, engineering, and mathematics-heavy work place. I felt out of my field, lonely, and very awkward. Hume and Mulcock write that the nature of the method that anthropologists use is in itself socially disruptive (2004, xii). Feelings of social failure and academic inadequacy, they explain, are very natural (ibid). It would seem it is impossible to go about doing fieldwork without being uncomfortable at some point. How can this discomfort be productive though? Hume and Mulcock explain that analysing one’s own emotional response during fieldwork can be a tool to learn about the values of those around us (2004, xxv). Based on this, I would argue that by bringing in the aspect of reflexivity, considering my own position at the field, this allowed me to understand the municipality at

another level, uncovering conflicts and resistance to change, or seeing in which ways and who was open to new knowledge and experimental work. It also brought my attention to how people perceived as “the other” experienced the municipality.

Anthropology at Home

Having had the experience of being an outsider in Norway I remember being introduced to the cultural characteristics of life in this country. However, it has been 12 years since then, and in many ways, I have become accustomed to life in Norway as well as having adopted many attitudes that I am aware of, and probably many more I have become blind to. Because of this, it was important for me to reflect over the concept of doing “anthropology at home”. Anthropologists critical of anthropology at home would argue that you “cannot learn something new if there is no real culture shock” (Vike 2017, 34). The assumption is that familiarity to a place would make the anthropologist at home blind (Vike 2017). This though, can be problematic, as one cannot assume familiarity “to a whole territory or nation” (Vike 2017, 34). Vike’s reflection is similar to Madden (2010). Madden suggests that “at home” has become a taken for granted classification (2010, 45). Madden argues, on the contrary, that home “has a personal and subjective” definition (2010, 46). Home can have some degree of unknown (ibid, 52). In spite of having in the past worked with municipal services (for example I worked at a municipal daycare, as a “street-level” bureaucrat (Lipsky 2010)), I found it productive to try to put away my biases and preconceptions about what a municipality was and how it should be, and rather approach the municipality as an “unknown” site. At the same time, bringing back my background knowledge about Norway and about the *kommune* during analysis in order to compare and contrast my differing experiences.

Ethics

There were a number of different ethical concerns that need to be addressed. Before, during, and after fieldwork, especially while writing, I have worried that I was unwillingly exposing actors who have, in good will, participated on my research. My informants were of course employees, and I have accounted detailed descriptions about the work they did, their values, and their assumptions concerning the nature of their work. In order to address these ethical challenges I have tried to be very careful giving details about the participants in the following chapters. All participants I have written about have signed informed consent forms.

In the informed consent forms, I also explained that they would be anonymised. Across the board, participants have been anonymised in the text by receiving new names, and I have at times excluded details in order to maintain their anonymity. Towards the end of the writing process, it became clear that although their names and sometimes genders had been changed, some actors could still to an extent be recognized by their co-workers because of details surrounding their work responsibilities. The relevant people were contacted again, and received a copy of what I had written about them, and they have given their consent. In spite of this, there is still a possibility that details they (and I) have thought of as harmless could have unintended consequences for them.

Another ethical question that arises for me concerns the technology being produced. History points to three past industrial revolutions that changed the way the world has functioned. The first was mechanization through water and steam power, then the technological revolution, which led to mass production of goods through the help of electricity, followed roughly 100 years later by the digital revolution marked by the introduction of automation, computers, and electronics. It has been suggested that we are now at the brink of a fourth industrial revolution, one characterised by “machine to machine” (M2M) communication, also called the Internet of Things. It is envisioned that machines will be able to drive forth industry without the involvement of people. At some point, computers would be able to write, and correct, code themselves. But as I will go on to argue, digital technology, code and algorithms today are not unanimously unbiased, they are positioned. These biases come to light in a number of ways, for example, the infamous answer that the personal assistant application Siri would give when users spoke to her in gender-derogatory manners: “I’d blush if I could”⁷ (United Nations Educational, Scientific and Cultural Organization 2019). In the case of my field, it was the coders and project participants who made decisions every day that affected the way digital tools would implement policy and make decisions. The values and practices that go into making digital tools for this purpose will likely have an effect on the future of how municipal goods and services are allocated and delivered. This is why understanding and unveiling these contexts is crucial at this point. These ethical concerns deal with how these biases will be reproduced through code if humans no longer have a hand in shaping

⁷ As of April 2019 the artificial intelligence has been changed to answer “I don’t know how to respond to that” after UNESCO’s critical report on gender equality and technology.

computers, and which consequences pointing out these biases in the creation of digital technology can have.

Informed Consent at a Workplace

My research proposal, method, and a copy of my informed consent form was approved by the Norwegian Centre for Research Data (*Norsk senter for forskningsdata*). I also received approval for my research from the Department of Social Anthropology at the University of Oslo. I received written informed consent from all people I have written about. The informed consent form outlined the aim of the research and the methods I would use. The form informed the participants that they could consent to being part of the project, that they could also not consent, that they could ask to see insight into the data I had gathered about them, and that they could withdraw their consent and their data whenever they wanted. Because leadership had approved my research, the employees themselves did not have a say as to whether I could be there or not. Because I wanted to decrease pressure and give them agency over their participation, I opted to hand out the form and specify that they would have to give them back to me signed if they wanted to participate in my research. There were a couple of actors who never returned the form, and have hence not been written about. Upon signing, I took a picture of their signature and gave back the form which outlined their rights, as well as a way to contact me after my fieldwork had finished.

Erasure

One challenging case for anonymization was TIP. Out of a team of six, one was a woman. I realised that in order to fully anonymise her participation, the team would have to be presented as homogenous – having the same gender. However, I had an ethical struggle with this. Women have been systematically erased from the history of science and technology, not to mention the history of computers and the internet. Claire L. Evans (2018) addresses this exact topic in her book *Broad Band: The Untold Story of the Women who Made the Internet*, asking how many people know that the first computers were female mathematicians? Or that infamous poet Lord Byron's daughter Ada Lovelace was the first to theoretically design a computer algorithm in the 1800s making her the first ever programmer? As this thesis might as well be a small piece of evidence that will inform the history of digital technology at the municipality of Trondheim, it felt wrong for me to erase the one female developer from the

story. Because of this, I have chosen to anonymise all TIP developers as women, giving them female names and using female pronouns.

CHAPTER 3: Contradictions at Digital First Choice

Introduction

A Norwegian citizen today will be involved with bureaucracy during most of her life. Bureaucracy will shape and dictate the formal contact she, and every other citizen, will have with municipal goods and services from, her birth to her death. At the same time, bureaucracies depend on the citizen's continuous use of (and trust on) their institutions in order to continue to hold their legitimate power. As digitalisation becomes a larger and larger project to the municipality of Trondheim, it brings about changes to the bureaucratic structures in the form of values, aesthetics, and practices. The catalyst for these changes at the municipality of Trondheim was the Digital First Choice program (*Digitalt Førstevalg*, DF going forward).

What happens then when a bureaucratic organisation such as the *kommune* starts digitalising? During my fieldwork, I looked at how the municipality tackled the consequences of this technological innovation project. I found that DF is recasted as a new form of bureaucracy - one that emulates a modern organisation, by putting in place new forms of infrastructures and routines that perform the values associated with de-bureaucratisation and the free market (such as efficiency and progress). These practices and performances were largely associated with, and borrowed from, the information technology industry. As I will show, through the adoption of these practices, DF attempts to perform an ideal of efficiency and innovation, posing a conflict as the program is embedded in a bureaucratic structure.

Communicating Values Through Performance

In the common discourse, bureaucracy can be understood as a way to organise and administer people, goods and services, and information. Max Weber developed bureaucratic theory among the social science academics, and framed it as one of three legitimate forms of authority: formal authority legitimized by rules and offices (Weber, Talcott, and Henderson 2012). Further, he expanded upon bureaucracy, identifying bureaucratic systems as efficient, rational, and transparent (Swedberg and Agevall 2016, 20). In chapter 2, I interpreted the characteristics Weber assigned to an "ideal type" bureaucracy as part of a system that allows bureaucratic organisations to be democratic, permanent, predictable, and transferable (in

addition to Weber's description of bureaucracy as rational and efficient). These characteristics may seem contradictory to how bureaucracy and bureaucrats are seen in popular discourse today, that is, as ineffective and slow. The term bureaucrat is in English used in a derogatory manner to denote an unnecessarily strict, difficult, and uncreative person. Likewise in Norway, the public sector can often be thought of as slow to adapt to changes, especially technological changes. This specific public image was something municipal employees in Trondheim were aware of.

During my first week in the field for example, I took part in a meeting between municipal employees. Towards the end of the meeting the participants were chatting about how they had finally started using a digital tool in order to send documents between different school administrations when an employee made a joke saying "There you go, the municipality is finally in 2019" ("*Da ser vi at vi er i 2019 [i kommunen]*"), prompting laughter from the other participants, pointing towards their self-awareness concerning the municipality's image. At the same time, "finally in 2019" also indicates an expectation that the adaptation of digital tools should progress in a linear manner, and that the municipality of Trondheim was delayed in relation to the norm. While Weber ascribed to bureaucracy the equalities of efficiency and rationality, today these values are associated to a much larger extent to de-bureaucratization and the rule of the free market. Interestingly, digitalisation projects at the municipality of Trondheim were also associated with these values, after all, the founding principles of DF was to make municipal services more efficient and transparent⁸.

In the previous chapter, I presented the concepts of street-level, screen-level, and system-level bureaucracy (Lipsky 2010) (Bovens and Zouridis 2002). For this chapter, I would like to dive deeper into how rules and laws are implemented in bureaucracies. Many decisions are no longer made at the street-level by the worker handling the case; rather, they have been programmed into the computer in the design of the software (Bovens and Zouridis 2002, 177). These kinds of biases are encoded into the technology we all use in our daily lives. It is therefore relevant to consider taking a closer look to who (or what) the actors in my field might be. While the actors of an "ideal type" bureaucracy might be bureaucrats, the

⁸ see chapter 2, *Delimiting the Field*.

participants at DF were by and large consultants hired through private consulting agencies. They held temporary positions and did project based work at the municipality. What kind of bureaucracy do these unorthodox bureaucrats perform?

In order to make sense of what kind of bureaucracy is being performed at DF I find it useful to first describe the social and aesthetic performances that I observed (and to an extent, participated in) at the municipality. With Butler's (1990) and Goffman's (1959) theories around performance in mind, I will approach performance in two ways: how space was organised (by looking at aesthetics as a site of analysis) and how time was organised (by looking at meetings). By looking through the lens of performance, the values communicated in this space can be made visible.

Organising Space: The Municipal Aesthetic

In the Norwegian imaginary, the municipality (and anything or anyone associated with it) is often seen as bland, grey, and outdated. In Norwegian there are a number of phrases or words built around this imaginary such as *kommunegrått* (municipal grey), used to describe the common cool dirty blonde hair colour that many Norwegians have, and which many people wish to lighten or cover up. Another example is *kommunalt tempo* (municipal tempo), a jest to describe things taking a long time. Although it is meant to describe hair, I find *kommunegrått* a fitting concept to describe the imagined aesthetic of the Norwegian public sector in general. In 2017, an Instagram account was created dedicated to posting images of municipal aesthetics, fittingly named *kommunal_estetikk* (municipal_aesthetic), effectively capitalizing on the social expectation of an outdated municipality. The account, which has amassed 23 thousand followers as of January 2020, shares images of the expected "tacky" interior, small meeting rooms with yellow lighting, laminated wooden furniture, and lunch spreads as seen in image 1.



Image 1: Top corner: a meeting room. Bottom corner: a lunch spread.

However, what is being performed through the above-described concept of *kommunegrått* goes deeper. Although the aesthetic seems cheap and tacky, it is also austere and a somewhat failed attempt at being *koselig*⁹. This could be because the municipality is not meant to spend money on fancy meeting rooms and catered lunches. Municipal goods are meant to be redistributed to the population, hence this aesthetic can be reframed as a way to retain and reproduce the Weberian values of bureaucratic fairness that one might expect from the public government in Norway. One example is how resources are used for decorating public offices, and the municipality of Trondheim's own take on this law. Walking in schools and other public offices in Norway, one might notice that they are adorned with art. Municipalities and other public organisations in Norway are actually expected to allocate 0,5 to 1,5% of their budget to buying art (KORO – Kunst i offentlige rom, n.d.). This is meant to support artists in Norway, but the municipality of Trondheim goes further, working extensively to make their art collection public and approachable. The offices were still closed off to the public through numerous automatic doors, yet the municipality invested in developing digital tools to classify and share municipally owned artwork so that citizens could see them, at least online.

Digital First Choice Aesthetics

In many ways, the municipality of Trondheim performed a separation from the *kommunegrått* aesthetic described above. The municipality of Trondheim's main office (which is where DF and Trondheim's Integration Platform (*Trondheim Kommunes Integrasjonsplattform*, TIP going forward) were located) was situated on the fourth floor of a shopping centre in the middle of the city centre. I later found out that the offices were leased from a bank. This location and style of building conflicted with the expected social democratic architecture that so many other offices in the public sector in Norway have. The municipal offices were locked by heavy, automatic doors that one can only open with ID-cards. Walking in, you would see a long hallway with glass walled offices to either side. The offices were all named after Norwegian sportsmen and women. Among others, I saw Northug, a prominent and infamous cross-country skier from Trondheim. A sign indicating the name of the office hung next to the door, and the writing was set on top of a small black and white picture of him wearing a hat with what must have been the Norwegian flag. The hallway led into an eating area that could seat around 50 people. All around the square room, there were

⁹ *Koselig* can be compared to an extent to the word cosy in English. In Norwegian it is associated with warmth, homeliness, candle light, and traditional interiors.

glass-walled offices, conveniently frosted at eye level. From the eating area, you could walk into three bigger open-plan offices. Through the floor to ceiling windows, the offices overlooked the city square (*Torvet*). In the middle, and almost at eye level from the office, there was a statue of King Olav Tryggvason, a Viking king said to be the founder of Trondheim. His left hand extended in front of him, holding an orb with a Christian cross, on his right, he held a sword, a homage to his central role in the violent Christianization of Norway.

Inside the offices, it smelled of brand new wooden furniture. The walls were white and the floors were made of light wood, echoing Scandinavian style design. The room was furnished with angular, slick sofas and hanging lights in orange and purple (see image 2). In the corner of the building, there were 16 desks arranged in four rows, delimiting the physical space of the Digital First Choice program. It was a medium sized open-plan office. Most desks were equipped with a screen and a keyboard, yet no personal details were visible. I came to learn that none of them were assigned to any particular person. As the spots were not permanent, employees cleared their space every day, except for the manager and the administrator at DF. The fact that DF did not have permanent seating for the employees was mentioned on different occasions by municipal employees, and indeed, they were the only office I saw at the municipality that did this. Consultants, however, did not communicate any issues with this arrangement, and if they had anything to say at all (which most did not), communicated that they felt it gave the office a more professional and “clean” look and that they preferred it.

Trondheim’s Integration Platform (TIP) also had their offices on the same floor, and were part of the same unit at the municipality, yet their aesthetic communicated something else. The room where they worked was long and narrow. The office contained seven desks, four facing the left wall, which was a calm blue-green colour, and three facing the floor to ceiling glass window looking over a shopping street. It felt open and light. Hanging on the wall opposite the door was a large screen showing a network of circles connected by lines, and a graph with histograms. It showed the status of all digital services the municipality had. Each desk had three screens, and large office chairs. The desks were full of gadgets and hardware as well as personal items such as food, tea, and change. There were indoor shoes on the floor, and a plant in the corner. It all came together to give this office a homely, messy feel.



Image 2: the offices.

Through its aesthetic, the whole information technology unit at the municipality of Trondheim performed a version of the municipality that was modern and fashionable, contrasting with the tacky, traditional, and austere *kommunegrått*. At the same time, the aesthetic of DF and TIP performed different identities. Whereas DF could be said to be attempting to reflect the look and feel of contemporary information technology providers by using open landscape offices, and non-permanent sitting, TIP could be said to be trying to give a feel of a tight knit community much like could be expected at a start-up. Both of these performances, though, emulated organisations associated with the novelty and efficiency that bureaucratic organisations are assumed to lack. Keeping these aspects in mind, what can the way participants at DF worked tell us?

Organising Time: Work Practices at the Digital First Choice Program

Temporary and project based work were essential organising principles at DF. DF was a relatively new program as the municipality of Trondheim took on the program in 2016. During my fieldwork, DF was structured in a completely different way than the rest of the municipality. Most people tied to DF were consultants hired through framework agreements (*rammeavtale*) from big consultant companies¹⁰. All consultants were tied to specific projects, which were assigned to other units at the municipality of Trondheim meaning that the projects were made in cooperation with employees from other parts of the municipality. A project may have had as little as two participants or up to dozens depending on the size and whether it was being developed in house or through an acquisition.

Working at a public office in Norway is often regarded as the safest, most stable employment one can have. In Norway in general, temporary employment for more than three to four years automatically places the person into the category of permanent employee (Arbeidsmiljøloven, § 14-9, 2005). In addition, there is also a perception among people that if you become a permanent employee in the public sector, it is virtually impossible to lose your job. Consequently, for assignments that could be seen as temporary, such as project based work, consultants are usually hired for a short time rather than hiring an employee that may be at the municipality for 40 years. At DF, consultants were framed as necessary because they held expertise in fields that municipal employees in Trondheim did not have, such as industrial management, and technology and project management (as well as knowledge of, and experience working with, digital technology). Consultants were usually hired on temporary contracts, usually for a year or until the project was finished. However, occasionally it also happened that participants were replaced before the projects were finished.

A challenging aspect was that, although employees were hired for projects for a limited amount of time, the length of each project varied greatly. One essential concern was that projects took a minimum of a year from when the need for a new solution was first defined to when resources were allocated, and project planning could start. In addition, projects were regularly delayed due to unforeseen challenges related to building the digital infrastructure, and ensuring that it worked as it should. Because of this, time projection and the limits and

¹⁰ See Chapter 2.

horizons of projects had to be reimagined and negotiated constantly. The OAS project, which aimed to create a solution for school administration, was delayed at a critical point in time: right before summer. The whole solution was not ready to be used for the start of the new school year, causing grief and frustration for many local authority officers (*saksbehandlere*) who would have to continue to use an obsolete decision-support solution. Together with the software providers, the project team decided to roll out the parts of the solution that were ready. However, these unexpected delays added an element of risk to the digitalisation project at the municipality.

Looking back to the characteristics of bureaucracy that Weber described (and the values tied to them), I analyse the bureaucratic performances at DF. The bureaucratic work done at DF was ruled by (digital) documents, which allowed for transparency and made traceability possible. However, continuity was a problem. If consultants were suddenly moved to other projects, or the funding for a given project was changed from year to year, it meant that the role of project manager changed hands at irregular periods. Further, once a project was considered finished, or the current objective was reached, consultants could leave the project in the hands of the units that had commissioned the project and in the hands of an employee that likely did not have expert knowledge about project management or technology development. This posed a challenge for the continuity and predictability of bureaucracy that Weber described. It was also possible for consultants to work for different clients at the same time, and even having a hand in different projects, which challenges the Weberian bureaucratic characteristic of having devoted employees. These organisational characteristics conflicted with the ideal values associated with bureaucratic institutions such as the municipality. So, which values *were* being embraced? What was being communicated? In order to answer this, I turn to looking at a popular work practice carried out at DF: meetings.

Meetings as Performance

Although DF participants talked to each other about projects at times, the main form of cooperation occurred through planned, structured meetings. Consequently, meetings became a central activity in my fieldwork. The special issue of JRAI *Towards an ethnography of Meetings* (2017) makes a contribution to the study of meetings. Hannah Brown, Adam Reed, and Thomas Yarrow (2017) call for researchers to approach meetings as a space for

collaborative action that acts to order relations. In addition, they write that meetings can influence a range of contexts beyond the meetings themselves (ibid). Writing about work meetings in Norway, Simone Abram (2017) expands upon this. She uses the concept of “conjured contexts” to address the imagined space that is governed through meetings. Abram continues writing that “meetings can be further understood to be the embodiment of the imagined state” (2017, 42). She prompts then that researchers should look at meetings to see “an enactment of what that state consists of, and how it is materialized” (ibid). These analytical perspectives inform the way I approach meetings. I look to meetings to see which organisational strategies were lifted up as preferable at the municipality. In addition, I pay attention to which wider conversations these meetings speak to. With this in mind, which contexts were the different meetings at DF “conjuring”? And which values did they materialize? In order to begin answering these questions, I will first describe the work done in (and around) meetings at DF.

Much of my ethnography was collected before, during, or after meetings, as well as in conversations planning or discussing meetings. On a day-to-day basis, participants went to work between eight and nine in the morning. They would pick up a cup of coffee on their way to the open-plan office and sit down at their usual desk, even though no one technically had permanent seating. Once seated, participants would look at their calendars. Calendars were the main tool by which participants connected with the rest of the municipality, and the tool through which all meetings were scheduled. Most people had at least one hour-long meeting every day, and the total amount varied from person to person. The rest of their time was used reading and answering emails or doing work on their projects such as budgeting, writing and documentation, and communicating with providers and stakeholders. When leaving for meetings, which were often in the same building but in another area or floor, my participants would often leave with just enough time. We would get a cup of coffee and walk together through the maze of offices, doors, and bridges on the top floors of the three large buildings that made up a large portion of the municipal office infrastructure. All meeting rooms could be used by anyone in the municipality through an internal booking system, so the rooms were often fully booked every day.

There are two main types of meetings I observed at DF: (traditional) work meetings (simply called *møter*) and stand-up meetings (*stand-up møter*). There were also project steering committee (*styringsgruppe*) meetings each month, which I did not participate in. Work meetings were usually at the same date and time every week and in the same meeting rooms. They usually included the same participants too. While work meetings could fulfil many different aims (planning how to go forward in a project, work with a provider, update the team, evaluate an assignment that had been accomplished, or brainstorm or discuss a new way to do things), the aim of stand-up meetings was mostly to facilitate communication between project managers.

For the projects I followed, work meetings happened weekly at the same time every week. The meetings were usually scheduled in bulk, for example weekly for a month. Work meetings invitations usually did not include an agenda. Who participated in these work meetings depended upon what the aim of the meeting was. For a project that was actively working with a provider, the work meetings would include the project manager, representatives from the municipal unit that commissioned the solution, and participants from the software developers. Meetings that concerned projects in the planning phase would include project managers, municipal employees from the given unit, and information and technology advisors from the municipality. Work meetings happened in small rooms where participants would sit around a table. They usually lasted one hour unless there was an extraordinary reason for it to be longer. Participants rarely attended digitally if it could be avoided. One project that used a software developing company located in another city even had multiple visits from them in order to meet in real life. To some extent, the traditional analogue meeting still was framed as preferable.

Participants were very punctual. Weekly meetings would be led by the project manager who would formally start the meetings. They would be the first to speak and use this opportunity to fill in the other participants on what had happened the previous week, for instance whether any project steering committee meetings had happened and whether the project team's ideas had been supported or shut down. This also allowed the other project participants to ask questions or ask for explanations about the process, which may be new to them. In this way, the first part of these meetings was used as a way to communicate the status of the project and

to inform the project team about recent changes. The meeting would continue by opening up a discussion about the recent developments and which actions the project would take, or by working together to carry out an assignment. Much of the time in meetings would be spent cooperating or working creatively to find solutions to different challenges posed by rigid bureaucratic processes, difficulties cooperating with providers, or lack of time and funding. These challenges also elicited opportunities for participants to vent and lament the inflexibility of municipal bureaucracy.

To my participants, meetings had a familiar form, they were predictable. This allowed them to predict behaviour and know how they themselves should behave. These work meetings were a scene in which they could perform their roles, but also challenge them. Participants could vent or discuss injustices concerning a rigid or old system, yet had to work together to find a feasible solution inside the limitations of the organisation. Meetings, as “ultimate expressions” of bureaucracy (Abram 2017), communicated concrete values that were produced and reproduced through performance. Work meetings conjured a traditional bureaucratic context for action. For stand-up meetings though, their form, and the organisational values they reproduced, were different.

Stand-up Meetings, in Practice

On my first day in the field at the municipality, the program manager Janne wanted me to participate in a weekly stand-up meeting, explaining it would be the best way for me to become acquainted with each project. In their article about daily stand-up meetings, researchers Viktoria Stray, Dag Sjøberg, and Tore Dybå explain that these meetings are a practice of agile¹¹ software development methods, and are meant to “improve communication

¹¹ The translation of the word agile to Norwegian poses a challenge. In the field of information and technology, they use the word *smidig*. *Smidig* could be more accurately translated in English to supple, pliable or flexible (Lexin). However, I will continue to use the word agile in my thesis because, in the context of software development and the information and technology industry, that is how the word was originally translated from English to Norwegian. In English, one of the definitions of the word agile is “relating to or denoting a method of project management, used especially for software development that is characterized by the division of tasks into short phases of work and frequent reassessment and adaptation of plans.” (Lexico). While I have seen the word *agilt* be used in this context, my informants across the board said *smidig*.

in software projects” (Stray, Sjøberg, and Dybå 2016, 101). Agile software development refers to a method of developing software that relies on thorough cooperation and comprehensive feedback from team members and end users (Manifesto for Agile Software Development 2001). On their qualitative study, Stray, Sjøberg, and Dybå define a stand-up meeting as “a brief communicative event that involves two or more people in a team; it is regularly scheduled at a pre-arranged time and place; the participants stand; it is organised and managed by the team; and its primary purpose is to increase team awareness” (2016, 118).

I had personally experienced stand-ups at an internship at a large information and technology company some years earlier. Working with user research, I was part of a team made up mostly of software developers. Every day, we would stand in a circle in a common area, not far from the work desks, and hold a short meeting between five to fifteen minutes. During the meeting, everyone would say what they would do that day. The meeting was meant to keep everybody in the loop about what everyone else was doing, allowing cooperation across different tasks that may need to be done in a certain order, but by different actors. The standing format, causing physical discomfort, was meant to keep the meeting short. My experience, although anecdotal, bears many similarities to Stray, Sjøberg, and Dybå’s description. Stand-up meetings at DF though were performed differently.

Firstly, they were held in a designated room: a big meeting room that could sit around 35 people with desks arranged in a horseshoe shape. This made it so that the room for standing was a narrow space between the desks and the walls, leaving the participants comically far away from each other. An efficiency tool, Upwave, was projected onto a wall. Each project had its own column, all in different colours. Under each column, the project managers were meant to fill in activities they would be doing that week. The project managers had filled in the boxes with half-sentences and single words, such as “meeting” and “workshop” leaving much to the imagination. As we waited for everyone to shuffle into the room, between the tables and the wall, I counted six people standing around the room: three men and three women (including me). I had a pen and a notebook with me and awkwardly scribbled words, leaning over on the desk as everyone else was standing and I felt I should too.

The first project manager spoke for a long time about what had happened with her project for the past week, and what she would be doing the following week. As we moved onto the next person, I started to feel tired from standing already, and wondered if the others felt it too. Some of them were leaning their backs on the wall. We moved on to the next person in the list. While each project manager spoke, the others either looked down or to the side, or nodded along. I noticed that what they had written on Upwave did not necessarily reflect what they were talking about doing that week. Janne had also filled in her to-dos on Upwave. When it was Janne's turn to speak, I noticed everyone turned their attention towards her when she started. She told us that she would be taking part in a course about how to work innovatively. She said that they would be discussing what they wanted innovation to look like at the municipality. The other project managers interjected, surprising me as no one else had spoken up during the meeting. A discussion about how the acquisition of innovative digital solutions should take place ensued. In the end, the discussion was cut short as the meeting had gone ten minutes over the 30 minutes allocated for this meeting.

Throughout my fieldwork, I tried to be present at the stand-up meetings every Wednesday. In general, the project managers had a tendency to report on what they had been doing for the past week and what they were planning to do the following week, which meant that they often talked for a long time, so that the meeting often went overtime. I also came to learn that it was not all DF participants, but rather the main project managers, who were invited to the stand-up. The style of the meetings did not vary or change from what I described above, except for the standing up. I remember feeling quite faint after these meetings, standing around for thirty to forty minutes while hearing others talk in highly technical language, at the same time feeling overwhelmed by the amount of information I received. After a few times, I started to bring a laptop to write notes, so I started sitting down while the others stood. Soon enough, it turned into everyone sitting. By April, this arose a comment from one participant, asking whether we maybe should start standing again.

Stray, Sjøberg, and Dybå characterized stand-up meetings as informal, short, casual meetings where a team can more easily synchronize their activities and cooperate (2016). Considering that stand-up meetings are a practice of “agile software development methods”, the cooperative characteristic becomes more clear. In software development, completing

assignments involves the work of developers with different experience and expertise at the same time. Stand-up meetings allow this coordination and make it possible for participants to organise their workflow on a daily basis. This quality of stand-up meetings was pointless at DF as the project managers worked, by definition, in different projects and independently of each other. Although my experience in other places was that stand-ups were planned and scheduled in calendars, they usually come together momentarily and had an air of spontaneity that was completely missing from the rigid structure at the stand-up meetings at DF. In short, the meaning and intent of the stand-up meeting were not successfully replicated at DF. Rather, the way DF performed these stand-up meetings could be compared to the piers and airstrips of the cargo cults recounted by Lindstrom in his book *Cargo Cults* (1993). Contemporary anthropologists argue for the rejection of the term from anthropology due to its stigmatizing and orientalist origin, yet it can be a useful category of thought for analytical comparison (Otto 2009, 88-89). Peoples who practiced these religious rituals were in essence copying a series of behaviours and practices, which they associated with a specific result: to understand and achieve material wealth.

Although this analysis of cargo cults puts emphasis on the gain of material wealth, the performance through ritual in cargo cults can be said to be similar to the stand-up meetings at DF: the behaviour was copied from the gatekeepers of software innovation (the information and technology industry) in order to gain something. I would argue that what DF wanted to achieve were the values associated with those who practice stand-ups: cooperative, innovative, agile and successful companies. Although the aesthetic was copied as they were indeed standing up, the meeting happened inside the boundaries of bureaucratic meeting structures by planning them carefully, allocating a number of minutes, and having prescribed behaviour, much like normal work meetings. On another level, similarly to cargo cults, stand-up meetings also allowed participants to imagine a specific future, one of innovation and success. DF's performance of stand-up meetings could then be said to be a caricature of the stand-up meetings in the information and technology industry.

Performing Innovation, Performing Separation

So far I have described how the way DF organised time and space became a window through which to look at contradictions. Concerning the organisation of space, the aesthetic

that was performed at DF and at TIP conflicted with the functional, austere municipal aesthetic that one would expect. Rather, the offices had a contemporary, fashionable look. Concerning DF's organisation of time, their work practices also became a site in which contradictory values could be observed. The main example I have presented were meetings. Much like the aesthetic of DF's office, their performance of stand-up meetings can be said to emulate the work style and aesthetic of contemporary information and technology offices. In fact, the consultants at DF identified these practices as "industry standard" for them.

So what does this tell us? What happens when bureaucracy meets innovative digitalisation? I argue that the DF program, through concrete aesthetic choices and work practices, attempted to create distance from the heavy, slow bureaucratic system at the same time as they tried to align themselves closer to the style of work of competitive information and technology providers. The actors at DF were at the centre of a struggle of performance of separation from traditional bureaucracy, while at the same time aligning themselves with practices at the epicentre of digital innovation: the information and technology industry. These conflicting internal values were contested during specific performances (such as meetings). It became clear that the essence of the stand-up meetings was "lost in translation" when transferred to DF precisely because stand-up meetings at DF, like all other meetings, were still bound to follow a bureaucratic form of continuity and predictability that conflicts with the innovative and modern nature of stand-ups. Thus, the contradictions that arise concern the different values that are attributed to each bureaucracy and innovation.

It is important to remark that these contradictions happened both at an individual and at an organisational level. Going back to Weber's theory on bureaucracy, he refers to it as an "ideal type". As a closing reflection for this chapter, I wonder if perhaps DF (and the municipality of Trondheim) may be pointing to a new kind of bureaucracy. Could it be that the responsibilities of the Norwegian *kommune* are starting to transform beyond merely redistribution of municipal goods and services, to become innovative institutions? And how about the category of "bureaucrat"? How can that role be understood when consultants (who make an earning on the free market) are assigned the role of bureaucrats?

CHAPTER 4: Digitalisation and Innovation

Introduction

In the aftermath of the space race, American popular culture became disillusioned with the promise of technology, leading to great works of technophobic cinema such as *2001: Space Odyssey* (1968), and years later *Blade Runner* (1982) and *The Terminator* (1984). A common theme among these films is that man-made technology, created to make lives easier and safer, turn on their creators, bringing about catastrophic consequences. It was the lack of control over how technology was used that was the centre of anxieties and fears in these movies. Although contemporary popular culture also delves into these themes, most recently through the Netflix series *Black Mirror* (2011-), this technophobia was far from the thoughts of the people I talked to at the municipality of Trondheim. On the contrary, participants at the Digital First Choice program (*Digitalt Førstevalg*, DF going forward) mostly fell prey to widespread technological optimism. There was an underlying idea that digitalisation was the best way forward, and there was a strong belief upon the innate ability of digitalisation to solve problems, rather than create them. The negative aspects were rarely discussed. My informants had utopian visions of technology, visions of the good work they could do in the near future through digitalisation and innovation. It is central to look at these elements because imagining does a specific type of work in our social world.

In her book chapter *Weeding Tasmanian Bush: Biomigration and Landscape Imagery* (2007), Marianne Lien writes about how environmentalists in Tasmania actively took part in both imagining and reshaping the Tasmanian landscape. Her informants engaged with their landscape by physically removing invasive plant species, introduced hundreds of years ago during colonisation, thus making their landscape a site where cultural imaginaries of the past and the future could unfold (and were negotiated) (Lien 2007, 103). Their notion of how the Tasmanian landscape should look like guided and motivated the measures they took in order to restore the landscape to the idealised native state. Lien analyses the environmentalists' intervention as a project of utopianism based on imagining, and working for, a better future (2007, 115). I see a resemblance between the environmentalists' project and the digitalisation project at DF. Part of the digitalisation projects happened in the municipal workers' and

consultants' imaginations of the future. I ask then, how did utopian ideals inform the actions of the employees at DF? And what did these utopian projects yield?

In her article about utopianism in the 19th century, Henrietta Moore writes that they are visions, of either a golden past or a golden future (Moore 1990, 16). She continues,

It is normal when we speak of Utopias to refer to ideal and unachievable states, to imaginary worlds which are labelled Utopian precisely because they can claim no link with reality. The nineteenth century Utopias were not like this. They were more like instances of social engineering, the social products of a technological age, and they were real (Moore 1990, 14).

Both authors point to a similarity between the past and future. Both are fetishized as unrealistic imaginaries of good times past, or good times to come. Putting these approaches to utopianism together informs different ways to analyse how the work that techno-positivist imaginaries of the future did for the DF employees. The proposition that utopianism can be based on unachievable ideals, based upon a far from realistic view of the future, can to some degree apply to what I saw at DF. Whereas the leadership at the municipality imagined that services provided by the municipality could become fully automatic - part of the crib-to-coffin vision¹², this future was indeed a long time away, and not realistic based on the technology being developed and implemented at the municipality at the time. At the same time however, participants at DF also imagined a future that was achievable based on the current technology available, such as having more automated processes, and having better, newer solutions. This is central to utopianism and its relationship to time (Moore 1990, 16). They enact visions of the future, and imply “a necessary temporal distance between the here and the then” (ibid). Utopian thinking at DF warped time, different people at sometimes framed full automation as a near future, whereas at other times both municipal employees and consultants brought up that the municipality of Trondheim was slow at implementing technology, expressing that the municipality was “behind”.

At DF, innovation and digitalisation were concepts that became fetishized. I find it useful to analyse this phenomenon through the lenses of utopian as it can be used as a pointer to look at

¹² The crib-to-coffin vision was a way that municipal employees, usually managers, talked about providing holistic services to the citizens throughout their whole life.

how the contradictions within bureaucracy were navigated (Billaud and Cowan 2020) (Mathur 2020). These kinds of imaginaries also informed action, promoting me to ask how these concepts were deployed and by whom (Lien 2007). I will continue by giving an introduction into how the process of digitalisation at DF looked like.

The Process of Digitalisation

On the municipal home page for DF, the municipality of Trondheim states that they continuously aimed to make the contact and communication that citizens have with the municipality “*enkel, sikker og smidig*” (simple, safe and agile) (Trondheim kommune, 2020b). In this website, DF is framed as a way to develop “good” digital services for citizens and the private sector in an effective way and with optimal use of resources, by putting the users at the centre. As discussed in the previous chapter, efficiency of services (and efficient use of resources) are values that can both be attributed to Weber’s ideal bureaucracy, and more contemporarily associated with the free market. Based on the home page for the DF project though, it would seem as if these same values are also associated with the project of digitalisation and innovation in a wider sense. Yet Anne Marie Berg points out that bureaucracy and innovation have “contradictory features of organisational behaviour” (2014, 139). How was this reflected on the process of digitalisation at DF?

At the municipality of Trondheim, digitalisation projects took a minimum of a year to get started: to go from an idea and proposal, to when resources were allocated and the formal planning could start. A lot had to happen at different municipal levels before a project could officially begin. Around the new year, a unit at the municipality could communicate with the chief executive’s (*rådmannens*) office and inform them that they would like to start a new digitalisation project. This could be because there were new requirements or needs that were not met by the current solutions, or because the old solution was obsolete. The unit would then need to fill in forms and turn in documentation for different things, for instance, how much they thought it would cost, and which challenges the solution would resolve. These investment applications were analysed throughout the spring by an allocated committee. The applications were reviewed based on their expected benefit. The committee rated the projects, out of ten, on a series of values that measured among other things how many citizens the project would benefit, how risky it would be, and the amount of money and work it would

take to be completed. For example, projects would be allocated more points if a large number of people could use the solution.

Once the cases were rated and considered, they were written into the action-finance plan (*handlings-økonomiplan*) which was discussed by politicians and the council (*kommunestyret*). By December, the manager of DF was then informed about which projects would start and formal planning could begin. The number of projects pursued depended on how many resources for investment were available, as the funds for the process of digitalisation at the municipality came out of the budget for investments, which also support many other things such as infrastructure. I was told that the next few years there would probably not be any new projects, as investment funds were to be allocated for other things, such as building schools and getting the city ready for the Nordic World Ski Championship of 2025.

This lengthy process could be seen as only natural in the context of a bureaucracy. Decisions were taken in a democratic manner by using committees and politicians who allocated funding to projects that were seen as serving the needs of citizens. In this way, they were held accountable to how public resources were used, which is in line with the bureaucratic ideals of fairness and transparency. However, the process was long and slow, in contrast to DF's founding principles of efficiency and agility. In fact, the members of DF, both consultants and municipal employees, voiced that they felt the process stood in the way of innovation. They explained that it was challenging "to buy innovation" when they had to wait up to two years before they could start looking to buy a program or solution. However, many municipal employees would at the same time argue that simply doing things in new ways was also innovation, and that this "grassroot" innovation could be done immediately, without waiting for the project to receive funding. This negotiation concerning whether innovation is in essence bought or created "in house" showed a separation in the interests of consultants and municipal employees. In fact, consultants almost exclusively opted to buy innovation and work with external providers rather than creating solutions at the municipality through for example Trondheim's Integration Platform (*Trondheim Kommunes Integrasjonsplattform*, TIP going forward). Municipal employees in contrast seemed to be more open to cooperating with TIP.

Indeed, in the process of digitalisation, DF was still bound by the limitations of bureaucratic elements and practices made to ensure the longevity, fairness and transparency of public services. How, then, can digitalisation and innovation, and bureaucracy be consolidated? How are the concepts understood, and how can they help navigate the contradictory principles within DF?

The Promise of the Digital

The word digitalisation was rarely articulated at DF. Although the word digital was central to the program called “Digital First Choice”, barely anyone at DF expressed their work in this way. Rather, they said that they innovated. Still, the digital dimensions played a large role in the daily lives of the DF employees because it framed and limited their work practices.

Productivity

Anthropologist Maria Røhnebæk frames information systems as tools that can shape work practices based on her research at an office of the New Labour and Welfare Administration (NAV) in Norway (2012). She argues that digital tools used at work affect the way people work and the type of work they do. A similar argument to Røhnebæk is made by Judy Wajcman (2019) who writes about calendar tools. She argues that the way people perceive time affects the way they act, and that digital tools can affect this too. Wajcman’s findings draw upon interviews with software engineers concerning the use of a calendaring system popular in Silicon Valley. She reframes calendars as more than just productivity tools, but rather as technology that reproduces values anchored on protestant work values, such as hyper-productivity (Wajcman 2019). At the same time, the calendar tools used also made the calendars visible to all employees (ibid). The calendar application's particular way of representing these individuals' time shaped a specific type of worker: one that was open, efficient and transparent (ibid).

At DF, digital tools were used as a way to manage work, cooperation and projects. During my fieldwork, I saw many similarities to what Røhnebæk and Wajcman described. The municipality used a Google solution for work across the board. This meant that all municipal

employees used the same type of calendar and email system. The people at DF very frequently used the Google calendar-scheduling tool. The calendar tool is automatically programmed to allocate one-hour time slots when booking a meeting. Consequently, the meetings I attended were rarely more than one hour. Employees at the municipality were encouraged to keep their calendars up to date, as meetings were often booked without asking people if they wanted to meet beforehand. I came to understand that it was assumed that, if your calendar was free, you would meet. Because most cooperation at DF occurred through planned, structured meetings, these took a big portion of the daily schedules of the members of DF, sometimes standing in the way of their workday. A strategy used by some of them in order to carve out time to do their work assignments was marking a meeting for themselves between 8:00 and 10:00 am in order to have time to work, undisturbed. One project manager who had a reduced position opted to book all of her assignments in the calendar so that she could not be called to meetings. At the same time, the visibility and public nature of the calendar, as well as the open-plan offices, did press the people working at DF into a hyper-effective work morality. If they were not working, it was obvious to everyone.

Although much cooperative work was done in meetings, the employees at DF also used a number of digital tools. Emails were exchanged constantly, as well as cooperative work on Google Drive, which allows for commenting and editing documents by multiple authors. In addition, tasks would be broken down into smaller assignments in a number of different efficiency tools, which project participants used at their discretion, such as Slack and Monday. All of these tools were used with the intention to simplify cooperation and improve communication and efficiency. When I asked some project participants inside and outside of DF about these tools, an answer I often got was that “the tools just keep coming”. It was up to each project team to decide how they worked, which meant that they had more and more tools to deal with, leading to them feeling overwhelmed. The idea that these digital tools were a way to make workers more productive, present, and hardworking was one expression of technological utopianism at DF. If these tools are imagined at the outset as a positive addition regardless of their actual effect on productivity (as they were at DF), the shortcomings may become obscured. Let us look at one example of this.

In February, the e-plan project, which aimed to develop a tool for the administration of municipal buildings plans, had decided to improve their citizen participation portal (*medvirkningsportal*). The municipality is legally required to facilitate citizen participation through input into their building plans (Plan- og bygningsloven, § 5-2, 2008). The issue was that the previous solution was outdated, and had had a series of bugs in the past years, which made it impossible to give feedback. This meant that the municipality was breaking the law, and this opened it up to liabilities. The project team decided that the citizen participation portal would be made by TIP, the developers at the municipality.

A few months into my fieldwork, I attended one of the weekly meetings for the e-plan project. This was a planning meeting, as the project was moving towards the end of the “planning phase”, and getting ready to start acquisition. Planning meetings fall in the category of “work meetings” which I introduced in the previous chapter. It was a one-hour sit down meeting, scheduled at the same time every week. The attendants were the same participants that usually were there and included the consultant in the role of project manager and another consultant, as well as four employees from the unit of Urban Planning. At this meeting, one participant showed a mock-up he had made of what the citizen participation portal that they would commission from TIP would look like. It was a one-page online form made up of a series of boxes. The form asked for specifications about which building plan code the feedback concerned, what the concern was, and the person's name and email. At the bottom, there was a box explaining the privacy policy for the information they would give.

A few weeks later, this portal was assigned to Hannah, a developer at TIP whom I was shadowing that day. Hannah, like most developers at TIP, was in her 20s and had an education in engineering from NTNU. The assignment which she received on Jira, a work management tool, can be seen below in image 3. The assignment is written in a technical language and it explains how each part of the form - how each value - relates to one another, and how these values will be communicated once the user sends the form. Each point is broken down into smaller, specified assignments, but no further explanation is given. It is written, much like a recipe, in a format of “do this, then do this”. I have censored sensitive information concerning the assignment.

fra Min side til journalpost

Edit Comment Assign To Do In Progress Workflow

Type: Story Status: TESTING (View workflow)
Priority: Medium Resolution: Unresolved
Affects versions: None Fix versions: None
Labels: None
Sprint:

Description
Løsningsbeskrivelse [redacted]
Utvikle skjema i Min side-rammeverk på "skjult url", dvs "/#/[redacted]"

- 1) Lag post-funksjon i Episerver-mal (vedlagt fil), som sender med sidetittel <Name>, samt saksreferanse <String01> og planident <String02>.
- 2) Lag skjema med samme utforming som i prototype <https://7185ok.axshare.com/#id=vthyfc&p=merkna&g=1> . Skjemaet skal ta med seg verdiene fra punkt 1. Disse skal ikke være redigerbare. Skjemaet skal fange data om Innsender (navn, kontaktinfo og f.nr) og merkna (multi line text input). Pluss evt vedlegg og et par inputfelter, dersom man representerer noen andre enn seg selv.
- 3) Samlet skjemainput skal legge seg automatisk inn som journalpost til ESA ved bruk av e-postintegrasjon. Saksnummer hentes fra <String01> (ref punkt 1).

Image 3: The assignment.

I asked Hannah to explain the assignment to me, and she told me that the assignment had been sent to her by Tom, the project manager for Min Side. Tom was involved because the citizen feedback portal would be accessed through Min Side. Hannah explained that Tom had described how each value would interact with one another. Hannah said that she found the text difficult to understand. She looked over the assignment for a while, and explained that she was struggling to decide what to do next, saying “I’m not sure what they want this tool for?” At an unrelated meeting later that day, Hannah asked Tom to explain the assignment further. Tom explained that the assignment had been sent from the unit for Urban Planning and would be a tool that would allow citizens to give feedback on building plans. Hannah expressed that what confused her was which part she was making, she wondered where the data would be sent and how it would be used. After the meeting, Hannah told me she still did not understand the point of the tool, but that she would just stick with making it look as similar to the indications as possible.

In spite of the different digital tools' obvious usefulness for working remotely and across teams, and their aid in planning and keeping track of assignments, it could be said that in this case, digital tools also stood in the way of cooperation and of the development of good solutions. Had the TIP developers been in the room during the planning meeting I attended, they could have perhaps seen the full picture concerning the solution, or at least discussed it more openly. Digital tools for efficiency (such as Jira, Monday, and Slack) which were framed as promoting streamlined productivity in this case led to confusion and doubt on the part of the developer. At the same time, it became clear to me that Tom did not have the whole picture either.

Nick Seaver (2017) writes about his experience doing fieldwork at a music recommendation company. He recalls email threads, closed meetings, and coordination with companies outside of the office being under-communicated to him and to other people in the office, and frames them in terms of “asymmetries of knowledge” (this is Casper Bruun Jensen’s (2010) term, referenced in Seaver (2017)). Seaver explains that these asymmetries are “characterized by limited presence, partial information and uncertain connections” (Seaver 2017, 7). This whole e-plan assignment was characterized by asymmetries of knowledge. Knowledge was not passed on equally to all parties in this project starting with the fact that many of the actors involved in the assignment (such as Hannah and Tom) were not present at the meetings where the idea started. Could the classic, bureaucratic, work meeting have been a better way to communicate this assignment?

Putting together Wajcman, Røhnebæk and Seaver, one can see how digital tools were used at work as a way to form a specific type of work environment and worker. The use of calendars attempted to promote transparent, productive workers yet overbooking often stood in the way of efficient workdays. At the same time, the use of efficiency tools such as Jira kept people working in the same project separate, and led in this specific case to work taking longer due to misunderstandings. In this case, I had been present when the project team decided to give TIP this assignment, and it struck me that only the essence of usability had been communicated. This might have happened on many different levels, as the assignment was communicated from the project team, to Tom, and then to Hannah, in addition to passing through a number of interfaces both digital and analogue. Another detail was that the tool commissioned did

more or less the same as a physical form would, with the exception that the feedback would be tied to a specific citizen by using a personal number. If the developers had been involved, this could perhaps have aided in innovating, creating a new way to solve the old problem¹³.

Going back to the values associated with digitalisation at DF, municipal workers and consultants alike imagined digital tools as promoting efficiency, productivity, and transparency. These ideals are in essence imagined as categorically good, in spite of the acknowledgement that there were too many channels to relate to. In this case, the over reliance on digital ways of work and a utopian approach to digital technology stood in the way of achieving these ideals. In this case, a traditional physical meeting could perhaps have allowed more agile cooperation as well as including the developers in the process of creating this new digital tool. Still, at the municipality, digital technology was also imagined as a way to achieve flexibility inside the rigid limitations of bureaucratic work.

Flexibility

Writing on labour and information systems, Røhnebæk argues that information systems reflect the “ideal world which is out of tune with local working conditions” (2012, 679). She presents the term “standardized flexibility”, showing how the increased pressure to individualize the public sector services by adjusting them to individual needs poses a challenge. She argues that computer systems both enable flexibility but limit it and contain it too. What happens is that digital systems are imagined as flexible and limitless, leading to a discrepancy between the expectations of the possibilities versus the reality of the ability of digital technology (Røhnebæk 2012). This can be compared to Henrietta Moore’s approach to utopianism, which was often based on unrealistic technological advancement, a future not based on reality (Moore 1990). Similarly to Røhnebæk’s findings, at the municipality of Trondheim, the project teams under DF imagined a level of digitalisation far more advanced than what their projects, and the technology available to them, allowed. They also imagined a future where they were not limited by bureaucratic rigidity, a future that was made possible and mediated by digital tools because digital technology was imagined as limitless.

¹³ I come back to this discussion in this chapter under the section *Innovation*.

Much like among Røhnebæk's informants, participants at DF imagined technology as the possibility to give personalized services, part of the crib-to-coffin vision, to the population as a whole. Yet the perceived flexibility that digital solutions offered did not only concern the tailoring of services for individual citizens, but of the municipality itself as a consumer when purchasing software. During conversations about acquisition of software, participants at DF often spoke in a sort of dichotomy of *skreddersydd* (tailored) versus *hyllevare* (off-the-shelf product). This differentiation was important because it dictated how far the project teams could go into acquiring a product in the open market from a software provider, something many employees, and especially consultants, prioritized. According to regulations for acquisition in the public sector, open-market acquisition can only happen if the given solution is novel, if it does not already exist. Arguing that a product was new and tailor-made laid the grounds for the process of acquisition in the open market. While a "product off-the-shelf" was conceptualised as a solution which was standardized and sold to multiple different companies/municipalities, a tailored product would be made from scratch or changed in such a way that it suited the specific needs of the project. Products that were tailor-made also were perceived as being more innovative, as it entailed creating something new, and were often verbalized as better or more desirable.

This aspect became particularly clear in the OAS project. During my fieldwork, the main aim of the project was to create a product that would provide different functionality for a large number of users: parents applying for or changing school or daycare spots, local authority officers (*saksbehandlere*) assigning school or daycare slots to families, and educational administration and teachers. With these requirements in mind, the project team had acquired a tailored product, which they made a significant investment in. Four months before the first parts of the program were set to launch, the providers had failed to deliver a series of functionalities that had been specified and promised months before. This was time sensitive as the solution would be used to organise the new school year, and the delays were tied to billing and registration, which were critical functionalities.

One central issue was that the daycare centres in the municipality of Trondheim measure billing hours for daycare slots in hours. If a child is a full-time pupil at the daycare, the caregivers are billed for the hour period "41 hours or more". For children who attend part-

time, they would be billed in periods of 0 to 10, 11 to 20, 21 to 30, or 31 to 40 hours¹⁴. The issue was that the software provider had made a system where billed hours were measured in percentages, where 41 or more hours corresponded to a 100% slot. This was not in line with the laws and systems for billing at this municipality. Since the start of my fieldwork in January 2019, the project team gave feedback concerning this issue but by the time I left in June, the mistake was still not fixed in spite of the weekly meetings where the issue was addressed. This left the project team, especially the members that worked with slot registration, frustrated and exhausted. As it turns out, part of the problem was that the provider was providing the same solution to other municipalities who measured billing hours in percentages rather than hours. It seemed the provider did not understand that municipalities measured time slots at daycare centres differently, and was not receptive to the importance of the fact that municipalities worked differently and had different needs. The problem, of course, was that the municipality billed for millions of kroner each month, and they would be losing a lot of money if they could not bill properly. Clearly, the team thought they had acquired a tailor-made product, yet were in fact acquiring something in between a tailor-made product and a product off-the-shelf.

Central to this conversation was the element that there are few software companies in Norway that have the capacity to produce services to the magnitude and needs that the municipality had. This means that the municipality has both little choice and little leverage when it comes to customization, which underlines that the idea that a product is either “tailor-made” or “off the shelf” is in fact a false dichotomy. However, it was a prevalent one. This was exacerbated by a utopian view of technology that was widespread among participants at DF. They imagined that the ideal solution was one that was made from a scratch to perfectly fit the laws, limitations and requirements that the municipality of Trondheim had. At the same time, they would imagine digitalisation as so flexible that every solution they acquired could potentially be tailor-made. This was of course not the case. Many projects had to be downsized and functionalities were dropped or postponed because there were no providers that were up to the challenge.

¹⁴ Reviewing this detail in June 2020, I found out that the hour billing period was changed in January. Keep in mind this observation was made in 2019.

In summary, I found that utopian thinking around digital technology amplified its qualities of efficiency and flexibility reimagining these technologies as limitless. At DF, digital technology was fetishized into a way to navigate the inflexible reality that many participants experienced while working at this bureaucratic institution. In turn, this approach to digitalisation was echoed in, and invariably tied to, the concept of innovation.

Innovation

The *kommune* needed to deliver the same quality of services, on the same budget, but to increasingly more people who expected increasingly more digitalised services. This called for new, creative ways of working and of solving problems. In a sense, innovation was framed as a way to achieve more efficiency and to fulfil the expectations set for the municipality. Thus, innovation at the municipality of Trondheim was seen as an imperative. But what is innovation when applied in the public sector?

Enquist, Fuglsang, and Rønning describe innovation as “(1) creating something new and (2) developing this into goods or services that have economic and societal value or impact.” (Enquist, Fuglsang, and Rønning 2014, 2). Similarly, consultants and municipal employees at DF described working innovatively as thinking of new, smart solutions and new ways in which to work. As one participant put it “*at det er nytt, nyttig og nyttiggjort*”, meaning, “that it is new, useful and put to good use”. She went on to explain that innovation needs not only be novel, but that it can also be to continue to find new uses for old solutions. In this context, she brought forward the AKS project. This project aimed to create a solution that would help employees at the introduction program do their work of supervising participants (refugees and their families), and also create a tool that would allow participants to log their own attendance. They decided that the tool would be based on a calendar concept. She explained,

Everyone has used calendars but no one has used it for refugees and immigrants. Just even thinking that calendars can be used as a tool for teaching is innovation because it is a new use of calendars for learning. It's simple innovation, but at the same time, someone had to have the idea, they had to think of it first.

Through her remark, she shows that she perceived innovation as being good in and of itself, and that digitalisation, or the use of digital tools, was part of that innovation too.

I found throughout conversations and interviews that most of the people I talked to at DF tended to tie together digitalisation and innovation in the following way: innovation was something they did or strived to do, and digitalisation was part of that innovation. During interviews when I asked what their job was, or what they worked with, they answered that they worked as project managers in “digitalisation projects”. But while digitalisation was what they worked with, they worked innovatively and aimed to innovate. For example, during an interview, a consultant explained that just because they were digitalising, it did not mean they were innovating. She explained:

I feel the term [digitalisation] is old school, it refers to going from paper format to digital format. If you are doing the same process, but on a computer instead, there is a very small degree of innovation. But if you’re making a new system and use new knowledge, or maybe make things simpler, then you have a large degree of innovation.

So while digitalisation could be an element of innovation, digitalisation was not necessarily innovation. In addition, her remark shows that she conceptualizes innovation as something that can be measured, and where the scale is tied to the novelty of the ideas or systems, but also tied to efficiency and simplicity. In reality, following this measurement, many of the assignments carried out by DF participants would be digitalisation, but not necessarily innovative (for example when looking at the e-plan feedback portal mentioned in the previous section).

Although in general at the municipality most of the people I talked to thought of innovation in the context of the development of digital technology, at times innovative ways of working were also discussed. The process of digitalisation could take a minimum of a year to allocate resources for a project, meaning that the actual project would take years to be completed. Because of this, a significant part of the innovation that happened at the municipality of Trondheim happened at an individual level. In fact, across many conversations, employees at DF persistently tied innovation to individual persons who had the great idea, “the innovator”, “the driving force” (*ildsjelen*). This discourse pointed to innovation as something that could accredit the person “going out on a limb” with individual merit. Enquist, Fuglsang and Rønning echo this approach through the term *bricolage* (2014, 9). *Bricolage* is innovation that happens through incremental changes and *bricolage*, where employees solve problems on the spot without a particular plan or policy (*ibid*). By verbalising innovation in this manner, it

seemed as if the people at DF associated innovation with individual drive and personal virtue rather than perceiving innovation as an organisational value at the municipality.

In summary, innovation could be understood as the acquisition of solutions that were “new, useful and put to good use”, at the same time as it could be finding new ways of working to facilitate the creation of these tools, such as in the case of the AKS calendar. Simultaneously, innovation could be, but was not only, tied to digitalisation, and not all digitalisation was innovation. This aspect is central to my argument that innovation was used as a tool to navigate the contradictions of bureaucracy. At DF, digitalisation was fetishized as a way to achieve utopian imaginaries of innovation. This is at the same time tied to how they perceived progress. It was seen as a linear process, one of “catching up” to the private sector. Although many DF participants (municipal employees and consultants alike) saw the municipality as “ahead” of other municipalities, there was a general agreement that the municipality of Trondheim was “behind”¹⁵. From this, the idea that “forward is always better” and the ethos that the municipality should always be moving forward is logical. It is important to remember that the criterion for whether something is innovative or whether a project has innovated is relative. How they evaluated innovation was tied to a utopian view of technology, and of the future of the municipality. But how did these preconceptions affect their actions and the digital technology being produced?

The Imagined Spaces of Innovation

Mathur prompts for researchers to consider what utopias “make imaginable”, and what possibilities they “allow to be conjured up” (Mathur 2020, 113). Similarly, Simone Abram wrote about the concept “conjured contexts”, that is, imagined spaces that were governed through meetings (Abram 2017, 28). Mathur and Abram both refer to an imagined space. Tying this to utopianism, I ask, which contexts does innovation conjure? Looking at how the concept of innovation was used during planning meetings, I would like to see which spaces were imagined beyond the current context and which actions it informed. As the basis of this analysis, I bring up a series of meetings for the e-plan project.

¹⁵ For another example of this, see the joke in chapter 3.

As mentioned, the e-plan project aimed to develop a platform for assessing building plans, and feedback about building plans. The project team had agreed that they would acquire a provider that would make the solution. The team had landed on the fact that no previous solution with the same parameters existed. This allowed them to argue that the project required a novel solution, which could then be acquired in the open market. Now, they could concentrate on how to carry out acquisition. The team had been talking for a while about how they wanted to do a new type of acquisition - what they called an agile acquisition (*smidig anskaffelse*). A team member told me: “We were looking for an agile method (*smidig metodikk*). It would be the opposite of a waterfall method (*fossefall metodikk*) which is when a provider gives us a product and there is little possibility for change”.

Agile acquisition was different from “normal” acquisition (which this team member classified as a waterfall method) in a number of ways. During a common round of acquisition, a project would announce a concrete set of requirements and specify a plan of action for the project, which providers could then make an offer based on. Once the contract had been signed, little could be done to change the plan. It entailed quite a rigid way of working. For this agile acquisition, the idea was that they would create a competition where they would explain what they needed the solution to do, and then providers could suggest an innovative and creative solution to the problem. The project would then choose the best candidate. So while during a normal acquisition the project team would explain what they wanted, (such as a solution for citizen feedback), during an agile acquisition they would give a wider frame so that the provider could work together with the team in order to find the best way to carry out the project. The project team explained that they wanted to do it this way because it would allow them to work creatively and it would give the potential for a lot of innovation. That being said, agile acquisition also entailed more risk.

In March, the project team’s proposal for an agile acquisition was shut down by the project steering committee (*styringsgruppe*) after they had barely started the pitch. All projects answered to a *styringsgruppe*. This group is made up of high-ranking employees at the municipality who supervise the project, and who are appointed by the project sponsor (*prosjekteier*). Through regular meetings, they check in on how the project is going and what will happen in the future. This group must keep in mind the constellation of interests that the

project serves. Who is part of these *styringsgruppe* varies, but at DF it usually included Janne, the program manager, in addition to other representatives who were involved with the units the project was commissioned by.

At the next planning meeting the following week, the project manager (a consultant called Rune) explained to the rest of the team that the project steering committee had said that it would firstly be too expensive, and secondly that they had had a bad experience with a previous plan to carry out innovative forms of acquisition. Previously they had invested nine million kroner in another project, and allegedly “not gotten anything out of it”. Rune said that the project steering committee had asked for a budget, a prediction as to how much this agile method they wanted to use would cost. At the meeting, the participants communicated disappointment. Rune explained that he had tried to convince them by reminding them that they had already come much further than that failed project ever had, but to no avail. They went on to plan a second pitch, and through this conversation started to imagine how they would justify risk for the sake of innovation.

William: I think it's so weird that they would say that.

Erik: Maybe they didn't get our plan?

Rune: They agree that we have to acquire a solution. They also know there isn't a solution in the market so...

Kristine: They are just thinking about money. We can't know how much it's going to cost or how long it will take because we don't want to decide now, we want to work it out together [with the provider]!

Rune: [attempting to concretize the argument in preparation for the meeting that Friday] ...So innovative acquisition is used for 1) to make solutions that don't exist from before, and 2) to use innovative methods. What we want to do is to cooperate with the provider.

William: We should present it in a different way I think. When you want to make something new and innovative you can't get hung up on price and time, you have to let go of one of those.

Kristine: We could start with an innovative acquisition and then make a review after 2 months?

Rune: If we did it our way we could choose the best people and also develop it together! What we are asking for is a deviation from the practices of acquisition.

In this exchange, the participants attempt to imagine and make sense of how their project pitch was perceived by the project steering committee. They reflect over the circumstances of the decisions taken for the project. They argue that it was risk and insecurity tied to the budget and the forecast of the project that made it so that the project steering committee did not accept the pitch. Innovation, whether in the public or private sector, is invariably tied to risk. In addition, innovation does not guarantee better solutions or services. Anne Marie Berg writes that if public employees are given freedom of action to innovate, they are also given the freedom to fail (Berg 2014, 140). This conflicted with my participants' experience. Especially among the consultants, there was a general feeling that the leadership may have encouraged risk, but that there was an internal system in the municipality that disallowed it. This in turn resulted in project plans being delayed or changed, as innovative proposals were shut down by the project steering committee. There was a discrepancy between what DF participants conceptualised as one of their leading principles - to innovate – and the reality of the limitations of a municipal organisation (because innovation and bureaucracy in fact enacted contradictory values (Berg 2014)). While bureaucracy is meant to distribute public goods and services in a fair, transparent manner, innovation takes a chance on investment. At DF, I found that because the municipality could at times be imagined as a site where innovation was possible, this allowed project teams to navigate the inflexibility of bureaucracy. Especially in the sense that innovation is tied to risk, this meant that innovative activities at the municipality were continuously imagined, negotiated, and argued about in different ways in order to make sense of these conflicting missions.

The following week the participants at the e-plan project continued preparing for the next project steering committee meeting, where they would attempt to convince the leadership of their approach once more.

- Kristine: We are hoping they will approve the innovative partnership as an acquisition strategy.
- Rune: Who is it to say we are not following the rules of acquisition? But at the same time, a provider may want to file an official complaint about the competition¹⁶ and this would be a risk.
- Kristine: A condition for using innovative partnership is that there is no solution in the market, and we do follow that. At the same time you could argue that another solution for case management is not really innovative.
- Rune: That's a really subjective issue. Even though it's another case management solution, we are going away from document centred solutions, we want another model.
- William: And **that** is innovation!
- Marie: How can they possibly say it's not innovative if there is nothing in the market?
- William: It's really a question of assessment. It's relative. I think we can argue that it is innovative.
- Marie: I think the local project steering committee is going to try to avoid making a difficult decision.
- Rune: Now that we have done our homework, maybe they will listen.
- Kristine: Can we maybe think of counterarguments to things they might say tomorrow [at the project steering committee meeting]?
- William: I think they want specific times and prices like last time.
- Rune: Time wise, the longer we wait the longer we work with bad solutions which we have been using for 20 years.
- Marie: You could say that we are not fulfilling our legal obligation of citizen participation [*medvirkning*] with the old solution...

¹⁶ Acquisition in the public sector is regulated by law in order to protect all parties. Providers could complain officially about the acquisition being biased or unfair.

Rune: I will say that tomorrow!

It becomes clear from this conversation that innovation was an aim for the project in and of itself. It is also made clear that innovation is valued by these participants, both by consultants and municipal employees alike. Innovation is seen as good and desirable. They are also engaging with utopian imaginaries of innovation in different levels. They engage critically with both what they saw as innovation (that is a novel solution which does not exist in the market) and at the same time they conjure the contexts which the project steering committee might imagine – that a decision-support tool (*løsning til saksbehandling*) was in fact not innovative, but common. William then brings up the argument that because the local authority officers use a different information technology infrastructure – working in new ways instead of sending and receiving documents – that the tool will be innovative either way because it designs a new way of doing things. By engaging with these concepts, they are taking advantage of the rule-based nature of bureaucracy that dictates the condition to acquire in the open market is tied to the solution's novelty: if there is no other solution like this one in the market, they can make a new one. Through this conversation, the participants are attempting to bypass the limitations set by the project steering committee, and the basic principles of bureaucracy.

The project team was engaging with utopian thinking by imagining a workplace reality where everything is possible without being limited by the fact that bureaucratic decision making at DF must also fit into the frame of limited amounts of time and of money. It would appear logical that the project steering committee would want concrete measurements such as the amount of time it would take, what the solution would do, and how much it would cost in order to make a decision on whether they should go ahead with it. During this meeting, the participants reimagined the challenge of time as not risky by arguing that they had already worked more effectively than a failed project that was continuously brought up as an example of the risk of innovation. They negotiated their perception of time and of money as a way to validate their agile acquisition before the committee. It makes sense that the project steering committee would not risk municipal resources in order to facilitate experimental acquisition, they are of course limited by the values of bureaucracy.

In essence, what the e-plan project team wanted was to be included in the process of innovation to a larger degree. A consultant explained,

What we want is to cooperate with the provider. We want a better contract than we are required by law and that we have today. We also want more insight into how they work. Agility is not the same as throwing a billion krone at them. It's working together with them on requirements and strategies.

Contact and cooperation with the provider was extremely important to them. This was underlined by the fact that the e-plan team had already picked out a bigger office room that they imagined would be the place where this agile work would take place. The challenge was that these participants felt this was only possible through acquisition of innovation in the free market. However, the kind of utopian innovation imagined by the e-plan team as a possible development for the municipality was in fact already practiced at the municipality: at Trondheim's Integration Platform.

Trondheim's Integration Platform

TIP was a team of 6 developers employed at the municipality who initially worked on putting together different digital solutions into the network of the municipality, and who later turned to more front-end focused programming in order to make these solutions look seamless, adapting them to the municipal digital aesthetic. The members of TIP were all municipal employees. Throughout my fieldwork, TIP got increasingly bigger orders from the municipality, going further and further into a role where they produced software for the municipality rather than merely sewing together systems. TIP organised themselves in unique ways in relation to the rest of the municipality, and shaped by their work practices and their tools, they worked uniquely innovatively. However, TIP was often overlooked and avoided by a number of consultants that worked at DF, in spite of the inferred agile work that TIP could easily provide. One example was of course the feedback solution brought up in the previous section. There was a general idea among consultants that if they wanted to acquire a novel solution, they went and got it from the open market. The consultants corroborated through conversation and at interviews that innovation meant not only "completely new", but also entailed using old materials and processes for new aims, and improving the efficiency of older solutions. In light of this, the resistance to using TIP on the part of the consultants was surprising.

The TIP team worked cooperatively, often talking across the room asking each other how to solve problems or think differently. This type of bricolage style innovation, making decisions on the spot (Enquist, Fuglsang, and Rønning 2014), allowed them to solve problems with agility and creativity without extra cost to the municipality. Concerning their tools, they often worked around the rules of acquisition - which would unleash a long and drawn out bureaucratic process. Rather, they found open source tools that were free that could be repurposed for the needs of the municipality. One example was the component library they used. A component library is a design system that allows them to copy and paste items used in front-end development, alleviating the workload of developers and making the style (the look) across services seamless. Copying and pasting is usually not practiced in coding as code can be patented or copyrighted. The component library that TIP used as a departure point for Min Side though was an open source one. By building upon already existing knowledge to improve their work, they used new tools and made their work more efficient, without extra cost for the municipality.

I asked the TIP developers and their manager how their work style came to be. One aspect that came forward was the practice of “extreme ownership”, which had been proposed by their manager. This concept was taken from a book on leadership based on the experiences of a soldier. As far as I understood it, it promoted taking responsibility and ownership over one’s work, as well as giving suggestions on how to keep a team motivated and united. One significant measure that TIP had adopted was shielding the developers as much as possible from tedious and rigid bureaucratic elements such as meetings and hang-ups about core work hours. In a similar way to what the participants at DF did, the TIP team also attempted to bypass bureaucratic processes seen as unnecessary and slow in favour of practices tied to the information and technology industry while also adopting innovative strategies.

A few weeks before I finished my fieldwork, my informants at TIP told me that some things were about to change. First of all, their name was to be changed from Trondheim’s Integration Platform to Trondheim’s Innovation Platform. In addition, they were to add new developers and were to be moved to the bigger office space that e-plan had wanted to occupy. Here, the developers explained, they were going to be able to work and cooperate better, and they

would have their own meeting room, something no other group at the IT-unit had. It became obvious that the kind of work that TIP was doing was being rewarded by leadership. Although my informants at TIP had not fetishized the concepts of innovation and digitalisation by amplifying it into a utopian imaginary, this amplification had happened through them.

Conclusion

For my informants at DF, the concepts of innovation and digitalisation conjured a utopian view of the municipality that allowed them to mentally bypass the elements of bureaucracy that stood in the way of the work they wanted to do. This conceptual work became especially visible during meetings. In contrast, at TIP these same bureaucratic hurdles were rather used as springboards to find ways to solve issues in cost-effective and creative ways, and finding ways to organise themselves and cooperate in new ways. But what else could these central concepts do for the actors involved?

In this chapter, I suggested that the concept of innovation was tied to virtue: innovation was good, more innovation was better. This raises the question of what was gained, personally, by driving innovation forward with such strength. What did this project yield? And which larger cause did this speak to? I have also contrasted how the different actors (municipal employees and consultants) approached the concept of innovation and digitalisation differently. This is of special importance because, as I have argued in the previous chapters, the actors who have a hand in shaping and creating digital tools also embed their individual values and ethos in them. If bureaucratic systems were throughout history made by those who traditionally were imagined as bureaucrats, where does that leave digital bureaucratic systems made by young developers, and consultants from giant international corporations?

CHAPTER 5: The Absent User

Introduction

So far, I have argued that there are innate contradictions within the Digital First Choice program (*Digitalt Førstevalg*, DF going forward) that come forth as the actors struggle to unite the fundamental elements of bureaucracy at the same time as embodying the spirit of innovation and progress. These contradictions play out in different manners, both in how DF is organised, how the employees at DF work, and how they make sense of their mission to digitalise and innovate. Along the way I have brought up how system-level bureaucracies (in which information technology tools implement laws (Bovens and Zouridis 2002)) are shaped by the actors that form them. In the context of the municipality of Trondheim, the digital tools are created by municipal employees and consultants at DF, by the developers at Trondheim's Integration Platform (*Trondheims Integrasjonsplattform*, TIP going forward), and by other private providers who are contracted by the municipality. How do their values, beliefs, and preconceptions affect the digital tools they have a hand in shaping?

In order to answer this question, I turn to how the user was conceptualised. I am using this case as an example because DF ostensibly has communicated that they aim to make good solutions *for the user*. Because I am interested in how these elements play out when it comes to considering the user, I ask, who is the user? How are they imagined and seen? For example, when it came to digital solutions, it was an imperative that they would translate them to English, and then consider other languages, rather than translating to a language that better represented the non-Norwegian population in Trondheim. Did this really reflect the population's needs?

Discussing the User

A central anthropological observation is the fact that what informants say they do is not necessarily what they actually do. Thus, I found it important to pay attention to my informant's discourse around "the user" compared to the actions they took around this topic. In Sara Mill's *Discourse* (2004), she writes that the concept of discourse has many different meanings. Within cultural theory though, discourse can be understood as groupings of

utterances that must be seen as “enacted within a social context” as well as determined by that context (Mills 2004, 10). Discourses, she continues, “structure both our sense of reality and our notion of our own identity” (ibid, 13). Drawing on Michel Foucault, she also points out that discourse functions to form the object of which is spoken (ibid, 15). In essence, she writes that discourse is informed by a given social context, it is normative (as it has power to form how the world should be), and it is performative as it has an effect on the subject, the object and the social world. With this in mind, how did the discourses surrounding the user at the municipality had an effect both on the actors themselves, and on the work they did?

Participants at DF often verbalised that their mission was “to make good, user-centred digital solutions”. As a point of departure, the people I talked to rarely evoked the user of the digital solutions as the citizen (*innbygger*), with the exception of some people doing formal interviews, or when talking about the municipality’s mission in a formal manner, such as in their website. Rather, they talked about them simply as the user (*brukeren*), or sometimes the client (*kunden*). When I asked one municipal employee at DF who used these tools, she answered the client, and explained that she saw the relationship as a client relationship, saying: “We are giving them a service. They are our clients, our commissioners”. Halvard Vike also recalls the welfare workers during his 1994 fieldwork in the municipality of Skien identifying the welfare receivers as clients (Vike 2017). This definition, he explained was ambiguous, and this ambiguity reflected on disagreements around “what a welfare client really needs” (ibid, 114). What I find interesting here is the different contexts that are conjured by using these categories.

The concept of user attributes of course the action of using, but it also entails the ability and the willingness to use, in this case, the given digital technology. Likewise, a user can act independent of the producer, in this case the municipality. This stands in contrast to the client. A client entails a relationship of exchange. As the municipal employee explained, the relationship can be seen as one of a commissioner and a provider. Lastly, a citizen is perhaps the most passive of all. The context here is framed by the official category of the state. At another level though, each of these words speak to different areas of responsibilities. While the state is responsible for the citizens, clients are to a larger degree tied to the market. That being said, public services also can have clients (such as a family therapist). My point here is

that the words used in and of themselves start creating ambiguity around the context of the relationship between the users and the municipality.

The users (*brukere*) were the most used category in the day to day at DF and at TIP, and I would argue that it was because it encompassed a large variety of people. There were three types of user groups that were addressed at DF: the citizens (*innbygerne*), the municipal workers, and the industry users (*næringslivet*). For example, the SSS project, which aimed to develop a platform through which people, could apply for food and alcohol permits, had different types of users with different needs and requirements. They could be a citizen who was celebrating a wedding and wanted permission to sell alcohol on their summer property. Likewise, they could be citizens of Trondheim who worked at a bar, and applied for the license on behalf of the company. Lastly, at the other end the digital solution, it also needed to be developed for municipal employees to assess these applications and give an answer. Hence, a given solution had multiple different users, and they were all addressed under the umbrella term of “users”. There were assumptions made about the user as a united category, blurring the lines between these groups. This meant that different users with different needs overlapped during the creation of tools.

Participants at DF and at TIP made a number of specific assumptions about the intended users. Some central assumptions that were made was that the users were literate, had digital abilities and had the infrastructure and hardware necessary to be online whenever they wanted. This was underlined in DF’s mission: to make all communication digital, raising the question of what if a person cannot or does not know how to go online. This assumption of digital literacy and digital equality came more clearly to light when looking at the AKS project. This project aimed to create a solution that would help employees in the refugee introduction program do their work of supervising participants (refugees and their families) and also create a tool that would allow participants to log absences themselves. The project manager for AKS, Stian, was a municipal employee who worked at the introduction program.

We had weekly conversations about the project, which gave us the possibility to discuss at length the context of the solution. He explained that the introduction program was both a privilege and an obligation for the participants. During the introduction program, they would learn everything that they need to know in order to be independent in Norway. This included

how to use technology, meeting etiquette, and how to navigate bureaucracy. The common denominator for these skills, he explained, was that they were necessary to enter and navigate the workforce in Norway. He explained it in the following way:

The introduction program is typically a process of trial and error, a place where you can safely learn how to live like a normal citizen, but with a safety net. They get to experience what it's like for other citizens. They get lots of practice making [job] applications and communicating with people through technology. It's a simulation of normal life.

The project team also explained that the program also aimed to teach participants strategies to take responsibility over their future, specifically their future as productive members of society. As Stian put it, "it's like an introduction to a new way of thinking" (*"Det er en inngangsport til en måte å tenke på"*). In addition to this, trust was a common teaching moment for the team:

We want them to start using these solutions, even though [the participants at the introduction program] might not have that digital intuition. They need to trust that the documents are being sent and received. We need to teach them that they should trust technology.

Stian explained that there was a need for the program participants to learn and improve their digital skills (*digitalkompetanse*) in order to participate in Norwegian society. On one level, the AKS solution would allow participants to have a "soft" type of introduction to the world outside of the program and to the municipal digitalisation process, which they would undoubtedly engage with in the future. Because of this, the tool would need to reflect the Norwegian society, and teach them values (such as trust) that Norwegians associate with bureaucratic processes.

Another aspect is that digital competence was conceptualized as a Norwegian skill, showing a number of preconceptions that the project team had about what it meant to be normal and what it meant to be Norwegian. They explained that Norwegian citizens had certain intuition, which introduction program participants would need to learn. Stian said that Norwegians have an intuition to go online if they do not understand something, which he attributed to it being an individualistic society saying, "we are not supposed to depend on others to get information and do important things." In contrast, participants of the introduction program did not have

the same intuition, and were missing the skills to communicate through writing. Rather, they much preferred talking on the phone. At the same time, he also explained that they were avid and skilled users of social media, being able to organise themselves and others skilfully through for example Facebook, yet missing the element of privacy and data safety. Stian's acknowledgement of the introduction program participants' Facebook skills points at yet another level of analysis. It said something about the kind of use of digital tools that was productive and wanted, and rather talks to integration in a wider sense. Digital bureaucratic tools were imagined as ways to integrate refugees and their families. Through technology, the participants could be integrated by proxy of learning how to use digital solutions across their ethnicity and nationality, and across their identity as "participants" and into "users" or maybe even "citizens".

By framing the project as a way to introduce refugees to the way of life in Norway, it would seem like digital skills, and mastery of digital communication could be a way through which immigrants and refugees could perform belonging by being a part of society. An aspect that is hinted at though, is the idea the project team held that immigrants and refugees needed to be taught digital tools in order to participate in civil society. In the meanwhile, Norwegian citizens were at times imagined as inherently skilled at digital tools. At the same time, municipal employees and consultants across the board acknowledged that there were certain strata of the Norwegian population, such as the older generation, who do not in fact have the minimal digital skills to be able to use the municipal services. Likewise, many municipal employees themselves in other units also struggled with digital technology. This points to a divide in digital skill and in access to municipal goods, services, and information that is found online, and although it represented a challenge, it was not systematically addressed as a problem. This was in contrast to the exchange above, in which refugees' lack of skills was defined as a gap that needs to be filled.

The digital divide is a concept in public discourse used to describe the gap between those who have access to digital technology and those who do not. It usually addresses inequality in terms of income and ethnicity, but also age and gender. Writing on digital inequality Jo Tacchi explains that the term digital divide points to those who are not part of the new technological developments, yet she brings up criticism of the concept's focus on the gaps in

technology and infrastructure (2012, 227-228). Rather, she points to the term digital inequality as a way to describe the socio-cultural aspect (ibid). So while Stian's remarks may not address a digital divide in terms of access to technology and infrastructure, it does address a divide in digital skills and digital literacy; one that marks a separation between those who can navigate digital bureaucracies and those who cannot. At the same time, the digital tools functioned as a proxy for integration across ethnicities.

Through discourses such as the one described above, municipal employees had a tendency to simplify user groups, assigning broad characteristics across the board. The discourse around integrating refugees and their families through digital solutions then functioned as a way to make sense of the other, but at the same time, it pointed to certain ideas around Norwegians, belonging, and citizenship. It is important to remember that the category of Norwegian users as digitally skilled was simplified. Far from all citizens in Norway are able to skilfully navigate digital services. Through this act of "flattening out" complexity, most users were conceptualized as digitally skilled and able to navigate digital bureaucracies. But how did this simplification come about?

Seeing the User

In John Postille's contribution to *Digital Anthropology* (2012), he gives a literature review on digital politics. He points out how most research has concentrated on how citizens can participate in politics through digital media, such as social media or mobile phones. He calls for further research on the topic, writing that,

Future anthropological studies of digital politics should avoid sterile debates about technological determinism and virtual versus real-life politics and concentrate, instead of the careful analysis of political processes and their digital dimensions. The devil is in the technopolitical details (Postille 2012, 178).

So I ask, how are citizens accounted from the point of view of digital bureaucracies? How are citizens taken into consideration when creating digital solutions for them? How are the complexities of their realities made legible?

One such answer can be found in James Scott's book *Seeing like a State* (1998). Scott writes that "the state continuously attempts to make a society legible" by arranging the population in simpler manners in order to be able to carry out necessary functions such as taxation and conscription (1998, 2-3). He writes that legibility is a central problem in statecraft, as the state is dependent upon seeing and knowing its citizens (Scott 1998). This necessity led to the widespread standardization of measurements and registers in the west, which also became enforced in the east (Scott 1998, 2). This project allowed the state to identify citizens, making them legible at the same time as it simplified the complexity of the population (ibid, 65-77). Indeed, a state that cannot measure and locate the population cannot carry out proper state interventions (ibid). The first time I met the leadership team at DF, during a meeting where I pitched my project to them, I said I wanted to study "the digitalisation of the state". They promptly answered that they positively were not "the state", they were indeed local government. In spite of this emic separation, I would argue that smaller bureaucracies, much like Scott's comprehensive state, must still find a way to make their citizens legible.

At the same time, as discussed in the previous section, the users were sometimes conceptualized as the "clients". I turn to Marianne Lien's approach to the consumer. In *Marketing and Modernity* (1997), Marianne Lien writes about a marketing team at a Norwegian food production company. She writes that in the context of that marketing team, their understanding of the consumer was an abstract one, one based on measurements at a distance (Lien 1997, 57-58). These measurable data points were tied to archetypical characteristics and reimagined as a person of flesh and blood through consumer segmentation, creating a "virtual consumer", an abstract construct (ibid, 58-60). At the same time, real consumers remained out of sight, as face to face encounters between the producers and the consumers were non-existent (Lien 1997). Additionally, the marketing team did not perceive themselves as consumers, as Lien explains, due in part to the expected separation between professional life and private experiences (ibid). In somewhat of a similar process to how the state makes citizens legible, Lien's marketing team made consumers legible by abstractions that functioned to simplify reality. Concerning the distance described by Lien between "the producer" and "the consumer", Scott also writes that the officials are often removed from the society they govern, and rather assess the society through measurements, such as documents and statistics, that are merely abstractions distanced from the diverse reality (Scott 1998, 76-77).

A municipality is dependent upon legibility in order to make sense of a complex population. Standardisation then is an essential element of bureaucracy. The attempt to make populations legible is a way to standardize and rationalize complex human existence. At DF, one central way users were made legible was through sets of documents called *kravspesifikasjon* (requirement specifications) which my informants called *kravspekk* for short.

The *kravspekk* were sets of documents that defined and quantified all the requirements that a digital solution had to have in order to be usable. They were lengthy documents that went into a lot of detail concerning what the user would see and do, how each component would act, and what kind of information would be communicated between systems. A *kravspekk* was akin to an architect's plan, which was then given to the developer. It broke down all requirements into small boxes that could be gradually built and ticked off to make a complex, large solution. These documents were usually made during the planning phase of the project, before the project went through acquisition. At the same time, these documents sometimes changed and evolved. As one project manager put it, “these specifications help us know what we need, and I will be working with them as long as we are in development”. If the developer was an external provider, the *kravspekk* became especially important, as it was the main condition the contract with the provider was built upon. If something was not specified in the *kravspekk*, the municipality had little leverage. Likewise, if it was specified but not delivered by the provider, the municipality could make a formal complaint. In essence, the *kravspekk* both made the user experience legible, and at the same time functioned as a bureaucratic tool to quantify the project. It also gave a measurement for how much had been accomplished and what still needed to be done.

For the e-plan project, which I described in the previous chapter, one of the main things they wanted to achieve through agile acquisition was to set the *kravspekk* together with the provider instead of specifying their needs before acquisition. Instead, they wanted to provide a *løsningsbeskrivelse*, an explanation of what the solution should be able to do instead of coming up with a detailed explanation of how it would look and what each page would do. The idea was that they would work on the *kravspekk* together. When I asked how they would go about that, one of the consultants on the project explained that they did user journeys

(*brukerreiser*). User journeys are a tool for user research popular among technology developers. As the consultant put it, “you make a persona, describe their goals and how they work day to day, and you break it down into steps”. The issue was that these user journeys mostly addressed the needs of the municipal employee user group, because they were the ones that contributed to their creation. Concerning the citizen or industry user, the consultant said that they had made an interview guide in order to figure out their journey, but that they had not carried out interviews. In fact, across the board, almost none of the projects had talked to “the user” (in this case they meant users outside of the municipality) while developing the solutions. Rather, project teams had done what they referred to as an acceptance test (*akseptansetest*) once the solution was almost finished. What they did, was imagine they themselves were the users and try to envision what kind of challenges or difficulties could arise.

When I asked about eventual discrepancies mentioned by the users once the solution was launched, I was told that they would correct it accordingly. It appeared to me as if very little information about the user was gathered. The whole point of the *kravspekk* was to ensure that the necessary usability was achieved, yet they did not appear to base this on actual data concerning the user, but rather, on an imagined user. One consultant at DF explained:

We haven't talked to the citizens yet. We have mapped out the service as it is today and seen which points of contact they have with the municipality. Also we made the user stories. We made fictitious people, like an older man who is retired and doesn't have a computer, how would they fill out the form? Also another person who is young and fully digital and uses other tools to communicate. So far we have drawn what the experience is like today and try at the same time to think of the future. It's a good way to show how the citizen experiences the tool.

Based on this remark, it is clear that the consultant thought they knew what the citizen experienced, in spite of their remark that they have not talked to the citizens. I found that many actors at DF, they had the perception that someone, somewhere in the municipality was talking to the user, which meant that they would receive this information sooner or later. Among the TIP developers, they had a perception that the *kravspekk* were based on research done by the communication office. Municipal employees and consultants alike at DF shared this perspective. Based on a conversation with a communication employee though, it did not

seem like much research was done apart from written feedback given by users based on their own initiative and click analytics of the municipal websites.

So what was happening? DF, as part of a bureaucratic institution and in order to deliver municipal services to the population, needed to standardize the population and make it legible. The complexity of the population's needs were simplified and standardized through bureaucratic documentation such as *kravspesifikasjoner*. However, these documents were not necessarily based on actual data on the user. Rather, the general discourse among municipal employees and consultants at DF was that the information was gathered, and somehow redistributed, without being able to account for the actual exchange of information. Similarly to how Lien's marketing team's consumers were "a result of virtualism, a phantom narrated by market and consumer research" (1997, 61), the users at the municipality of Trondheim were imagined and extrapolated from incomplete user research practices common in the information and technology industry.

Decisions that gave form to digital solutions at the municipality were taken daily by a number of actors, from developers to project managers. These decisions were said to be made based on citizen data collected elsewhere at the municipality. In fact, what I found was that actors at DF and at TIP carried out another strategy in order to approximate the point of view of the users: they took their own experience as the point of departure.

Being the User

On their home page, DF states that they are committed to "developing good digital services for citizens and the industry in an effective way, and with optimal use of resources" (Trondheim kommune 2020b), which is why they pledge to pay special attention to the user when digitalising, putting the user at centre and taking their position as a point of departure. In essence, they present their work as user-centred. At DF, it was verbalised by the employees there as doing *medvirkning* and *samhandling*, two terms that to an extent were fetishized as paramount to being user-centred. In reality, both *medvirkning* and *samhandling* roughly translate to cooperation, where *medvirkning* is perhaps closer to collaboration and participation, whereas *samhandling* is closer to coordination. These terms are directly tied to

bureaucracy, and are requirements that are written into laws and regulations that would ensure that the user is taken into account. In chapter 3, I presented the term *smidig* (agile) in relation to software development. This concept also entails that the user should be in the centre by testing the solution in small increments and making changes along the way.

In theory, *medvirkning* and *samhandling* were actions that project teams could do with the users in order to make sure that their solutions fulfilled a need among the user group. However, often the only group included in *medvirkning* were the municipal users who would end up using the tools as part of their job at the municipality of Trondheim. The reason for this was that they were in fact often part of the project team. Their addition to the teams ensured that their perspective and struggles with the current tools were heard when designing the new solutions. The municipal employees, such as local authority officers (*saksbehandlere*), who would end up using the solution had a direct say on how the solution would look and what it would do. Consequently, the team could easily argue that they had carried out *medvirkning* as a blanket statement, without necessarily including the citizen in the production of this solution.

A similar bureaucratic term that was meant to ensure that the user was considered was *universell utforming* (universal design). This design principle is supposed to inform all public services in Norway, from architecture to digital solutions. It is meant to ensure standardisation of the services so that everyone, even those with disabilities, can enjoy them. When dealing with digital solutions, this principle entails for example that the writing on a website has a good contrast and an acceptable size so that it is readable for people who have challenges with vision. Another aspect is that the elements (or components) on a website are intuitive, that is, if it looks like a button that it should be a button. In the municipal discourse, the concept of *universell utforming* was also connected to discourses around user friendliness (when I asked the participants directly). However, in passing conversations, the idea of whether a solution was user friendly was rather tied to familiarity: that the services of the municipality, across the board, look, feel and function similarly. Likewise, an answer I often got from DF and TIP participants was that a good solution fulfilled the needs that the user had. But how would they know that the needs were being fulfilled?

One central strategy, which many of my informants adopted in order to ensure that their product was user-friendly and intuitive, was taking the role of the user. This could be done in their day-to-day work, or in a more formal manner such as during an acceptance test. As an example, I turn to one such test. In March, the OAS project (which aimed to develop a portal through which caregivers could apply for daycare (*barnehage*)) was told by the provider that the solution was almost finished. The project team had been sceptical towards the quality of the product due to multiple shortcomings throughout the project. Because of that, two members of the project team (Bjørn and Jan) had come together in order to do the test, which I asked to participate in. Bjørn and Jan worked as local authority officers assessing daycare applications and thus had an “insider” perspective into the project’s *kravspekk*. They had contributed to writing them. The test started by us looking at the original *kravspekk*. With this document on one screen, and the website the provider had created on the other, we started evaluating each specification.

We started with the first *kravspekk* which read “Applying to daycare should be easy and clear”. They clicked into the website. The first thing we saw was a prompt asking us to choose which month the child would start attending daycare. Then, a drop down menu appeared. Here you could pick a daycare from a long list. Bjørn pointed out that this list includes all daycares, also the ones that had no free spots. Bjørn explained that it was because the website was just retrieving information about all daycares without filtering out the ones that were full. This, he remarked, needed to be fixed. There was a button called filter, and this allowed the user to filter out daycare centres using different parameters, such as location. However, Bjørn pointed out that the map filtering showed the wrong location. Once the daycare centre was chosen, there was a button you could click on that read “Apply”. Jan piped up “That’s nice and intuitive”.

Details about the child such as age, whether the child had any needs that require special attention (such as health concerns), and the child’s mother tongue had to be filled out manually. Documentation was asked concerning handicapped or sick children. Bjørn mentioned, “I think it’s strange that parents are asked to upload files. The local authority officer would be looking at information they don’t need”. With this comment, he was referring to the fact that the local authority officers did not need documentation that detailed

which kind of handicap the child had yet. Uploading a document (in the way the application asked us to do) would then be in conflict with data privacy regulations. We continued clicking through the solution, adding details about the lives of their fictional children, discussing how it would feel for a parent to apply. Then, they had to pick how many hours the child would attend, and the date they would start. However, they could only pick “fulltime” or “part-time”, not the total amount of hours. This requirement had been discussed many times, and Bjørn and Jan pointed out it still had not been done¹⁷. At the end of the application, we saw an overview of the information that was filled out. Once the application was sent, a confirmation message appeared on screen. Moments later, an email was sent to Bjørn, but the email merely provided a link to the portal reading “changes have been made in your profile” rather than specifying that an application had been sent, which they pointed out, could lead to a misunderstanding.

During this exercise, Bjørn and Jan put themselves in the position of the user, and attempted to imagine how it would be for a parent to apply for a daycare spot through the digital tool they had purchased and helped shape. However, their perspective was uniquely informed by their position as local authority officers. Based on their remarks on data privacy, immediately followed by them pointing out that they, as local authority officers, did not need specific documentation showing the child’s disability, this underlined that they were not capable of completely switching roles in order to embody the user. Their attempt to be the user was embedded in their own experience of the tool, which intersected different social positions: their lived experience working as local authority officers, their past experience of actually being parents and applying through an older tool, and their self-ascribed role as fictional parent applying through the new solution.

This kind of user confusion when attempting to embody the role of the citizen-user was also present at TIP in interesting ways. The developers Linn, Hannah, and Ida talked about what the user would experience on a daily basis. These remarks and thought experiments were continuously framed by their idea that the user, as a given, had less knowledge and digital skills than they did. With this in mind, they tested and retested every change they made to the Min Side home page, as one of the developers Ida put it “trying to destroy her own

¹⁷ See Chapter 4.

component”. This, she explained, she did in order to find mistakes in the code and essentially fool proof the website. Likewise, while working on Min Side Hannah and Ida would often test the mobile version of the website in parallel, looking carefully at how the boxes were placed on the screen and how much room they occupied. At the same time, they would wonder out loud about who would even fill out these forms on their phones, yet continued to test the usability and adaptation to mobiles, because this was an option the municipality gave.

One time, when making a search bar for addresses in Trondheim for Min Side, Linn and Ida discussed how they would code the alphabetization of the addresses that came up. First of all, there were not just letters but also symbols and spaces. Without editing the code, they started looking at maps of Trondheim trying to find street names that contained dashes or numbers. It was not exactly a systematic process, it seemed rather motivated by a challenge to see if they could find out how to solve it. This specific element had not been written into their *kravspesifikasjoner*. Rather, it simply stated that the search bar should be able to find the addresses and that should be alphabetized. Similarly to how many logical problems had to be solved by the “discretion” (Lipsky 2010) of each developer, a lot of choices concerning how the solution was experienced by the user came down to them.

In another occasion, when making a component that would allow the user to add a file to a form, Ida wondered what the button should look like and where it would be placed. As she explained, the button needed to be recognized by the user as a button they could press in order to upload a file. It needed to be intuitive, she explained. She chose a round button with a paperclip graphic, colour blue. Once the user clicked on it, a finder opened. Here, the user could pick a file. The button would then turn red and the graphic would change to a garbage can, which could be clicked to delete the uploaded file. I asked what would happen if the user wanted to upload multiple files. Ida explained that the functionality only allowed one file to be uploaded, so they would have to make a zip file. A zip is a type of file that allows you to compress multiple documents into one “package”. This somehow clashed with her previous remarks that she saw the user as someone with significantly less digital skills than herself.

By putting themselves in the role of the user, participants at DF and at TIP made decisions and acted based on a model that only took into account a small part of the population: a user group that had a deep understanding of the requirements bureaucracy sets for digital municipal solutions, and that had an above-average understanding of technology such as themselves. As they did not in fact have a systematic way of gathering and using user-data, they could test user-friendliness along the way in this one way. However, this posed some problems. By having a hand in creating digital solutions for welfare services, actors at DF and at TIP had a lot of power when it came to how the solutions would look, and which needs they would serve. Putting themselves in the role of the user strengthened the process by which their personal biases concerning who the user was, what the user wanted, and what the user was able to do, became inscribed into the digital solutions, which would continue to perpetrate these preconceptions.

CHAPTER 6: Final Remarks

As Norway's extensive welfare state continues to expand and absorb more and more responsibilities, the issue of capacity becomes more and more pressing (Vike 2017). The central government in Norway has since 2007 initiated a nationwide project of making virtual communication the first choice for contact with public services. In this thesis, I have argued that the concept of digitalisation has been fetishized as a solution to the issue of efficiency in the public sector. However, the meaning of digitalisation could also go beyond this surface level observation. Rather, I have shown that digitalisation was closely linked to the idea of innovation, which opens up for new ways to approach this phenomenon.

The Digital First Choice program at the municipality of Trondheim became an interesting site in which to observe the myriad of contradictions that arise when a traditional bureaucratic institution comes face to face with a state-project that is essentially agile, novel and above all full of risk. At the end of the day, bureaucracies are designed to maintain order and reliability while staying fair and predictable. One could argue that the embodiment of these values is what has made bureaucracies in Norway reliable and trustworthy. Above all, Norwegian *kommuner* became the first line of service that citizens encounter, and is often the one they encounter the most. Thus, *kommuner* have a big responsibility of remaining reliable, while at the same time further developing their services in order to serve the expectations the population has. What happens when these values clash?

Through detailed ethnographic analysis of the Digital First Choice program at the municipality of Trondheim, I found that the participants in the program experienced a sort of crisis of identity. The contradictions between the values of bureaucracy (which impregnated all municipal work) and values tied to innovation (that were framed as desirable) became visible in this site. The participants became stuck in a tug of war between their individual (and to an extent organisational) motivation to take risks in order to reap success in innovation (further encouraged by the confusing messages they receive from central government, such as being awarded a prize for taking risks), while at the same time their action and decisions had to *make sense* within the organisational values of a bureaucracy.

Digital innovation needed to happen at a fast rate in order for services not to become obsolete, but the projects at the Digital First Choice program may take up to a year to even get started. My informants experienced that they were encouraged to find new ways to do things, all within the requirements and limitations of bureaucracy. Likewise, the Digital First Choice program attempted to incorporate work practices such as stand-ups, yet the intended benefits evaporated as they kept the same routines and practices of typical bureaucratic meetings. In light of these struggles in the execution of their work, I argue that participants at the program turned to the concepts of innovation and digitalisation as tools to navigate these contradictions. They used the concepts of innovation and digitalisation as gateways to a utopian reality, just out of reach, in which they could imagine that their day-to-day was dedicated to innovation rather than being anchored in municipal reality. My observations at Trondheim's Integration Platform have brought attention to a contrasting way to approach these contradictions. Trondheim's Integration Platform was able to find ways to bypass the aspects of bureaucracy that were deemed slow or inefficient, turning innovation talk into action.

The temporary nature of the work done at the Digital First Choice program also became an aspect in which these central contradictions were contested. One central element of bureaucracies would be that they strive to be permanent and transferable. The type of employment at the program though contradicted this. Most employees were there just temporarily. In addition, the consultants were not exactly bureaucrats, but rather something else. The longevity of digital solutions also brings up an interesting aspect of time. While older bureaucratic processes, such as paper forms, could last decades, digital solutions (and infrastructure) must be updated and up-kept in order for them to continue to function in relation to newer solutions and tools. Thus, the temporality that was inscribed into the digital solutions places them in and on themselves in contrast to bureaucracy's values, and created a need for municipal digital expertise that exceeded the temporary contract of the consultants.

The products of the projects at Digital First Choice were in the end digital solutions that would give better municipal services to the citizens of Trondheim. The actors that worked at the program had significant power in shaping not only the solutions, but also the meaning and

intention behind them. As solutions are socially embedded, they are also shaped by the social context that made them. All these contradictions within the organisation were also embedded into these digital technologies. That is why it is so important to start looking at the assumptions, practices, values, and ethics that go into digitalising the welfare state.

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