

# **The social construction of automation:**

How organizations negotiate the use of automated decision-making in  
the Norwegian Directorate of Immigration

Beatrice I. Johannessen



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Department of Sociology and Human Geography

Faculty of Social Sciences

University of Oslo

## Abstract

This thesis explores how public agencies and non-governmental organizations (NGOs) interpret and negotiate a proposed expansion of automated decision-making in the Norwegian Directorate of Immigration (UDI). Automation generally refers to the process of making something operate independently of human intervention. While often associated with industrial production, the technology is increasingly introduced in other aspects of our work life, such as professional decision-making.

The introduction of automation is often talked about in technologically determinist terms, as an inevitable development where the technology takes over jobs and eradicates the need for professional discretion and judgment. This thesis instead finds inspiration in the *Social Construction of Technology* (SCOT) approach, which argues that the introduction of technologies always involves negotiation between different actors with different understandings.

Drawing on SCOT, this thesis explores an attempt to expand the use of automated decision-making in UDI. In 2019, the Norwegian Ministry of Justice proposed to decrease current restrictions on the use of automation. To pass, the proposal had to go through a hearing process, where different actors get the chance to comment and voice their concerns. Taking the hearing process as its case, the thesis' overall research question is: *How do relevant social groups interpret and negotiate the proposed expansion of automated decision making in UDI?*

To address this research question, the thesis draws on documents from the hearing process and qualitative interviews with eight key participants in the debate. Using concepts from discourse analysis as an analytical framework, I identify three discursive struggles surrounding the proposal, concerning: the relationship between discretion and objective criteria; the strengths and weaknesses of humans and machines as decision-makers; and whether children's cases can be subject to automation. In debating these issues, the actors are roughly divided into two sides: On the one hand, a "supportive" group argues that "simple" and "straightforward" cases can be decided using objective criteria; that machines are better decision-makers in some cases; and that children's cases can be subject to automation. On the other hand, a more "critical" group argues against the distinction between objective criteria and discretion; sees humans as the most suited and trustworthy decision-makers; and argues that children's cases should *not* be automated. Whereas the supportive side draws mainly on a

*modernistic discourse*, emphasizing that automated decision-making is an objective and reliable solution for the challenges in UDI, the critical side draws more on a *humanistic discourse*, which sees automation as a poor alternative to human decision-making.

The hearing process thus sees two groups struggle for hegemony over the definition of “automation”. Importantly, their discursive struggles can affect how the technology is understood, developed and implemented in UDI – especially as the struggles are taking place in a democratically institutionalized negotiation process and the outcome of the hearing process will be materialized into legal regulations. The thesis thus highlights the importance of looking at how public agencies and non-governmental organizations debate proposals to introduce or expand the use of technologies, as this can teach us valuable lessons about how technologies are negotiated through democratic processes more generally.

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# 1. Introduction

This thesis explores how public agencies and non-governmental organizations (NGOs) interpret and negotiate a proposed expansion of automated decision-making in the Norwegian Directorate of Immigration (UDI). Automation refers to the process of making something operate independently of human intervention (Nof 2009b), and is an increasingly central aspect of our private and professional lives – in everything from household technologies to large and complex industrial control systems. Automation is often associated with industrial production, but as computer technology is becoming more advanced, we are seeing the technology introduced in other aspects of our social life. Professional decision-making is one such field, which is seeing increased use of computer programs to make or support decisions (Susskind & Susskind, 2015). The introduction of such systems is often talked about in technologically determinist terms (Wajcman 2017), as an inevitable development with revolutionary effects, with the technology taking over jobs and tasks formerly performed by human beings, and eradicating the need for professional discretion and judgment (Bijker 2015:136).

In contrast to such technological determinist thinking, the sociology of technology argues for a more social constructivist approach to technological development (MacKenzie and Wajcman 1999). Within this field, the introduction of technology is seen as an open and complicated rather than linear and one-dimensional process. A key approach, *the Social Construction of Technology* (SCOT), argues that the introduction of any technology must always be negotiated between different actors with different understandings of the technology, and that these actors contribute crucially to the social construction of the technology in question (Pinch and Bijker 2012). The question of any technology's impact thus requires empirical study of how particular actors understand and negotiate the technology in question (Bijker, Hughes, and Pinch 2012).

Inspired by sociology of technology and SCOT, this thesis explores an attempt to expand the use of automated decision-making in UDI. In 2017, UDI started developing and using automated decision-making processes in one of their immigration protocols. In 2019, the Norwegian Ministry of Justice and Public Security proposed regulatory changes that would decrease current restrictions on the use of automation. As elaborated in Chapter 3, the proposal suggests a more general regulation that would allow UDI to use automation in many

different cases. For these changes to pass, the proposal must go through a hearing process, where different actors get the chance to comment and voice their concerns about the proposal. As these debates can influence both legislation and the development of automation in UDI, this hearing process can serve as a strategic case for studying how technological change is negotiated between different actors in this institutionalized negotiation process.

The Master's thesis' overall research question is: *How do relevant social groups interpret and negotiate the proposed expansion of automated decision making in UDI?*

To address this question, the thesis draws on documents from the hearing process and qualitative interviews with key participants in the debate. The documents include the proposal from the Ministry of Justice and six written comments from central organizations and public agencies involved in the hearing process. In addition, I conducted seven interviews with the authors of these written comments, as well as with relevant employees in UDI, to better understand their opinions about automation in UDI.

To analyze the document and interview data, I draw on various concepts from discourse analysis (Johannessen, Rafoss, and Rasmussen 2018). In general, discourse analysis argues that language is never neutral; that meaning is dynamic; and that language constructs rather than reflects phenomena in the world (Jørgensen and Phillips 2002). Beyond this, approaches differ; in this thesis, I draw pragmatically on some central concepts that can help me address my research questions. My starting point is the concept of discursive struggles, which refer to how actors fight to establish a dominant understanding of a phenomenon. To unpack the discursive struggles surrounding the issue of automation, I draw on the concepts of discourses (to understand how actors frame automation within a broader universe of meaning); symbolic boundaries (to understand the key distinctions in actors' arguments); values (to understand what the actors deem important); and actions (to understand how different arguments encourage different actions). This framework allows me to address the primary research question through a range of analytical sub questions, including: What are the key discursive struggles surrounding the proposed expansion of automation in UDI? What discourses and symbolic boundaries underlie these competing interpretations? What kind of values are reflected in their understandings? And what kind of actions do the different social groups encourage?

As I will show, I find that the proposed expansion of automation in UDI is characterized by three key discursive struggles, concerning: the relationship between discretion and objective



criteria; the strengths and weaknesses of humans and machines as decision-makers; and whether children's cases can be subject to automation. In debating these issues, the actors are divided roughly into two sides: A "supportive" group argues that "simple" and "straightforward" cases can be decided using objective criteria; that machines are better decision-makers in some cases; and that children's cases can be subject to automation. A more "critical" group argues against the distinction between objective criteria and discretion; sees humans as the most suited and trustworthy decision-makers; and argues that children's cases should *not* be automated. Whereas the supportive side draws mainly on a modernistic discourse, emphasizing that automated decision-making is an objective and reliable solution for the challenges in UDI, the critical side draws more on a humanistic discourse, which sees automation as a poor alternative to human decision-making.

As the hearing process is still ongoing, it is impossible to declare a "winner" in this debate. Nevertheless, the findings show that the technology of automation is not an independent "force" that inevitably rolls in and alters UDI, but rather subject to debate and negotiation through the hearing process. The thesis also unpacks the different understandings of automation and its use, and shows how the discursive struggles reflect not just differences in knowledge, but also different discourses and values. By delving into these different discourses, the thesis highlights the importance of looking at how public agencies and non-governmental organizations debate proposals to introduce or expand the use of technologies – an approach that can teach us valuable lessons about how technologies are negotiated through democratic processes more generally.

## **Roadmap**

- Chapter 2 discusses previous research and the theoretical framework of the thesis.
- Chapter 3 provides background information about UDI, its current use of automation, and the Ministry of Justice's proposal to extend the use of automated decision-making in this context.
- Chapter 4 discusses the data and methods of the thesis.
- Chapters 5-8 present the thesis' findings. After a short introduction, I present the three main discursive struggles in my data, concerning the relationship between discretion and objective criteria; the strengths and weaknesses of humans and machines as decision-makers; and whether children's cases can be subject to automation.
- Chapter 9 discusses the study's findings in light of the theories presented in Chapter 2.

## 2. Previous research and theoretical framework

In this chapter, I first discuss automation and how it has been researched in the social sciences. In the two subsequent sections, I elaborate the theoretical framework of the thesis. I begin with *SCOT*, which sets the stage for understanding how the development and implementation of technology is affected by different understandings, and go on to discuss *discourse analysis*, which serves as the thesis' main analytical and methodological framework.

### What is automation?

Automation is sometimes referred to as “labor-saving technology”, based on the technology’s ability to process and perform with minimal human assistance (Groover 2010). A more precise definition states that “Automation, in general, implies operating or acting, or self-regulating, independently, without human intervention” (Nof 2009a:14).<sup>1</sup> This definition entails that automation is a technology that acts by itself by performing a series of actions based on its programming and stimuli. That said, humans are always involved in automation to a certain degree, including in its development and with maintaining, supervising and repairing an automated system (Nof 2009a:14–15). According to Vagia, Transeth and Fjerdingen (2016), an automatic system “will do exactly what it is programmed by the programmer to do without having any choice or possibility to act in any different way dependent on the situation at hand. Its actions are predefined from the beginning and it has no ability to change them into the future” (Vagia et al. 2016:191). Thus, while automation can function without human involvement, it is not fully autonomous from humans (Vagia et al. 2016:190–91).

Automation is often associated with industrial production and the use of machines for faster and cheaper production. An early example is the industrialization of the cotton industry in the UK (Chapman 1990). Other examples include the transformation of the automobile industry, where production has mostly been taken over by automated robots building cars (Dassbach 1986), and similar developments in the coal industry, where human workers are increasingly being replaced by automated machines (Bellamy and Pravica 2011). These developments

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<sup>1</sup> Automation is sometimes used synonymously with “artificial intelligence”. As used here, however, automation refers to a more general process of technologies acting without human intervention. While artificial intelligence entails automation, it is also a more complex technology that relies on machine learning or similarly advanced algorithms in their processes (Nof 2009a:20–22).

often attract significant political attention, such as when Donald Trump in the 2016 presidential campaign focused on getting back the jobs in the coal industry (Torrance 2017).

At the same time, automation is increasingly introduced in fields beyond industrial production. Accordingly, researchers have studied the use of automation in everything from the job market (Brynjolfsson and McAfee 2014; Susskind and Susskind 2015) to self-driving cars (Bissell et al. 2020; Stilgoe 2018), the criminal court system (Flores, Bechtel, and Lowenkamp 2016; Werth 2019) and in the finance industry (MacKenzie 2019; Tokic 2018).

According to Ford (2015), automation (and similar technologies) will have an impact on all occupations – including those that require higher education. While automation has influenced the job market before, Ford argues that this time it will be different. These technologies, Ford argues, is a “game changer” and will create a new and precarious future in the job market (Ford 2015). Susskind & Susskind (2015) agree with Ford and argue that automation will alter the professions as we know them. However, Susskind & Susskind have a more positive view on the consequences of automation. They argue that automation (and similar technologies) will democratize professional knowledge and expertise by making it widely available to everybody, not only those who can afford it (Susskind and Susskind 2015).

Wajcman (2017) has criticized these and similar authors for their deterministic understanding of technology, which sees an over-simplified view of how technology is developed and implemented. In addition to being factually wrong, Wajcman highlights how this determinism contributes to “constituting” the future; that is, by talking about these technological developments as unavoidable, these authors contribute to a self-fulfilling prophecy, where the technology can be spread, in part, because everyone sees this as an inevitable development (Wajcman 2017:124–26).<sup>2</sup> Wajcman’s critique is linked to her social constructionist view of technology – a view that is central also for this thesis.

## **The Social Construction of Technology (SCOT)**

The thesis is rooted in the sociology of technology – a literature largely unified around a skepticism towards deterministic views of technology, where technology is seen as a driver of history, more or less independently of the actors who make it. Based on a social

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<sup>2</sup> Wajcman also argues that these books ignore other important question surrounding technological development, including how companies fight for power and profits, how homogeneous companies create systems that ignore minorities and diversity, and how technologies keep producing jobs that reproduces class-differences (Wajcman 2017:124–26).

constructionist understanding, the sociology of technology emphasizes instead that technology is created and implemented through negotiation between different actors. Thus, one is as concerned not just with how technology affects society, but also with how society impacts technology (MacKenzie and Wajcman 1999:4–11).<sup>3</sup>

The thesis draws in particular on the literature related to “The Social Construction of Technology” (SCOT). The basis for the theory is that any technology is characterized by *interpretative flexibility* and can therefore be interpreted in several ways. Technological artifacts are culturally constructed and interpreted, and there will always be many different understandings, problems, solutions and conflicts associated with a technology. On this basis, SCOT promotes a view of technology as a negotiation process between *relevant social groups*. A relevant social group can comprise everything from institutions and organizations to unorganized groups of individuals. What unites it is that the group interprets technology in (approximately) the same way (Bijker 2015:136–37), based upon shared norms and values, which have been influenced by their sociocultural and political situation. Importantly, the group’s interpretation of the technology also has consequences for how they act towards the technology – whether they support it, use it, counteract it or try to change it (Kline and Pinch 1999:113–14). In particular, SCOT argues that social groups “play a central role in defining and solving the problems that arises during the development of an artifact” (Bijker et al. 2012:6). “Problem” is here used in a social constructionist sense; in Pinch and Bijker’s (2012) words, “a problem is defined as such only when there is social group for which it constitutes a ‘problem’” (Pinch and Bijker 2012:23). Different social groups will define the technology in their own way, which means that the problems and the solutions identified can vary between groups.

Given this multitude of interpretations, Pinch and Bijker (2012) see technological development and implementation as a multidirectional flux, based on constant negotiations between different social groups. Contrary to more linear and deterministic models, they also stress that an artifact’s success is something in need of explanation, rather than being self-explanatory; for every successful technology, there is always many other different

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<sup>3</sup> This literature also challenges the emphasis on the individual inventor as the central explanatory concept, and the common distinctions between the technical, social, economic and the political aspects of technological development (Bijker, Hughes, and Pinch 2012:xli).

developments that could have had – and can have – the same or more of a success (Bijker et al. 2012:6–7; Pinch and Bijker 2012:22–23).

To mark the endpoints of the social construction of a specific technology, Pinch and Bijker use the terms closure and stabilization. The technological artifact reaches a point of closure when “the relevant social groups *see* the problems as being solved” (Pinch and Bijker 2012:37). This is seen as a gradual process, where the technology over time becomes stabilized around an agreed-upon design by the different groups (Bijker et al. 2012:6–7; Pinch and Bijker 2012:37–39).

Applied to the present case, the questions become how different social groups interpret and negotiate the expansion of automation in UDI. Following Pinch and Bijker, I will place a special focus on conflicts and what the different actors view as problems with the technology, as both conflicts and problems are essential in understanding technological development. Importantly, however, since the use of automation in UDI is an ongoing process, this thesis will not be able to analyze the closure and stabilization of this technology; the terms are instead included to give an impression of the entire constructionist process, and to give the reader a sense of how the social construction of technologies occur in general.

It should also be added that the present case contrasts with the traditional emphasis of most SCOT studies. In brief, whereas SCOT has explored negotiations between producers and different groups of users in the market – e.g. by studying social influences on the development of the automobile (Kline and Pinch 1996), on the internet (Lenert 2004), and on bicycles, lightbulbs and Bakelite plastics (Bijker 1997) – this thesis explores negotiations between public agencies and NGOs in the public sector. There are some important differences between the two cases, as I will return to in the Discussion (chapter 9).

## **Discourse analysis**

As SCOT offers relatively few tools for understanding how actors in relevant social groups interpret technologies differently, the thesis will use discourse analysis as an analytical method. Discourse analysis helps the researcher study how actors understand and frame a given phenomenon (Johannessen et al. 2018) – in this case, automated decision-making in the UDI. A central argument in discourse analysis is that language use is never neutral; it always entails certain understandings rather than others. Meaning is also seen as dynamic: A phenomenon’s meaning can never be fixed, because of the inherent instability of language (Jørgensen and Phillips 2002:6–7; Phillips and Hardy 2002:5–6). Adding to this, language use

is seen as *constructing* rather than *reflecting* a phenomenon. How actors write and talk about automated decision-making therefore contributes to constituting and changing the phenomenon (Phillips and Hardy 2002:6–7). The method is thus well suited to study the interpretative flexibility of technology, and to understand the underlying assumptions and ideology that characterize the actors' arguments.

A key term for understanding how actors struggle to define the meaning of a given technology is *discursive struggles*. As defined by Jørgensen and Phillips (2002), a *discursive struggle* is a process in which “Different discourses – each of them representing particular ways of talking about and understanding the social world – are engaged in a constant struggle with one other to achieve hegemony” (Jørgensen and Phillips 2002:6–7). Achieving hegemony means becoming the dominant understanding of a phenomenon. Applied to the discussions about automation in UDI, the different actors are engaged in a struggle to define how the technology can be understood and used, and to foresee its potential and unintended consequences. Accordingly, the ones who are critical might seek to restrict its use and argue for more regulation of the technology, whereas the ones who are supportive might argue that these systems are safer and more efficient in their decision-making as compared to human professionals. By analyzing the conflicts between these different discourses, I aim to gain a deeper understanding of how the social environment influences the introduction and use of automation in UDI.

To be able to understand and analyze these discursive struggles, I will draw pragmatically on analytical tools from different discourse analytical approaches, rather than focusing on one specific approach. This multi-perspectival approach will allow me to tailor my analytical framework to the case in question (Jørgensen & Phillips, 2002, p. 4). Specifically, I will use four general and overlapping concepts as analytical tools in this thesis.

### ***Discourse***

A first key term is the concept of *discourse* itself, which refers to shared ways of understanding or framing a phenomenon. The emphasis on *shared* means that I am interested not in how different individuals understand automation, but in their collective, conventionally established understandings (Phillips and Hardy 2002:4). Each discourse encompasses a particular set of ideas, understandings and arguments about a particular phenomenon. The discourse is always temporary, in the sense that it establishes a temporary meaning of a phenomenon and is always open to negotiation and change (Jørgensen and Phillips 2002:26–

28). Discourses are also always selective, in the sense that some aspects of a phenomenon are emphasized while others are excluded. Moreover, the selected aspects are placed in a specific context and viewed from a particular perspective (Johannessen et al. 2018:58).

An important step in analytically unpacking a discursive conflict, then, is to carefully analyze the different discourses involved in the conflict, as these are expressed in various texts. This can be done by careful scrutiny of what is included and excluded in these texts, and by identifying the perspectives from which the phenomenon in question is viewed.

### ***Symbolic boundaries***

To help unpack the discourses I study, I will also draw on the concept of symbolic boundaries. *Symbolic boundaries* are “conceptual distinctions made by social actors to categorize objects, people, practices, and even time and space” (Lamont and Molnár 2002:168). Although not always identified as part of the discourse analytical toolkit, the concept of symbolic boundaries is helpful in understanding discursive struggles, as it allows me to study how different discourses involve different boundaries between, among other things, acceptable and unacceptable uses of automation. Focusing on symbolic boundaries helps us “capture the dynamic dimensions of social relations, as groups compete in the production, diffusion, and institutionalization of alternative systems and principles of classifications” (Lamont and Molnár 2002:168).

Symbolic boundaries can take various forms, showing different degrees of penetrability, visibility, importance to different people and settings, and endurance over time and space (Johannessen et al. 2018:130–33). For my purposes, symbolic boundaries are of crucial relevance in the three analytical chapters presented below: the first concerning the boundaries drawn between discretion and objective criteria in automatized decision-making, the second between humans and machines, and the third between acceptable and unacceptable uses of automation in children’s cases.

### ***Values***

A third key concept is *values*, referring to what actors hold to be important, sacred and valuable. In analyzing discursive struggles, I will focus closely on the values that actors express in their discourses and boundary work. This will help me identify what the different actors deem to be important and unimportant when discussing automation (Jaspers 2016; Jørgensen and Phillips 2002:8–9). For instance, a supportive discourse might value efficiency

and the saving of time and resources, whereas a critical discourse might value “the human touch” and human discretion in handling cases. Values are often implicit or unstated; by identifying them, we can unpack the “sticking points” in the discursive struggles in question.

### ***Action***

A fourth focus point for the analysis is how each discourse encourages specific *actions*. More than just influencing our understanding of a phenomenon, a discourse also encourages us to act in a certain way, as “different discourses each point to different courses of action as possible and appropriate” (Jørgensen and Phillips 2002:9). This is enabling but also constraining, as discourses highlight some actions while hiding or ignoring others (Johannessen et al. 2018:61–64; Taylor 2001:8–10). As Jørgensen and Phillips (2002) argue, “Different social understandings of the world lead to different social actions, and therefore the social construction of knowledge and truth has social consequences” (Jørgensen and Phillips 2002:6).

In terms of SCOT, this means that being part of a relevant social group and thinking inside a particular discourse will influence how we act. This insight is captured in the Thomas theorem, which states that “If men define situations as real, they are real in their consequences” (Merton 1995:380). In other words, our beliefs influence how we act, and these beliefs do not need to be “true” in order to be influential. As long as we accept them, we will act according to them (Merton 1995:383–84). Importantly for present purposes, our beliefs do not have to be based on direct experience in order to be influential. As I will show in the analysis, most actors have never seen or used automation in UDI; to discuss the technology, they must therefore rely on the understandings presented to them through indirect sources, such as the hearing process, UDI’s website or media coverage. Although some might charge them of not having an “accurate” or “true” understanding of the phenomenon, they nevertheless have to act based on their own understanding, which means that these understandings – however “inaccurate” – are of crucial importance to understand how automation is negotiated among different parties.

In sum, then, the thesis combines SCOT’s constructionist view of technology with analytical tools from discourse analysis. Applied to the issue of how organizations interpret and negotiate the proposed expansion of automation in UDI, this theoretical framework allows me to ask a range of analytical questions, including: Who are the relevant social groups, and how do they interpret the proposed expansion of automation? What are the key discursive



struggles surrounding the proposal? What discourses and symbolic boundaries underlie these competing interpretations? What kind of values are reflected in their understandings? And what kind of actions do the different social groups encourage? I will address these questions in the results section (chapters 5-8). Before that, it is necessary to provide some background information on both UDI and its use of automation.

### 3. Background

This chapter gives background information about automation in UDI. I start by describing the role of UDI, move on to describe their use of automation, and then give a broad overview of the hearing process initiated for expanding the use of automation in UDI.

#### UDI and the Norwegian system

The Norwegian Parliament – and especially the Ministry of Justice and Public Security – creates the framework for refugee, immigration and integration policies. The Ministry has an overall responsibility for factors such as social security and preparedness, combating crime and criminal justice, immigration, courts and legislative work in Norway (Aspøy 2020). The Ministry oversees eleven different departments, including the Norwegian Directorate of Immigration (UDI) and the Immigration Appeals Board (UNE), which are both central to this thesis. UDI is responsible for processing applications for refugee and immigrations cases, while UNE is the immigration appeals board (UDI n.d.).

The Directorate of Immigration (UDI) is the central agency for immigration in Norway. They implement immigration laws and work to comment on and elaborate the immigration and refugee policy. A central task in UDI is facilitating lawful immigration, and to make sure that “those who meet the requirements are given an opportunity to come to Norway” (UDI n.d.). They also strive to prevent abuse of this system. UDI processes applications related to asylum, citizenship, family immigration, visitor’s visa, permanent residence permits, travel documents and residence permits for work and study. In asylum cases, the directorate is also responsible for offering living arrangements for the applicants while they await their results, and for helping with returns to their home country if their application is rejected (UDI n.d.).

#### Automated decision-making in UDI today

The Ministry’s proposal about automation is an extension of an already established arrangement. In December 2017, UDI started working with automated decisions when processing selected applications for family reunifications based on qualified and skilled workers [*familiiegjenforening med faglært arbeidstaker*].<sup>4</sup> In parts of this portfolio (related to applications from spouses, partners and their joint children), the processing of applications is

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<sup>4</sup> As some Norwegian words lack direct translations to English, I sometimes provide the Norwegian word or phrasing in square brackets, in the way shown here.

now fully automated, in the sense that predefined criteria (e.g. income, offer of employment) are used to process cases mechanically (The Ministry of Justice and Public Security 2019b:2–3). The application process is then as follows: After the application is sent to the UDI, it is processed mechanically based on predefined criteria; if the case meets all the criteria, and provided that the application *is granted*, the application is then accepted for automated processing. The machine then makes a decision, and forwards this to the actors involved (together with a statement that the application has been processed mechanically) (The Ministry of Justice and Public Security 2019b:7).

## Hearings

In their proposal, the Ministry argues for introducing a general authorization and regulation for the use of automation, thus extending its use to additional portfolios.<sup>5</sup> In order to get this general regulation, the Ministry has to take the proposal through a hearing process. A hearing is a process for collecting information and opinions in connection with the handling of cases in public administration and in political bodies (Tjernshaugen, Berg, and Gisle 2018). The hearing is open for opinions and arguments from affected parties, before the decision of the proposition is made.

The hearing process is organized as follows: The department that proposes the creation or changes in laws and regulations, prepares a proposal document [*høringsnotat*]. This is then sent to affected individuals and organizations [*høringsinstanser*] for their comments [*høringsuttalelse*] (Tjernshaugen et al. 2018). These actors are often affected by the proposal in some way or another, and can comment based on their experience and expertise in a field. The hearing process can also be an important platform for these actors and organizations to try to affect the decisions by voicing their opinion about the proposal (Stortinget 2018).

There are two types of hearings, written and vocal. In the written hearings, relevant actors are invited to comment on the proposal with a written comment. In the vocal hearing, the actors are invited to give vocal comments. After the comments are received, it is the department's task to decide to what extent it will take the comments into account, in preparing the proposal for the new law and regulation (Tjernshaugen et al. 2018). This thesis focuses on written hearings.

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<sup>5</sup> A portfolio refers to a specific case in UDI. Examples of portfolios are “work permits” and “citizenship”.

## The proposed extension of automation in UDI

The hearing process on automation in UDI started in July 2019, when the Ministry of Justice published its proposal and invited several actors and organizations to comment. The Ministry's proposal included three subjects: automation, the collection of personal information [*innhenting av personopplysninger*]<sup>6</sup> and further processing of personal information [*viderebehandling av personopplysninger*]<sup>7</sup> (The Ministry of Justice and Public Security 2019a). This thesis focuses only on automation and will not include the other two subjects.<sup>8</sup>

At the time of writing, guidelines from The Norwegian Data Protection Authority (DPA) state that automation can only be used when the applicants consent to this. In the newly proposed arrangement, however, the Ministry suggests a general regulation [*forskriftshjemmel*] for using automation, without requiring consent from the applicants. In other words, the Ministry is proposing that there is no need for new hearing processes for each new portfolio that UDI sees suited for automation. The Ministry argues that UDI should themselves be able to decide which cases are suited for automation; as they phrase it, "In the Ministry's view, the use of automation should not be linked to specific case portfolios, as this may prevent necessary flexibility in light of how needs vary over time" (The Ministry of Justice and Public Security 2019b:9). One planned use for automation is the allocation of residence for asylum seekers; another is for benefits payments, based on the applicant's economic status. The Ministry argues that automating these processes will benefit both the applicants and the use of resources in UDI (The Ministry of Justice and Public Security 2019b:16). Importantly, however, the Ministry emphasizes that full automation will be used only in "simple" cases based on objective criteria, and not in the more "complicated" cases that require discretion (The Ministry of Justice and Public Security 2019b:7–9).

The Ministry argues further that the automation process will be subject to regular check-ups (based on UDI's judgment), and that complaints handled by the Immigration Appeals Board (UNE) will still be handled manually by human caseworkers. According to the Ministry, this

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<sup>6</sup> This involves collecting personal information about the applicants from other public agencies that UDI either have restricted or no access to (The Ministry of Justice and Public Security 2019b:1).

<sup>7</sup> This entails the ability to further process the data for purposes other than those they were collection for (to inform the processing of related cases) (The Ministry of Justice and Public Security 2019b:1–2).

<sup>8</sup> These two last themes do not have a direct connection to automation; they represent two separate issues with their own regulation changes, opinions and arguments, which is why I chose not to include them.

will act as a safety measure for the use of automation in UDI, maintaining the right to complain and to be heard in the application process (The Ministry of Justice and Public Security 2019b:10). Moreover, in line with today's situation, the Ministry emphasizes that only the cases that have the potential for being approved can be automated. The Ministry does not explicitly rule out that denials will be handled by automation, but the proposal clearly seems to imply this to be the case (The Ministry of Justice and Public Security 2019b:7).

The hearing process received seventeen written comments, which reveal strikingly different understandings of automation and its consequences. The aim for the rest of the thesis is to uncover these different understandings, to show how various actors negotiate the proposed expansion of automaton in UDI.

## 4. Data and methods

In this chapter, I will discuss the thesis' data and methods. I begin by discussing my choice of documents and semi-structured interviews, before moving on to how the data was collected and analyzed, as well as the ethical aspects of the thesis.

### Documents and semi-structured interviews

To explore the interpretation and negotiation of automation in UDI, this thesis uses qualitative methods, which allow an in-depth study of a case or a limited set of cases (Silverman 2005). Specifically, the thesis draws on both documents and interviews with key actors in the hearing process.<sup>9</sup> The documents are central actors in the hearing process, as they form the basis for the political actors' discussions and decision making. As mentioned, it is through the hearing process that the Ministry of Justice proposed the expansion of automation, and it is here that the different public and non-governmental organizations have voiced their opinions. The texts then represent the organizations' opinions about automation. This makes them active components in the hearing process and subsequently in the development and use of automation in UDI (Johannessen et al. 2018:68–70).

Given the importance of these texts, why use interviews? Relying only on texts might have saved me a lot of time and resources that follows from gathering data from interviews. However, after reading the hearing documents, I was left with a lot of questions about the different positions on and understandings of automation, in part because most documents were heavily influenced by legal jargon and difficult to understand for someone without a law degree. Entering the field as a newcomer was like entering an ongoing conversation, where much is taken for granted. Using interviews was a way of introducing me to these ongoing debates, thus bridging the gap between their and my understanding and enabling me to dig deeper into the discourses and tacit meanings within this field. Closely related, many of the documents are only a few pages long, and many opinions are argued through only one or two short sentences. Interviews thus seemed a relevant method for allowing the authors to expand on their views, giving them more space to argue freely about their opinions about the technology, without the limitations of the document format (which is relevant in part because

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<sup>9</sup> The hearing documents can be found at: <https://www.regjeringen.no/no/dokumenter/horing---endringer-i-utlendingsforskriften-om-bruk-av-automatiserte-avgjorelser-innhenting-av-opplysninger-fra-andre-offentlige-myndigheter-m.m/id2662215/>

the organizations can also work to influence the technology outside of the hearing process, for instance through lobbying or the media (Grindheim, Heidar, and Strøm 2017:288–90)). As it turns out, interviews were also useful as a form of member validation (Brinkmann and Kvale 2015:221–22), as during one of the interviews, I discovered that I had misunderstood one of the document’s main arguments about the proposal. The interviews thus became an important measure for strengthening the validity of the analysis.

The strategy, then, was to use both the documents and the interviews as two different kinds of data that could complement each other. The documents are seen as active components, influencing the hearing process and the technological development by themselves, and the interview are used to elaborate and describe in detail what the documents cannot.

## **Data collection**

### *Constructing the sample*

After writing a bachelor paper on the Norwegian media’s coverage of artificial intelligence (Johannessen 2018), I knew that I wanted to write about the development and introduction of new technology. In the spring of 2019, I found out that UDI had started using automation to solve some of their tasks. I also learned that this had created some media attention, and I thought that this would be an interesting case to start working with. In the fall of 2019, I met with a representative from UDI and talked about a potential master thesis on the use of automation in UDI. At that time, I was mostly interested in how *the caseworkers* used and negotiated the technology. However, as UDI already was involved in many master and PhD projects, they could not spare any more time and resources to support further projects. I therefore had to find another way to write about their use of automation. Based on a tip from a friend, I found out that the Ministry of Justice had initiated a hearing process with a proposal to expand the use of automaton in UDI. Based on the hearing documents, I concluded that this could be a potential project. The project then went from focusing on the negotiation of automation *inside* the UDI, to the broader negotiations between The Ministry, UDI and other external actors.<sup>10</sup>

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<sup>10</sup> Although they did not participate in the hearing process, the caseworkers in UDI could have been relevant actors for this thesis. However, as UDI was not interested in supporting the project, I was unable to include them as informants.

The sample of documents and interviewees was constructed in close connection. I began by reading the Ministry's hearing document and the 17 written comments in the hearing process. As five out of seventeen documents had no comments on the proposal, I eliminated these from my sample. For further narrowing, I decided to focus only on those who had comments on the main aspects of the proposal (automation, the collection of personal information and further processing of personal information). This excluded three actors who commented only on less central aspects (e.g. the possibility of identity fraud, archiving data in public sector and how the proposal affects the Police Directorate).

I was then left with documents from nine organizations. After reading these, I decided to supplement the documents with interviews (for the reasons mentioned above). After the project was approved by the Norwegian Centre for Research Data (NSD; see appendix 3), I started emailing potential informants for my project. Some of the informants were contacted directly, as their names were published in their written comment. They were often eager to be interviewed and thought that my project was interesting. Other comments were not signed by specific individuals, which led me to contact the organization instead. This sometimes ended up with my request being sent back and forth within the organization for weeks, before I eventually was contacted by someone that wanted to be interviewed. In three cases, the organization declined or failed to answer my request to participate in an interview. For reasons of symmetry, I decided to exclude their hearing comments from my sample.<sup>11</sup>

After about two months of correspondence and follow-up e-mails, I had managed to arrange interviews with representatives from six organizations that participated in the hearing process. One of these was UDI's legal department, which advised me to also approach someone from UDI's technical development department, as these could give an insight into the technology that the proposal and the comments could not. When contacting the technical department, I was told that UDI uses different kinds of automation, and that it would be best if I talked to two representatives from different departments; these were interviewed together.

In total, then, my sample consists of 7 documents from the hearing process (including the proposal from the Ministry), as well as seven interviews with eight informants. While I

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<sup>11</sup> This includes the comments from Unicef, JussBuss and MiRA-senteret. As their comments in many respects overlap with the critical side of the debate (outlined in the following chapters), their exclusion has not had major consequences for this thesis.



withhold the informants' name, age and gender for reasons of confidentiality (as elaborated later), the organizations they represent can be described as follows:

- 1 informant from *the Norwegian Organization for Asylum Seekers (NOAS)*: NOAS is an NGO that works to promote asylum seeker's rights in Norway. They meet all newly arrived asylum seekers and give legal aid to more than 1000 rejected asylum seekers every year (NOAS n.d.). NOAS' main purpose is to offer information and guidance to asylum seekers in different part of the asylum proses. They also work to influence the Norwegian authorities to follow UN recommendations and human rights. According to the informant, reading and commenting proposals from hearing processes is a central way that NOAS works to influence the Norwegian authorities. Many of the cases handled by NOAS have been rejected from both UDI and UNE (NOAS n.d.).
- 1 informant from *Save the Children Norway*: This is the Norwegian department of the global organization "Save the Children", which is a politically and religiously neutral NGO that works to fulfill children's rights according to the UN conventions. Their website states, "Our advocacy and campaign work addresses the rights of the poorest and most marginalized children and towards Governments to close the opportunity gaps and ensure equitable progress and outcomes for children" (Save the Children Norway n.d.). According to the informant, the organization sees itself as a "guard dog" in the hearing process, making sure that children's rights are not being ignored.
- 1 informant from *Rettspolitisk forening (Rpf)*<sup>12</sup>: Rpf works to improve the legal position of vulnerable groups and to strengthen human rights in Norway. They write consultation statements, arrange seminars and debates, and publish a journal (Rpf 2015). The informant stated that one of the organization's most important tasks is to participate in hearing processes.
- 1 informant from *The Norwegian Directorate for Children, Youth and Family Affairs (Bufdir)*: Governed by the Ministry of Children and Families, Bufdir's main task is to "provide children, young people and families in need of help and support with appropriate, high-quality assistance nationwide" (Bufdir 2016). Bufdir also provides services such as centers for child welfare and family counselling, and care centers for unaccompanied asylum-seekers under the age of 15. According to the informant from

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<sup>12</sup> The organization does not have an English name, but can roughly be translated to the Legal Policy Association.

Buudir, contributing to hearing processes is essential to inform the Norwegian government on how their suggestions might affect the groups Buudir represents.

- 1 informant from *The Immigration Appeals Board (UNE)*: UNE is the appellate body for immigration and citizenship cases. This means that all cases considered by UNE have first been considered by UDI (UNE 2017). While UDI and UNE follow the same rules and regulations, UNE is independent from UDI. This means that rejections can get a new consideration by a different body with different staff – and if the appeal is successful, then the UDI’s rejection no longer applies (UNE 2017). If UNE also rejects the application, there is no other option left in the immigration process than taking the case to court. It is also important to underline that even though UDI are using automated decision-making in some of their decision-making processes, UNE does not. All the complaints sent to UNE is therefore decided by human discretion (UNE 2017).
- 1 informant from *UDI’s Analysis and Development Department* (henceforth referred to as “the legal department”): UDI’s legal department has as one of its main tasks to read and comment on the proposal from the hearing process (UDI n.d.). Through their comments, they provide input for regulatory changes in the proposal based on their experience from the legislative aspects.
- 2 informants who are responsible for *technical development and automation in UDI*. The first informant works with automated decision-making processes, or what is called “full automation” (where no human is involved in the decision-making process). This is the kind of automation that the hearing process wishes to expand the use of in UDI. The second informant works with Robotic Process Automation (RPA). These robots are not involved in the decision-making in the application process, but are used to replace some of the repetitive task in the existing systems. These two informants combined can therefore give an extended description about automation in UDI.

### ***Conducting the interviews***

All interviews were carried out in January 2020.<sup>13</sup> Since the informants had busy schedules, I gave them the opportunity to choose a time and place for the interview. All interviews were

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<sup>13</sup> As the interviews were carried out in good time before the lockdown, the corona crisis has had limited impact on this thesis (although not having access to a printer undoubtedly complicated the analytical process). A greater and gendered challenge was my pregnancy. While rarely mentioned in qualitative method textbooks, being pregnant has – in my case at least – been a constant nuisance that has influenced both my data collection and analysis, especially towards the end of the thesis process.

done during working hours, and all (except for one) were done at their workplace – often in their office, or in a seminar room they had requested. One of the interviews were carried out in a café in central Oslo, based on the informant's request. Since it was conducted during working hours, there were few people in the café, and we found a quiet corner where we could talk.

Before all the interviews, I sent out information about the project and a copy of the consent form for them to read. This was also a useful way of reminding them of the interview. I started all the interviews by handing them the consent form and giving them time to read it. Many had read it beforehand. The consent form stated that I would record the interview, but I always asked if I could record before starting the interview. All the informants consented to being recorded. The interviews were recorded on an external tape recorder that was placed between me and the informant. I also wrote some notes on a notepad that was useful for asking follow-up questions. The interviews lasted from 45 to 60 minutes.

The tone of the interviews was semiprofessional and friendly. I always started the interview by giving them information about the project and myself (Brinkmann and Kvale 2015:97). I also took care to emphasize that I did not have a law degree and that I did not have a technical background, thus highlighting that I am an outsider to the field.

During the interviews, I used a semi-structured interview guide (see appendix 1). This helped me ask questions that were directly relevant for the topic of the thesis, while also allowing me to improvise and follow up on the informants' answers (Rubin and Rubin 1995:5–6). The guide was structured in four sections: (1) information about the informant and the organization they represented; (2) information about the hearing process, and how they and their organization related to it; (3) elaboration of the informant's written comment; and (4) more general questions about the future consequences of automation (both positive and negative). The third part was the most important and included both standardized and more individually tailored questions about the written comment they (and others in their organization) had produced. Lastly, the guide ended by asking if the informant had something they felt that I had not covered in the interview. In the interview with the technical informants from UDI, the guide only included a few questions about the hearing process, as their departments was not involved in this process. Instead, their guide was mostly focused on automation, its use and the future use in UDI.

Each interview proceeded differently. Some interviews were very structured, following the interview guide from start to finish. Other interviews were more like a conversation, where I barely looked at the interview guide. Most were something of a combination of these two, being more semi-structured in nature. I had memorized most of the questions beforehand, and often ended the interview with looking through the guide just in case there was something we had left out (Brinkmann and Kvale 2015:157–59).

Different kinds of data were gathered in the different interviews. Some had extended knowledge about automation, whereas others were very unsure of the technology. Some of the external organizations had talked to UDI about the technology beforehand, others had only read the proposal from the Ministry. The informants who were unsure about the technology often speculated more about the technology, and often talked more about its possible future consequences. It also varied whether the informants spoke on behalf of their organization or voiced their own opinions. The latter was often marked by comments such as “this is only based upon my opinion”, or “this is a bit outside of the organization’s argument”. These differences are important and have been central when analyzing the data.

As the interviewer, I had an active role that involved asking follow-up questions, asking them to elaborate their argument, and at times (when informants seemed hesitant) I tried speculating together with them. Because of this role, I see myself as a co-producer of the data (Brinkmann and Kvale 2015:109). While some might argue that this is an unethical or invalid way of gathering data, I see these tactics as crucial for stimulating the informant to elaborate and reflect more on their own opinions (Brinkmann and Kvale 2015:109–12). It is worth noting, however, that this strategy can have affected their views on automation. One of the informants said that the interview had made them realize that automation might be more relevant for them to comment on in the future. This means that I might have influenced how both the informants and their organizations relate to the technology.

After the interviews, I would use an hour to write down important points, as well as notes and phrases that might have been difficult to catch on the recording. All interviews were transcribed using a program called F5. While transcribing the interviews, I took notes on possible analytical themes and started to work on possible codes for the coding process. All quotes (from the interviews and the documents) have been translated from Norwegian to English.

## Analysis

After all the interviews were transcribed, I started coding both the interview transcripts and the hearing documents inductively in Nvivo, inspired in part by thematic analysis (Braun and Clarke 2006). I ended up with around 150 codes, in part because I wanted to categorize all the themes in my data, with only limited concern for whether they were relevant for my research question. While I ended up with a lot of codes I never used, this process was useful to explore the details of my material.

After coding the data in Nvivo, I started working on identifying more general themes. As I identified a large number of such themes, the challenge was to determine their relative relevance (Johannessen et al. 2018:142–44). After constructing several drafts, I decided to focus on the most prominent *discursive struggles* in the data, related to the informants' talk about discretion vs. objective criteria, humans vs. machines, and the use of automation in children's cases. This choice of focus was inspired by the discourse analytical framework outlined in Chapter 3. This framework also provided several analytical questions that helped guide my coding and categorization (Johannessen et al. 2018:142–46), such as: What *discourses* structure the actors' talk about automation? What *symbolic boundaries* are drawn – between humans and machines, between clear-cut and the discretionary decisions, and so on? What *values* are expressed in the hearing documents and interview transcripts? And what *actions* do the participants in the debate encourage?

More generally, the use of discourse analysis also helped me focus on the hearing documents as active components in the debate about automation in UDI. Discourse analysis also entails a particular analytical stance towards the informants' accounts, where the question is not whether their statements are true or false, but what they themselves *assume* to be true, and what consequences these assumptions have for their actions (as highlighted by the Thomas theorem; see Chapter 2 and Jørgensen and Phillips 2002). Moreover, discourse analysis also highlights the importance of having analytical distance to one's data, in order to identify and understand what is taken for granted in the texts under study (Phillips and Hardy 2002:10). For this reason, I found it important to read up on how other discourse analytical work on technology (Greenhalgh et al. 2012), to help identify the central discursive patterns in my data.

During the analysis process, both the hearing documents and interview transcripts have provided crucial information; and as mentioned above, I see these data sources as

complementing each other. The results chapters vary, however, in how much they rely on each source of data. For instance, while Chapter 6 relies heavily on data from the hearing documents, Chapter 7 relies more on interview data because the conflict in focus in this chapter – that between humans and machines – was largely implicit in the documents. In the interviews, however, this issue was given a lot more explication. Thus, without the interviews, this conflict would not have been as prominent as it ended up to be, despite being a crucial (but mostly unstated) premise in the hearing documents.

## **Ethics**

Two fundamental ethical concerns in social scientific research is informed consent and confidentiality (Fangen 2004:158–65). As the hearing documents are publicly available, there was no need to ask for permission to use these data. The data collected in the interview, however, include personal information (e.g. name, work title, educational background) and therefore had to be accepted by the Norwegian Centre for Research Data (NSD). The project was therefore submitted to NSD and accepted in the end of October 2019.

All the informants were given a consent form to sign (see appendix 2). The consent form consisted of information about the project, about the informant's rights, and about possible consequences of being a part of the project (Norwegian Centre for Research Data (NSD) 2020). As mentioned above, the informants were sent information about the project and a copy of the consent form before the interview. I wanted to give them time to consider the proposal, ask questions about the project and potentially withdraw before the interview started. When we talked about the consent form before the interviews, we also talked about what kind of data would be collected and used in this project.

To ensure confidentiality, I have left out each informant's name, gender, work title, work experience, former education and other personal information stated in the interview. Anonymization is essential when doing research, so the informant is protected from being recognized (Rubin and Rubin 1995:95–96). When transcribing and analyzing the data, the personal information was taken out and separated in a secure document. This is also the case with the informant's contact information, which has also been stored separately from the data. This is a way of securing the identity of the informants in case someone would get a hold of my data (Fangen 2004:84, 158–60).

However, I have decided to include the name of the organization they represent, as this is analytically relevant information (Brinkmann and Kvale 2015:94–95). Since most of the

informants were involved in writing the hearing comment, this means that they can be identified even if they are made anonymous in this thesis. I therefore made sure that we talked about this before the interview started. The consent form also consisted of an extra box to tick off, where the informant consented to the possibility that they might be recognized. I also decided to give all informants the possibility to read their selected quotes before publishing the thesis, to ensure that the data I use will not put them in a difficult position, either publicly or in their work situation. This also gave me the opportunity to fix any potential errors, in case I had misunderstood or wrongly transcribed their accounts (Fangen 2004:155–58).

## 5. Results – introduction

In the following, I will present the three most central discursive struggles surrounding the proposed expansion of automated decision-making in UDI, concerning:

- The relationship between discretion and objective criteria
- The relationship between humans and machines as decision-makers
- Whether children can be subject to automated processing

In debating these issues, the actors can be divided roughly into two relevant social groups: one supportive and one more critical.<sup>14</sup> The supportive group consist of the Ministry of Justice, UNE and UDI (both the legal department and those involved in technical development). Based on their experience, they all argue that automation can have a positive effect on the application process in UDI. The time expectancy for processing an application is commonly known to be long (as with many public case proceedings), and waiting for approval or denial is widely believed to be a challenging time for the applicants. The Ministry of Justice, UDI and UNE agree that automation can be a good solution to this problem. The organizations also emphasize that the technology can make the application process more fair (as all are processed with the same system and using the same criteria); that the resources saved with automation can be prioritized to more complex applications that require discretion; and that the process will be more accurate, since there is no human discretion involved in the process.

The second relevant social group consists mainly of NOAS, Save the Children Norway, and Rpf, who are all critical to the proposed use of automation. Bufdir can also, to some extent, be included in this group: While their written comment did not explicitly mention automation, the interview highlighted some possible negative consequences with the technology (as I will return to in Chapters 7 and 8). While all the organizations in this critical group accept that the processing time in UDI should be more efficient, and that shorter waiting period will benefit the groups they represent enormously, they are critical towards the use of automation for reaching these ends.

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<sup>14</sup> The actors could have been divided into more fine-grained relevant social groups, focusing, for instance, on internal differences between various ‘critical’ groups. However, for simplicity and communicative purposes, I chose to emphasize two main groups (while also trying to show some internal differences in my in-depth descriptions of each group’s views and arguments).



It should be mentioned that many informants – especially in the critical group – have emphasized the difficulty of understanding what automated decision-making in UDI entails, and how it works. Most of these actors do not have a technological background, and have not been directly involved in the legal or the technical development of automation, which means that they have never experienced the technology first hand. Their knowledge was typically based on a mix of media reports, information from UDI’s website and the documents published in the hearing-process. Many informants were also critical of the limited access to relevant information in this hearing process; indeed, informants from Rpf, Save the Children Norway and NOAS argued that the lack of information had prevented them not only from understanding the technology, but also from performing their roles and duties as commentators on the proposal. They argued that a key purpose of a hearing process is to inform relevant actors so they can take an informed stance towards the proposal. The informant from NOAS emphasized that this hearing process had relatively few comments, and speculated that this might be related to the vague and lacking information in the proposal, which might have kept other actors and organization from commenting.

This lack of information is an important precondition for the results that follow. However, it should not automatically be assumed that more information would have resolved all conflicts (Greenhalgh et al. 2017). The lines of conflict I will now present are well-established and recurring in debates about automation (Greenhalgh et al. 2012). And as the informant from Save the Children Norway argued: if more information had been provided, they could have been *more* critical and given a more detailed description of how UDI’s use of the technology may harm the group they represent. I will return to this issue in the Discussion; but first, I will elaborate the three central discursive struggles in my material.

## 6. Discretion vs. objective criteria

The first discursive struggle concerns how the different groups draw the boundary between discretion and objective criteria. As I will show, The Ministry of Justice, UDI and UNE distinguish firmly between the two, by claiming that automation is only to be used in cases with clear-cut, objective criteria. In contrast, NOAS, Save the Children Norway and Rpf are more critical of this distinction, believing that the boundaries are less clear cut and also putting the validity of objective criteria into question.

### A valid distinction

To understand those who distinguish firmly between discretion and objective criteria, I begin by looking at the Ministry of Justice's proposition. In arguing for increased use of automation, the Ministry appeals to the objectivity of assessment criteria in certain types of applications:

UDI has already developed solutions for full automation and initiated such use in one case portfolio, and are working on further solutions. The complexity of the immigration authority's tasks varies. Some decisions are based on simple, predefined criteria (e.g. income, offer of employment, admission of study, length of stay, etc.). These cases have great potential for machine processing. This will, as the Ministry sees it, free up resources for other, more challenging tasks. Many immigration cases require varying and difficult assessments, and the need for discretion can be significant. In these cases, automation will not be appropriate.  
(Hearing proposal, the Ministry of Justice)

The Ministry of Justice here distinguishes between simple decisions that are based on objective and predefined criteria (and thus candidates for automation), and cases that require discretion (as they involve more varying and difficult assessments). The Ministry sees the use of automation in the latter, complicated cases as unjustified, because these require discretionary assessments. Thus, a firm boundary is drawn between assessments depending on objective criteria, and those depending on discretion.

The actors who support the proposal from the Ministry of Justice (UNE and UDI), also treat this distinction as valid. For instance, the written comment from the legal department in UDI states the following:

Although several provisions and terms in the immigration regulation [*utlendingsregelverket*] are discretionary based, it is still possible to determine individual cases on the basis of predetermined criteria that do not involve use of discretion. For instance, assessments of identity according to the immigration regulation [*utlendingsforskriften*] § 8-12 will involve an assessment of whether or not the applicant is required to present a passport, and on whether the identity is considered sufficiently reliable [...] In cases where the terms cannot be determined based on objective criteria alone, it will not be acceptable to use automated decisions. (Hearing document, UDI's legal department)

A similar point was made in the interview with one of the technical informants in the UDI, who argued that cases that require discretion will not be automated:

What these automation regulations [*automatiseringshjemplene*] say, is that you shouldn't automate discretionary assessments. So if you need to decide in a case that's not straightforward, then it won't go to automation. (Technical interviewee #1, UDI)

In line with the Ministry of Justice, these informants argue that these "simple" and "straightforward" cases can be automated, compared to the more complicated, difficult and varying cases. The cases that cannot be decided with objective criteria alone, are not considered fit for automation; thus, while these actors support the use of automation, they only do so in the subsample of cases that can be decided based on objective criteria.

But what, exactly, make criteria objective? As mentioned, objective criteria include income, offer of employment, admission of study, length of stay and presented identification.

Common to all is that they are based on absolute boundaries: Either you are inside or you are outside. The informants often describe them as being based on a yes/no answer. Either you have presented a passport or you have not; there are no grey areas. As the informant from UNE argues, these criteria are like crossing of items on a list: "[...] one has to have this or that income, [...] it's a lot of objective dot, dot, dot, dot, dot [simulates crossing items of a list], which I think you might be able to automate without there being any discretion involved" (interview, UNE). As presumed here, then, objective criteria need no evaluation; they are straightforward and can be applied without judgment.

That said, objective criteria were not always considered equally suitable for use. For instance, the informant from the legal department in UDI argues that the use of objective criteria

depends on structured and high quality data: “There are some pitfalls, such as whether we have data that is structured and of good quality, so that we can base a decision on it” (legal interviewee, UDI). Similarly, one of the technical informants in the UDI argues that the data has to come from trustworthy sources. The informant also emphasized that they are continually working to improve their data sources, so that they can increase their use of objective criteria in the future.

The use of objective criteria is also limited by the laws and regulations for automation. As one technical informant in the UDI argues, they have to follow the laws and regulations when developing automated systems and the criteria it is based on:

[...] the entire reason why we cannot automate any rejection cases concerning citizenship, is because we have a regulation in the Citizenship Act [*hjemmel i statsborgerloven*] which says that “if there are special reasons for granting [citizenship], even if the conditions are not met, the case can still be granted”. And we cannot automate that particular regulation [*hjemmel*], you know, because it is part of the law. We can’t pretend that it is not part of the law, even if we have very objective reason for rejecting [the application]. (Technical interviewee #1, UDI)

Thus, although they otherwise might have objective criteria and high-quality data, legally mandated exceptions like these make automation impossible. In the absence of such obstacles, however, the existence of objective criteria was considered good grounds for automation.

### **An invalid distinction**

On the other side of the conflict, the critical social group is skeptical of drawing a clear-cut boundary between discretion and objective criteria. They argue that all decision-making requires discretion, and that the objective criteria might not be as objective and standardized as assumed by the actors above. They also argue that the use of objective criteria might become an end in itself, which might lead to faulty decisions and goal displacement in UDI.

Several informants, and especially Rpf, argue that it is difficult to draw absolute lines between discretion and objective criteria. In their written comment in the hearing process, Rpf argues that this distinction is difficult to make because even “objective” criteria involve discretion:

All interpretations of words and expressions require discretion. This is particularly clear where a legislator has used legal standards. The Immigration Act

[*utlendingsloven*] is characterized by discretionary judgments. In asylum cases in particular, the terms are distinctly discretionary and not suited for schematic treatment. It is difficult to delineate what can be considered a “discretionary assessment”. In his book *Legal Philosophy [Rettsfilosofi]*, Svein Eng goes a long way in claiming that all legal assessments essentially are judgments, and that even the most specific term can be discretionary. That every word and expression can require some discretion should not, however, stand in the way of legislators’ access to using general Norwegian language when specifying norms in terms of laws and regulations. The perspective should nevertheless serve as a guideline when expressions characterized by significant discretion are proposed into law, perhaps especially when the word “discretionary” itself is proposed into a legal text. (Hearing document, Rpf)

Rpf here argues that there is a significant grey area between discretionary and objective judgments, making it near impossible to draw a firm line between the two. In the interview with Rpf, this was illustrated by a simple example:

[...] you have to be 18 years old to be listed for the military in Norway. Okay, so does that mean that you must have turned 18 years, or does it mean the year in which you have your birthday? Even the most rigid rules can be made into discretionary rules. (Interview, Rpf)

Other actors were also skeptical of drawing firm boundaries between discretion and objective criteria. For instance, in their written comment, NOAS argue that no applications can be automatically said to require *no* discretion. This was also emphasized by Save the Children Norway, who claim in their written comment that:

We believe that the word “does not require discretionary judgment” is too vague, and are worried that the decision on whether a case requires discretion or not, in itself requires discretion. (Hearing document, Save the Children Norway)

They thus argue that whether a case is based on discretion or not, is itself a matter of discretion, and thus not something that can be determined in advance. Accordingly, they believe the Ministry’s proposal is based on a dubious distinction.

Another argument against the proposal is that “objective criteria” are less objective than presumed. For instance, the informant from NOAS argues that a presumably objective

criterion might be invalid in light of other concerns. The informant uses an example from 2015 to illustrate this argument:

[I]n 2015, some [asylum] seekers came through Storskog, from Russia, to Norway. And then the authorities concluded that if they had a visa from Russia, then they should be sent back to Russia. At the outset, that may seem like an objective criterion: “Do you have a visa? Then you have to go back”. Then it might look like a portfolio that’s suited for full automation. Because the authorities didn’t consider whether the asylum seeker had a need for protection, or ... The only assessment, in the beginning, was whether one had a visa from Russia or not. But as it turned out, it isn’t that simple. And it took a long time before the authorities realized that a return isn’t feasible. This was a question of what kind of visa one had, whether one actually had the authority to return [the asylum seeker], if the seeker was expelled, after the visa had been issued. So there was a series of other issues that should have been considered, but wasn’t.

(Interview, NOAS)

According to this informant, the use of objective criteria can make UDI too narrow-minded and put them at risk of overlooking other and potentially more important concerns. Thus, what initially seems like a black-or-white scenario may in reality have more nuances.

A third argument against drawing firm boundaries concerned the reliability of the information used in the assessment. To illustrate this, the informant from Save the Children Norway talked about the sometimes lacking reliability of information about the applicant’s age:

[A]ge is supposedly an objective criterion, but [...] age isn’t always objective, if you don’t have documentation on it– or if it’s unaccompanied minors where you dispute their age or don’t have documentation for their age and stuff like that. So it’s far from an objective assessment. (Interview, Save the Children Norway)

Thus, with lacking or insufficient documentation, the objectivity of an applicant’s age can be put into question, according to the informant from Save the Children Norway. Adding to this, the informant from NOAS mentioned other sources of error, related to interpretation and cultural differences:

Our cases show that the risk of erroneous registering [of data] is high. You know, they’re questioned on several occasions, require an interpreter– [Errors are]

especially [common] when it comes to dates. Our clients come from cultures where birthdays, for instance, are less relevant than for us in western cultures, but still, they're encouraged to say, "Yeah, but can't you, roughly, tell us when your parents are born?". And then they guess a date. (Interview, NOAS)

As highlighted by the informant from NOAS, the applicants may come from different cultural backgrounds and be less "standardized" and "homogeneous" than what the supporters of the proposal seem to assume. The risk of erroneous data might therefore be significant, as criteria like the applicant's age might be far less objective than presumed.

Adding to the above, some informants also asked: if the objective criteria are not as objective as presumed, then what are the possible consequences if they nevertheless are *treated as* objective in an automated decision-making process? According to the informant from NOAS, one consequence can be that such "dubious" criteria can be given undue weight, by being treated equally with other, more relevant criteria:

[T]ake the income requirement in family immigration cases [*familieinnvandrings saker*]: Here, the reference person [*referanseperson*] has to document their income. UDI often treat this as an absolute requirement. It's not supposed to be absolute, it should be possible to make exceptions, and then it's kind of difficult to weigh these things equally. (Interview, NOAS)

If cases like these are assessed by a human decision-maker, then a criterion such as income might be deemed to have varying importance; but if these cases are being processed through automation, this criterion might be given equal weight to other criteria, according to this informant. In extension, NOAS' written comment also argued that automated assessments leave no room for individual consideration. They used the allocation of a living space in asylum institutions as an example:

The Ministry mentions the allocation of living spaces [*mottaksplass*] in reception centers as examples of decisions that are based on objective criteria [...] As NOAS sees it, this example illustrates that a general regulation for automated decisions should not be given. Even decisions on reception center space will involve discretionary assessments regarding the need for adaptations for the individual applicant. Health, vulnerability, family network are issues that must be considered when allocating living spaces. (Hearing document, NOAS)

The allocating of living spaces should thus not be based on objective criteria, according to NOAS, as an automated process might not take individual considerations into account. Their concern seem to reflect a fear of *goal displacement* (Oxford Reference 2020): that the use of automation might shift the goals away from holistic and fair assessments towards assessments that are speedy and standardized. Without denying the importance of making the decision-process more efficient and equal, the informant seems to argue that the use of automation and objective criteria might not be the right way of reaching this goal. In short, if the objective criteria are not as black and white as the Ministry of Justice assume, the result might also be less fair than intended.

### **What discourses are expressed by the two groups?**

So far, I have shown how the debate involves two relevant social groups who argue either for or against the use of automation in UDI. While each group displays some variety in arguments and views, they can also be said to articulate two ideal typical discourses about technology.

The supportive group (consisting of The Ministry of Justice, UDI and UNE) largely articulates a modernistic discourse. According to commentators, this discourse depicts technologies “as offering reliable, cost-effective and ethically benign solutions to complex clinical and social problems” (Greenhalgh et al. 2012:4). This discourse is often articulated towards public agencies that are overwhelmed and lacking in resources. The modernistic approach represents technology as a solution to these challenges, and often frame it as something that can offer better, safer, more efficient and more reliable services (Greenhalgh et al. 2012:4–7). Following this, the supportive group sees automation as an apt solution to problems in UDI, in light of the technology’s ability to make rational decisions based on clear-cut boundaries and objective criteria. This does not mean that the supportive group argues that all decisions can be automated, but rather that technology is better suited to handle and solve some of the challenges of our time. And to know which cases are suited for automation, they draw on a specific symbolic boundary between objective criteria and discretion.

The more critical group (NOAS, Save the Children Norway and Rpf) articulates a more humanistic discourse (Greenhalgh et al. 2012:7–8). As others have pointed out, this discourse emphasizes “the uniqueness and moral worth of the individual” and that technologies are “only sometimes fit for purpose and could create as well as solve problems” (Greenhalgh et



al. 2012:1). The humanistic discourse focuses more on the “human touch” and sees the technology as offering, “at best, partial solutions to the complex challenges” (Greenhalgh et al. 2012:8). Technology is typically framed as prone to failure, having limited use, being unfit for purpose, and treading a delicate balance between benefits and harms. Thus, without denying that technology can offer (partial) solutions to problems, this discourse also emphasizes the technology’s potential to create further problems down the line (Greenhalgh et al. 2012:8). The critical group articulates this humanistic discourse by arguing that the human world consists of a lot of grey zones that non-humans are unfit to handle. This does not mean that humans are perfect, but rather that the world’s complexity and the seriousness of cases in UDI are often best handled by a human’s use of discretion.

Adding to this, the humanistic discourse in the present case is closely linked to a discourse of professionalism, which emphasizes the need for *discretion* to solve tasks. In the theory of professions, discretion is a form of practical reasoning used in ambiguous cases and situations, where the purpose is to make a decision (Grimen and Molander 2008:179). Given their knowledge and expertise, professionals are often considered most qualified to make such decisions in ambiguous cases and situations (Grimen and Molander 2008:179–80). When institution such as The Ministry of Justice then proposes the use of automated decision-making, they break with the emphasis on discretion, which is so central to professional thinking.

Just like the supportive group, then, the critical group encourages specific actions based on their values and assumptions. Although they do not argue that decision-making should never be automated, they argue that it should be restricted – in part because the distinction between discretion and objective criteria is believed to lack validity in a complex world. Moreover, before the use of automation is expanded, they also call out for more discussion and evaluation of the technology’s impact. This call for action is based on their view that the human world is too complex to be objectivized, and that the cases and the applicants are not standardized enough to be automated. They therefore paint a more positive picture of the human decision-maker, who can better handle a complex world with diverse cases and applicants.

## 7. Humans vs. machines

This chapter focuses on a second discursive struggle in the hearing process on automation in UDI, concerning the relative strengths and weaknesses of humans and machines as decision-makers. I will start by focusing on those who argue on behalf of the machines, and then move on to those who argue on behalf of the human decision-maker. In both sections, I will focus particularly on the symbolic boundaries drawn between humans and technology when talking about decision-making in UDI. As I will show, the two groups draw these boundaries differently, and their boundary work reflects more general discourses and values.

### Why machines are better than humans

The supportive group emphasizes the weaknesses of humans and the strengths of machines. They offer several arguments for their views, including that machines are less prone to errors than humans. One of the technical informants in UDI argues that we often overestimate how good humans are as decision-makers in general. The informant claims that humans generally have a propensity for making mistakes, and that the risk of human error is particularly high when an organization has many individuals making a large number of decisions:

[I]f you charge a human with doing the same assessment [as the machine] over the same amount of time on an equal number of cases, the human will, at some time or another, make a mistake. A keystroke, reading a number incorrectly, or ... you know, it will happen. And when you then take this competition between humans and machines and say that “not only is it one human who is supposed to do this correctly over a long period of time, it is 50 humans who are supposed to do so”. Then there’s going to be errors in the system no matter what you do. You know, no matter how much you do, for people to do things correctly, it’s— people aren’t infallible. (Technical interviewee #2, UDI)

Thus, given this large number of actors engaging in repetitive decision making, errors are inevitably going to happen, according to the informant.

The informant from UNE similarly emphasizes humans’ propensity for making errors, linking this to how humans, in contrast to machines, have bodily needs that might distract us (e.g. being hungry or fatigued). This makes humans prone to eventually making errors, whereas machines are said to make the right decision every time. As an appellate body for immigration and citizenship cases, UNE are made aware of many human errors in the application

processes. The informant gives the example of human errors when calculating income requirements in an application:

I've had at least one case [*arbeidssak*] where I judged the applicant to have fulfilled the income requirement, while someone else judged them not to, because they hadn't come across that type of payment system with payments every 14 days before – and a month doesn't consist of four weeks, and then it turned problematic, because it was two days that [failed to be included] ... so then an error was made. [...] Apparently, this payment issue shows that it [application processing] depends a bit on one's background – she had only worked in the government and seen their payment system. (Interview, UNE)

This informant highlights *wrong* experience as a basis for human errors. Adding to this, the legal informant from UDI highlights *lack* of experience as a reason for why humans are more prone to errors: “caseworkers make mistakes. Some are experienced and good, whereas others are inexperienced and don't know their trade as well as they should” (legal interviewee, UDI).

In contrast, the supportive group sees machines as being more reliable, in part because of their reliance on objective criteria. For instance, as the informant from UNE argues:

I'm thinking that if it's completely objective requirements, then automation will mostly be better than a human. One shouldn't think that we do it perfectly. I think that if there's really good algorithms, and if they're really good robots with good data to build on, and have a good foundation, then they're better at it [making decisions based on objective criteria] than we are. (Interview, UNE)

The informant here argues against the humanistic discourse (where humans are considered better decision-makers than machines), emphasizing that we are not perfect. Instead, machines are considered better suited to handle cases based on objective criteria.

In sum, these actors see machines as superior decision makers, in part because humans are more prone to making errors (due to factors such as bodily weaknesses and having limited experience). The risk of errors is further linked to the sheer number of decision makers: While individual caseworkers might make few errors, 50 caseworkers put together can make a lot of errors. At the same time, the informants do not claim that human decision-making is always flawed; they emphasize that some applications require decision-making based on human experience and discretion. But in cases with “objective criteria”, they see the technology as

better equipped to make the right decision, as it processes applications more uniformly and does not suffer from human weaknesses related to concentration, fatigue and (in)experience.

### ***What about machine error?***

While the supportive group do not consider machines infallible, they believe the seriousness of machine error is limited for several reasons, including that: the technology is based on strict criteria; humans generally have a higher margin of error than machines; and machines only make mistakes if humans have structured them wrongly or given them faulty data.

Illustrating the former, one of the technical informants from UDI emphasizes that the risk of machine error is limited because they do comprehensive testing and only use the system if there are no doubts that it will operate optimally:

[The potential for machine error] is something you have to take into account. We have tested the system thoroughly before putting it into production. We have invested a lot of resources on testing. And we're very focused on highlighting the limitations of the system and what it can and cannot assess. If there's any uncertainty as to how things should be programmed to create the right outcome, then we don't automate, you know. We don't have— there hasn't been any room in UDI so far to take any risks, along the lines of, "okay, this might be correct in 90 percent of the cases if we do it like this, so then we'll do it". It has to be correct, and if we doubt that we have all the information we need for it to be correct, then we don't do it. (Technical interviewee #1, UDI)

In other words, the informant argues that when developing these systems, one has to take possible machine errors into account. By extensive testing and using high quality data, UDI ensures that the automation will be successful; if any uncertainty is detected, then they will not automate, according to this informant. The other technical informant also argues that the margin for failure is minimal when it comes to the robots: "You know, the robots have a marginal failure rate – a marginal failure rate that is way below what a human has" (technical interviewee #2, UDI). Thus, while not infallible, the machine's propensity for making errors is considered to be significantly lower than that of humans.

Adding to this, the technical informants also argue that machine errors are often the result of human mistakes:

If errors are made, then it's because the input for what the robot was supposed to do in the first place, was wrong, you know – which is something that's decided by humans. And it's kind of important that automation isn't this black box where things happen and we don't know what the machine emphasizes. There's no element of machine learning going on when we automate decisions. It's a rule engine [*regelmotor*] where humans – lawyers – define what criteria should lead to an “okay” or not. So, it's really a systematization of the assessments that humans are already doing today. (Technical interviewee #1, UDI)

The informant thus argues that the automated decision-making systems in UDI are completely under human control; there is no “black box” and the decision-making process is not hidden from us. Thus, if the system makes a mistake, the error is really a *human* mistake, according to the informant.

### **Why humans are better than machines**

In contrast to the supportive group, the critical social group focuses on the weaknesses of machines rather than humans, and argue that even if humans make mistakes, they might be more reliable and trustworthy as decision-makers. This is not to suggest that the critical group sees human decision-making as perfect, or automation as too flawed to be used at all; they all admit that humans are not perfect and that they have and will make mistakes in the decision-process. However, the informants seem to argue that even though automation can be a useful tool, there are too many possible challenges with this technology for it to be delegated the power to make life-altering decisions, at least under the present circumstances.

It should also be pointed out that the informants often “hedged” their criticisms with reference to their lack of experience with automation in UDI, and to what they saw as vague information in the hearing process. For instance, some of the informants believed that the automated process was a far more complex process than what has been mentioned by the technical informants from UDI above. However, their disagreements cannot simply be reduced to a lack of experience or knowledge; many of their criticisms are linked to a more fundamental disagreement about humans or machines as decision-makers, to their different weighing of values (e.g. thoroughness vs. efficiency), and to different time frames (e.g. focusing on its use here or now vs. its long-term and unintended consequences).

Moving on their arguments, the critical social group offer an array of reasons for being skeptical towards machines as decision-makers. For one, some emphasize that while

machines might make fewer errors, the errors they do end up making will be *systematic* in kind. This means that machines can make errors on a larger scale, as emphasized by the informant from NOAS: “What I’m realizing, worryingly, is that potential mistakes will have graver consequences in an automated process because it will affect more [applicants], as I see it” (interview, NOAS). In other words, if the system is flawed, the decisions can be erroneous in a systematic way, in contrast to the more individual and random errors of humans.

Another concern was voiced by an informant from Bufdir, who points to how machines may be limited by the data given to them: “You know, it’s like ‘shit in, shit out’. Computer systems are never better than the information they receive, so that’s an obvious risk” (interview, Bufdir). The informant argues that if the data is flawed, then the decision based on the data will also be flawed because the system cannot itself judge if the data is faulty. The informants from Rpf and Save the Children Norway made similar comments and added that humans are generally better at detecting errors in the decision-making process than machines. For instance, the informant from Save the children Norway emphasizes the value of transparency in human decision-making:

[...] it’s an important principle in the rule of law that one should be able to scrutinize and challenge the decisions being made. But if it’s a machine making the decision, then you cannot scrutinize it; you can’t see what’s lying behind it in the same way as you can when humans do it [make decisions]. (Interview, Save the Children Norway)

With less transparency into the automated decision-making process, errors can be difficult to discover, according to the informant. In contrast, detecting errors is claimed to be easier in human decision-making. The informant thus uses the machine’s lack of transparency as grounds for questioning its ability to make just and fair decisions.

Another argument was offered by the informant from Rpf, who argues that the use of automation might challenge society’s trust in both UDI and its decision-making process:

It’s possible to trust a machine, but it’s really possible to do the opposite too, in my opinion. It’s impossible to weigh welfare goods up against one another, but there’s no doubt that citizenship applications can mean the world to people. It can have such an all-encompassing importance for applicants, and for those who are rejected – and then it’s reassuring for that person to know that the case has been handled by a human rather than a machine. I think this [automated decision-

making] can create great frustration and a feeling of not being taken seriously. And I feel that's important [...], being able to trust the authorities, knowing there's people involved and not just machines saying flat out "no". (Interview, Rpf.)

The informant from Rpf thus questions whether we should put our trust in machines, and what democratic consequences this may have. The issue seems simpler if a human is making the decision: this can create a feeling of safety and make applicants feel that they are being taken seriously, rather than being treated as one case among many and processed through a machine. Adding to this, the informant points out that human errors can be easier to forgive than machine errors: "For me, it's more comforting to know that a person has tried but failed, compared to a machine just saying some stuff because it's been wrongly programmed" (interview, Rpf).

Lastly, several informants also point to the potentially unintended consequences of introducing automation. For instance, the informant from Save the Children Norway speculates that the present expansion of automation might be a stepping stone towards the use of "profiling"<sup>15</sup> in the screening of applications:

It's kind of difficult to examine and control, so it might develop and become a form of discrimination in, say, immigration cases where you profile different groups and nationalities and the like. So, it's really important to, at least, control them [the machines] as much as one can, and continuously weed out errors – and that's more difficult when we have machines that are hard to scrutinize.

(Interview, Save the Children Norway)

The informant here speculates that the technology's lack of transparency and accountability might lead not only to wrong decisions, but also pave the way for profiling and discrimination: Instead of each applicant getting an individual evaluation of their case, their case might be decided base on the "group" they are placed into.

Similar concerns for the future was also voiced by the informant from Bufdir, who argues that this "new system" might create severe, unforeseen consequences:

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<sup>15</sup> Profiling refers to the act of suspecting or targeting a person based on assumed group characteristics rather than on individual suspicion (Merriam-Webster 2020).

[...] a concern that I feel like mentioning, is that this [automation] is so complex that it's not always possible to completely grasp what it's all about. Problems and errors might arise that no one's dreamed of, and which may be serious. [...] It's not possible, almost, to foresee all its implications. (Interview, Bufdir).

Given the novelty of the technology, the informant argues that it might lead to errors and problems that we cannot foresee today. The informant therefore emphasizes the uncertainty and risk involved with the technology, especially seeing how these problems can only be uncovered once the system is used and integrated into the decision-making process in UDI: “[...] how good they [the automated systems] are, that's something you probably won't know before they're rolled out” (interview, Bufdir). Even though these systems are based upon secure algorithms and have safety features that involve humans, the informant argues that we will not know whether these precautions work until these systems have been fully introduced and used. The informant thus emphasizes that there might be unforeseen challenges with this technology, which we cannot fully know until the errors and mistakes have been made. This introductory phase of automation is thus seen as the beginning of a potential “slippery slope” process, which might have repercussions that we cannot fathom today.

In sum, the critical group argues that the way machines are programmed make them prone to systematic errors that can be difficult or impossible to detect. The informants also argue that the expansion of automation might create unforeseen consequences in the future, which we can only detect when the errors have already been made. All these arguments are made with the human decision-making process as a baseline. Some argue that humans are better at detecting errors in the process, because they do not blindly use the data provided. Others put less emphasis on humans being inherently better than machines at these tasks, but rather stress that we trust humans more; in short, a system based on human decisions can create a feeling of security and trust, even if errors are made. Several accounts also highlight how automation challenges a human-centered system that we know and have worked with for centuries. The latter points to a difference in temporal orientation between the supportive and critical social group. In general, the supportive group bases its arguments on how the technology is today, while the more critical group focuses more on the future consequences of automation.

Despite their differences, this chapter has, to some extent, seen greater agreement between the supportive and critical groups. For instance, the supportive group agrees with the critical group that automation has its limits, that machine errors can occur and that many portfolios in



UDI are too complex to be automated. Moreover, the critical group accept that humans are imperfect decision-makers and that technology can help handle some of the challenges in UDI. In other words, the two groups do not argue from completely different positions.

That being said, the two groups still articulate discursive differences that overlap significantly with those mentioned in the previous chapter. Thus, the supportive group still bases its arguments mostly on a modernistic discourse, in which the world is seen as more or less controllable and predictable, and where human shortcomings can be tackled by machines (Greenhalgh et al. 2012:4–7). They argue that the “old” system is too fragile and prone to errors, and that automation has a lower risk of error than the human-based system. On this basis, the supportive group advocates expanded use of automation for decision-making in UDI.

The critical group on the other hand, articulates a more humanistic discourse, which emphasizes that humans are the better decision-makers (Greenhalgh et al. 2012:7–8). They argue that it is better with an imperfect but known and trustworthy system, rather than an unknown and potentially harmful one. Accordingly, they encourage different actions than the supportive group, arguing against the expansion of automation and insisting instead on the continued reliance on human decision-making in UDI. There are thus significant differences in how the two groups view the relative strengths of humans and machines as decision-makers, and in the role they believe automation should have in UDI.

## 8. Can children be subject to automated processing?

So far, we have seen how the relevant social groups draw different boundaries between objective criteria and discretion, and between the capabilities of humans and machines. In this chapter, I will build on and extend the analyses from the previous two chapters, by looking at the perhaps most controversial issues in my material: whether applications involving children can be subject to automation. As in the previous chapters, the actors were divided in two main groups: those in favor of automating some cases involving children (the Ministry, UDI and UNE), and those opposing it (NOAS, Save the children Norway, and Bufdir).<sup>16</sup>

### Why children's cases can be automated

In their written proposal, the Ministry of Justice describe both why and how children's cases can be automated. First, while the Ministry acknowledges that legal texts do not *recommend* using automation in children's cases, they also emphasize that this cannot be understood as an absolute prohibition:

It follows from point 71 in the regulation [*forordningens fortelepunkt 71*] that fully automated decisions "should not" encompass children. This can probably not be understood as an absolute prohibition, but the Ministry still believes that one should show some caution in creating the legal basis [*rettsgrunnlaget*]. (Hearing proposal, The Ministry of Justice)

The ministry thus articulates the existing legislation as a recommendation rather than an absolute prohibition, while also emphasizing the need to exercise caution when formulating the legal basis of automation. By framing automation as contentious but not prohibited, the Ministry creates an opening for the use of automation in children's cases. The next step in their proposal is to fill this opening with cases that can be determined according to objective criteria:

As the Ministry sees it, the limitations of the proposed regulation will in itself indicate that cases that affect children, also unaccompanied children, should be subject to automation. The relevant decisions will be based on objective criteria,

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<sup>16</sup> Rpf did not comment on this issue.

where children are no more vulnerable than others. (Hearing proposal, the Ministry of Justice)

The Ministry is here engaging with the argument that children are more vulnerable than adults (which we will see articulated in the next section). They argue that as long as the automation is based on objective criteria, the use of automation does not make children more vulnerable. As seen in Chapter 6 (Discretion vs. objective criteria), the Ministry views objective criteria as firm grounds for decision making. In line with this logic, it makes no difference whether the applicant is a child or an adult; as long as they can be processed according to objective criteria, the process is legitimate.

Extending this argument, the Ministry contends that automation is permissible both in cases with unaccompanied children and in cases where children apply together with their families:

Several immigration cases concern children; first and foremost children who apply together with [their] family or a parent, but also unaccompanied children. Where the child's case forms part of the parent's case, and the parent's case is subject to full automation, it is appropriate for the cases to be processed together. For instance, in allocating living spaces in reception centers, a family will be treated as a unit and placed together, and it will be artificial to separate the child's case. (Hearing proposal, the Ministry of Justice)

The Ministry of Justice argues that if the family's case is based on automation, then it would be unsuitable to separate the child's case, in part because processing the family's case together can be expedient for the family. The Ministry also adds that children arriving alone can be processed automatically. This means that a child's case is not dependent on being connected to a larger family case to be automated; any child can therefore have their case processed through automation. The Ministry does not, however, elaborate this argument further.

The legal informant from UDI agrees with the argument that children are not, in principle, more vulnerable than adults in an automated system:

As UDI is concerned, I don't see any difference. We also think that decisions that concern children should be open to automatic processing [...] I mean, we shouldn't be making the wrong decisions, regardless of whether they're children or adults. And it's true that there's more things to be aware of when it comes to

children, but the issue is still the same. If we have good enough logic and data to process their application, then I believe we should be able to do it [use full automation] on children. (Legal interviewee, UDI)

The informant argues that as long as the criteria is objective and the system is reliable, then there is no difference between processing an adult or a child; their issues are the same and can be handled in the same way. The informant later acknowledged that more discretion can be required in the cases of some children, but then also pointed out that *if* a case requires discretion, then automatic processing is out of the question: “they’re excluded, exactly because they are discretionary assessments” (legal interviewee, UDI). The informant then again assumes that the boundary between discretion and objective criteria is valid.

Similar arguments were offered by UNE, who despite acknowledging that children in general are more vulnerable than adults, emphasize that this does *not* apply to the automated decision-making process (for the same reasons articulated by UDI). Adding to this, UNE also put greater emphasis on the uncertainty and negative consequences children face when humans individually process their applications. In their written comment, they argue:

UNE agrees with the proposal that full automation in UDI, where the decision is based on objective criteria, can also apply to cases involving children [...] Several considerations suggest that cases involving children should also be included. Because children are generally more vulnerable than adults, they will often be more negatively affected by living in uncertainty concerning their situation while awaiting a decision. In cases involving children, then, it is particularly important to avoid long case processing time. Full automation is assumed to contribute to avoiding this. In cases where the requirements cannot be assessed based on objective criteria alone, it will not be justified to use automated decisions.  
(Hearing document, UNE)

As long as objective criteria can be used, UNE believes that children can benefit from automation because this can reduce the negative effects of living in limbo while waiting. This argument was elaborated in the interview with UNE, where the informant emphasizes that they have a lot of firsthand experience with children suffering from a long waiting period:

[...] we see that it’s a severe problem, the current processing time, especially for children. They become depressed, they perform poorly in school, they don’t know whether their parents will be deported or not. We’re seeing that to a great extent in

UNE, because maybe they've gotten a deportation order [*utvisningsvedtak*] from UDI, and then it takes a while here, and ... yeah. So it really affects children to just sit and wait. And that's why I think that if you can do it [use full automation], and don't require the use of discretion, then it's positive. And it's UDI, not UNE, which is also a difference, because then you still have an appellate body [that applicants can appeal to if their application is rejected]. (Interview, UNE)

By using automation in children's cases, UDI might reduce the waiting time and make their situation more manageable, according to this informant. UNE therefore believes automation is warranted, especially because the applicants have the possibility to appeal to UNE if they believe a wrong decision has been made. Using automation in these cases, can therefore be in the child's best interest, according to UNE.

### **Why children's cases cannot be automated**

On the other side of this debate is the group consisting of Save the Children Norway, NOAS and Bufdir, who all oppose the use of automation in children's cases. They offer a range of different arguments, including that children are especially vulnerable, have their own rights, and that their individual interests will not be considered in an automated process.

Beginning with the emphasis on children as vulnerable, the written comment from Save the Children Norway argues that the Ministry's proposal is not in line with the UN Children's rights convention:

The biggest drawback is that we cannot see how one can do a good assessment of the child's best interest in an automated decision [making process]. Following article 3 in the UN's convention on the rights of the child, the child's best interest should be a fundamental concern in *all* actions concerning children. (Hearing document, Save the Children Norway)

A similar statement was made in NOAS' written comment, where they claim that automation is not in the child's best interest:

NOAS are critical of the Ministry's proposal. As they themselves state in the hearing proposal, the immigration authorities are obligated to make individual assessments in cases concerning children. We can therefore not see how the child's best interest will be assessed in an automated process, and the Ministry

does not discuss how the child's right to be heard will be upheld. (Hearing document, NOAS)

Both organizations argue that the proposal from the Ministry does not convince them that the automated process will ensure the considerations necessary in children's cases. They question whether automation can fulfil these considerations and critique the proposal for not discussing if children's rights are still being maintained. This issue was elaborated in the interview with Save the children Norway, where the informant argues why the child's best interests cannot be maintained when using automation:

[...] we feel that it's inherently problematic, because assessments of the child's best interest involve a lot of individual assessments. So how one can do a good assessment of the child's best interest, in line with the commitments of the administration and the authorities, when this is automated, that's something we have a lot of questions about. Because an assessment of the child's best interests is a discretionary assessment. That goes without saying. (Interview, Save the Children Norway)

The informant argues that determining what's in the child's best interest inevitably requires discretion. Accordingly, the child's best interests cannot be ensured through objective criteria and automation; this can only be done through a more comprehensive assessment:

[...] with children, it's important to see the full picture. And that's where it gets difficult. And when it comes to age ... what age [they are] is in principle an objective criterion, but then again, that's only one of several things one need to consider when it comes to children. (Interview, Save the Children Norway)

The informant argues that by focusing on objective criteria in an automatic process, the focus might narrowly be placed on criteria such as age, instead of an overall assessment of the individual child's needs. This is problematic, according to the informant, because objective criteria such as age might not be the most important for making decisions in a child's case – and because figuring out whether age is relevant or not, ultimately requires a discretionary assessment.

Save the Children Norway also specifically addressed the Ministry's proposition that the child's case can be automated if the family's case is automated. In their written comment, they argue that this will not be in the child's best interest:

[We have] difficulties understanding in what cases the Ministry believes that children are not more vulnerable than adults. We want to emphasize that children are their own legal entities [*egne rettssubjekter*], and that the child's interests can differ from the parent's interests. (Hearing document, Save the Children Norway)

The written comment thus claims that even in "simple" automated cases, the child's interests might not be the same as the rest of the family's interests. In the interview, the informant from Save the Children Norway elaborates this issue as follows:

[...] in asylum cases, children are separate legal entities and can have separate reasons for being granted residence [..., including] child persecution, child soldiers, forced marriage. And it might also be something within the family – that there isn't a good relation between the child and the parents. [With automated decisions], these differences won't surface [as they would] in an individual assessment of the child's situation. It won't be handled as it should be, according to article 3 of the children's convention and the constitution. (Interview, Save the Children Norway)

The informant argues that children can have other interest than their family, and that they in some cases even need to be protected from their parents. According to the informant, this applies not only to asylum cases (where the child is especially vulnerable and automation should be off the table), but also in cases based on family reunification, which are already being automated. The informant points to the UN convention and argues that the child's best interests might not be discovered in an automated process if the family's case is treated together.

A final argument against using automation in these cases is that the consequences of doing so has not been adequately investigated and described in the written proposal from the Ministry. The informants argue that by expanding the use of automation on these uncertain grounds, there might be unforeseen consequences that might have an impact on the vulnerable children. As the written comment from Save the Children Norway makes clear: "We believe that the regulation [*bestemmelsen*] is too unclear and that the consequences for children are too poorly investigated" (hearing document, Save the Children Norway). A similar point was articulated

in the interview with the informant from Bufdir, who illustrated the potential for unintended consequences with an example from the child protection services, where an automated system might have contributed to putting vulnerable children in harm's way:

[...] issues often arise that one couldn't foresee. For instance, there have been cases in the child protection services where automated systems use the [National Population] Register and other data systems. And then there's been some examples where the child protection services have assumed care [*overtatt omsorgen*] for the child [...], but in the [automated] communication between the school and the home, these automated systems rely on information from the National Population Register, which still states that the parents have parental responsibility, meaning that the information goes from the school and to the parents. These systems are so big, and there are so many issues woven into them, that you cannot account for everything before it's rolled out. And then you discover things afterwards, and these cases can and are serious, because you've decided that the parents shouldn't know where the child is, but still there's been cases where they have received information about which school the child attends. (Interview, Bufdir)

When using a system that only bases its decision on the data given to it, we can expect unforeseen errors to occur, according to this informant. The informant is also concerned about these errors often being uncovered *after* they have potentially put a child in danger. Thus, given the complexity of the system and the situation surrounding these children, automation may prove to be a risky prospect in children's cases, according to the informant from Bufdir.

In sum, the two different social groups largely continue the use of the discourses identified above. Reflecting a modernistic discourse, the supportive group sees automation as suitable for children's cases (as long as they can be decided based on "objective criteria"), and as something that can improve the welfare of the children waiting in limbo, as an automated system can make decisions faster and more efficiently than what a human professional can. Automation is thus considered an effective solution to some of the problems of the welfare state (Greenhalgh et al. 2012:4–7). In contrast, the critical group base their arguments on a more humanistic discourse, where automation is considered a poor alternative to human decision-making when processing children's cases (Greenhalgh et al. 2012:7–8). Although they agree that living in limbo is especially hard for children, they argue that the technology is



unable to have the child's best interest in mind when processing a case, and that automation thus might create more problems than it solves. The issue of subjecting children to automation thus also reflects the two other conflicts represented above – discretion vs. objective criteria and humans vs. machines – and sees the actors drawing similar boundaries around what is acceptable and unacceptable uses of automation, and around who is the best decision-maker in children's cases.

## 9. Discussion and concluding remarks

Drawing on SCOT and discourse analysis, this thesis has explored how relevant social groups interpret and negotiate a proposed expansion of automated decision-making in the Norwegian Directorate of Immigration. Based on documents and interviews with key actors, I have identified three central discursive struggles surrounding the proposal. The first concerns the boundary between *discretion and objective criteria*. A group of supportive actors assume this to be a valid distinction, claiming that “simple” and “straightforward” cases are suitable for automation, whereas “complicated” cases (i.e. those that cannot be decided based solely on objective criteria) require handling by human case-workers using discretion. The other group of more critical actors question the validity of the distinction between discretion and objective criteria. In their view, objective criteria are often less objective than presumed (in part because drawing the line between discretion and objective criteria in itself requires discretion); they also fear that these criteria can be given undue weight in the decision-making process, at the cost of other relevant but less “objective” criteria.

The second conflict concerns the relative strengths and weaknesses of *humans and machines as decision-makers*. The “supportive” group sees machines as more suited for making “routine” decisions, in part because humans are more prone to making errors. This group considers machine error unlikely because of the strict requirements for the technology – and if errors do occur, they consider the “human input” to be the most likely explanation. The “critical” group on the other hand, argues that the decisions in UDI are too complex and important to be made by a machine. They argue that machines can make errors on a systematic level (thus hurting more people); that it is more difficult to detect errors and control the machines; that this new and unknown system can have unintended consequences; and that machines are considered less trustworthy than humans.

The third conflict concerns whether *children’s cases* can be subject to automation. In addition to raising some new concerns, this issue also acted as a prism for the other two conflicts. The “supportive” group argued that as long as the case is based on objective criteria, children’s cases can and should be automated. These are cases where children are not considered more vulnerable than adults, and where automation will reduce the waiting time for the children. The “critical” group on the other hand, argues that children *are* more vulnerable than adults, also in cases with “objective” criteria, and that children have their own rights and interest

which might conflict with the family. They also argue that the children's best interest requires a discretionary assessment by a human case-worker.

These three conflicts in turn reflect two primary discourses. On the one hand, the supportive group draws their arguments mostly from a *modernistic discourse*, where technology is seen as a reliable and cost-effective solution, especially within public agencies that struggle with case overload. A modernistic discourse typically represents technology as a solution to these challenges, and often frame it as something that can offer better, safer, more efficient and more reliable services. On the other hand, the critical group articulates a more *humanistic discourse*, which emphasizes the human decision-maker's uniqueness, trustworthiness and "personal touch". This discourse sees technology as prone to failure and not always fit for purpose – at times even offering more problems than solutions.

We thus have two primary discourses that struggle against one another to become the hegemonic understanding of automation. As the struggle is part of a hearing process, becoming the dominant understanding will influence not just the meaning, but also the development and use of automation in UDI, as this discourse will be materialized into legal regulations. Thus, if the modernistic discourse becomes prominent, one can assume that the use of automation will be expanded within UDI. If the humanistic discourse gains hegemony, then the use of automation might continue as it is or even face more restrictions. How the different actors understand the technology, then, has an impact on how they act towards the technology – whether they support it, use it, counteract it or try to change it.

### **Negotiating technology**

This thesis has been motivated by SCOT and its skepticism towards technological determinism – of seeing technology as a driver of history, more or less independently of the actors who make it (MacKenzie and Wajcman 1999:4–6). SCOT argues that the development and introduction of technology is not a linear process but a multidirectional flux based on negotiations between relevant social groups (Pinch and Bijker 2012). This is particularly evident in the case of UDI, where the proposal to expand the use of automation has to go through an institutionalized negotiation process, in which the different actors are invited to express their opinion about the proposed use of the technology. While the actors' influence varies, this process in itself shows that automation, in the present case, is not an independent and deterministic "force", but rather something that can be influenced through the hearing process. This democratic approach is typical for major technological changes in public

agencies, especially when the technologies intersect with broader political issues (such as immigration) (Christensen et al. 2015).

In focusing on an institutionalized negotiation process in the public sector, the thesis differs from most studies within SCOT, which have mostly focused on how technologies are negotiated between producers and different groups of users (see Chapter 2). A classic example of SCOT research is Bijker's (1997) study of how the bicycle was negotiated between relevant social groups (e.g. young men, women and older users) and manufacturers (Bijker 1997). This differs in many ways from the institutionalized negotiations of technology in a public agency, where the negotiations are, to a much larger extent, based on a formalized process with clear guidelines, strict regulations and a greater insistence on public accountability (Christensen et al. 2015:15–20).

As mentioned, SCOT also theorizes that technological controversies eventually reach closure through a stabilization process (Pinch and Bijker 2012:37–39). As the hearing process is still ongoing (in part because of the corona crisis), this thesis cannot cover the issues of closure and stabilization. This means that the discursive struggle is still an ongoing struggle.

Nevertheless, the thesis highlights the importance of looking at how public agencies and non-governmental organizations debate the introduction of technologies, as this can teach us valuable lessons about how technologies are negotiated through democratic processes more generally. While of course not the only arena where technology is negotiated (other channels include lobbying and the media (Grindheim et al. 2017:288–90)), the hearing process represents a central and readily available source of data on how technology is negotiated in the public sector.

### **Knowledge, discourses and values**

As demonstrated in the results section, the actors involved in this thesis have varying knowledge of and experience with automation in UDI (and in general). This varying knowledge has likely affected how the actors perceive the technology. For instance, it is likely that the critical group would have voiced somewhat different criticisms had they had more precise information about automation (something the actors themselves acknowledged). Some might take this point further and argue that the critical group would have been *less* critical – or simply had no grounds of being critical – if they had had the same information as the supportive group. However, more information does not guarantee less criticism; it might

simply raise new questions and even make the critical groups *more* critical (Greenhalgh et al. 2017).

In other words, differing viewpoints and arguments reflect not only differences in knowledge, but also different discourses and values. This point is captured in SCOT's notion of interpretative flexibility, which refers to how a technological artefact can be understood in many different ways, based not just on a groups' knowledge and experience, but also its norms and values (Kline and Pinch 1999:113–14). As shown, the conflicts identified here all reflect established discourses when debating technology, with each emphasizing different values (e.g. the modernistic discourse valuing stability, reliability and cost-effectivity, and the humanistic discourse emphasizing “the human-touch” and “tailor-made” decisions). The conflicts also involve conventional struggles over symbolic boundaries (Johannessen et al. 2018:130–33; Lamont and Molnár 2002:167–69) – for instance, concerning the validity of the distinction between discretion and objective criteria.

These discourses – and their accompanying boundaries, values and actions – are thus unlikely to be unique findings of this thesis. Instead, we can expect to find similar struggles and arguments in other cases where technologies are proposed and negotiated between various actors. Exactly how this plays out is something that needs to be studied empirically. Nevertheless, the findings of this thesis tell us something more general about the cultural preconditions of introducing new technologies in the public sector.

### **Limitations and future research**

The thesis has several limitations. For one, hearing processes are only one avenue for negotiating technology in the public sector; other avenues including lobbying, arranging demonstrations and protests, participating in public debates and creating media attention about their cause (Grindheim et al. 2017:288–90) – all of which can be equally or more influential. I therefore encourage further exploration of how hearings relate to other ways of negotiating technology.

Moreover, the thesis is based on only one case: automation in UDI. While similar conflicts, boundaries and discourses can likely be identified in other public agencies, there is a need for empirical research to assess the transferability of the present findings to other cases. Doing so could be a rewarding line of research; at present, there are many other public agencies and organizations that have introduced, or plan to introduce, automation in their tasks, including agencies such as the Norwegian Labor and Welfare Administration (NAV), the Norwegian

Tax Administration and the State Educational Loan Fund. These all represents avenues for further research, especially considering how relatively few studies have researched political debates about the introduction of new technology.

Closely related, it would also be interesting to study how technology is proposed and introduced in private rather than public organizations. This would likely have shown different negotiation processes, in part because the private sector is characterized by a different institutional logic and typically faces fewer bureaucratic hurdles (Christensen et al. 2015). Exploring the differences between these two sectors could therefore be another relevant topic of study.

The thesis has also not been able to address all relevant social groups involved in the negotiation of technologies in public (or private) organizations. For one, it would have been interesting to study how case workers use and negotiate the technology in question (for illustration, see Busch 2019). Adding to this, it could have been rewarding to explore the media's influence on the use of automation in the UDI, seeing how they have written about how applicants are being granted residence in Norway without humans involved (Søndel 2018) and how automation (and similar technologies) are revolutionizing decision-making in public agencies (Jørgenrud 2018). The informants from UDI all argued that it could be difficult to handle the media coverage on the use of automation, since the coverage (in their view) often portrayed the technology wrongly and too critically. Studying how automation (and other technologies) is discussed and represented in the media could therefore give us a deeper understanding of another critical actor involved in the negotiation of technology.

In short, then, there are several ways forward for studying the negotiation of technologies in UDI and other organizations. As these can help us understand the cultural preconditions for introducing technologies in organizations more generally, they are highly encouraged.

## References

- Aspøy, Arild. 2020. "Justis- og beredskapsdepartementet." *Store norske leksikon*. Retrieved March 22, 2020 ([http://snl.no/Justis-\\_og\\_beredskapsdepartementet](http://snl.no/Justis-_og_beredskapsdepartementet)).
- Bellamy, Drew, and Luka Pravica. 2011. "Assessing the Impact of Driverless Haul Trucks in Australian Surface Mining." *Resources Policy* 36(2):149–58.
- Bijker, Wiebe E. 1997. *Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change*. Cambridge: MIT Press.
- Bijker, Wiebe E. 2015. "Technology, Social Construction Of." Pp. 135–40 in *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)*, edited by J. D. Wright. Oxford: Elsevier.
- Bijker, Wiebe E., Thomas Parke Hughes, and Trevor Pinch. 2012. *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*. Cambridge: MIT Press.
- Bissell, David, Thomas Birtchnell, Anthony Elliott, and Eric L. Hsu. 2020. "Autonomous Automobilities: The Social Impacts of Driverless Vehicles." *Current Sociology* 68(1):116–34.
- Braun, Virginia, and Victoria Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3(2):77–101.
- Brinkmann, Svend, and Steinar Kvale. 2015. *InterViews*. Third edition. London: SAGE Publications.
- Brynjolfsson, Erik, and Andrew McAfee. 2014. *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. New York: W. W. Norton & Company.
- Bufdir. 2016. "Bufdir - About Us." *Bufdir.No | Barne-, Ungdoms- Og Familiedirektoratet*. Retrieved March 23, 2020 ([https://bufdir.no/en/English\\_start\\_page/About\\_us/](https://bufdir.no/en/English_start_page/About_us/)).
- Busch, Peter André. 2019. "Digital Discretion Acceptance and Impact in Street-Level Bureaucracy." PhD Dissertation, University of Agder, University of Agder.

- Chapman, S. D. 1990. "The Cotton Industry in the Industrial Revolution." Pp. 1–64 in *The Industrial Revolution A Compendium, Studies in Economic and Social History*, edited by L. A. Clarkson. London: Macmillan Education UK.
- Christensen, Tom, Morten Egeberg, Per Lægreid, Paul G. Roness, and Kjell Arne Røvik. 2015. *Organisasjonsteori for offentlig sektor*. 3. utg. Oslo: Universitetsforlaget.
- Dassbach, Carl H. A. 1986. "Industrial Robots in the American Automobile Industry." *Insurgent Sociologist* 13(4):53–61.
- Fangen, Katrine. 2004. *Deltagende observasjon*. Fagbokforlaget.
- Flores, Anthony W., Kristin Bechtel, and Christopher T. Lowenkamp. 2016. "False Positives, False Negatives, and False Analyses: A Rejoinder to Machine Bias: There's Software Used across the Country to Predict Future Criminals. And It's Biased against Blacks." *Federal Probation* 80(2):38–46.
- Ford, Martin. 2015. *Rise of the Robots: Technology and the Threat of a Jobless Future*. New York: Basic Books.
- Greenhalgh, Trisha, Rob Procter, Joe Wherton, Paul Sugarhood, and Sara Shaw. 2012. "The Organising Vision for Telehealth and Telecare: Discourse Analysis." *BMJ Open* 2(4):e001574.
- Greenhalgh, Trisha, Joseph Wherton, Chrysanthi Papoutsis, Jennifer Lynch, Gemma Hughes, Christine A'Court, Susan Hinder, Nick Fahy, Rob Procter, and Sara Shaw. 2017. "Beyond Adoption: A New Framework for Theorizing and Evaluating Nonadoption, Abandonment, and Challenges to the Scale-Up, Spread, and Sustainability of Health and Care Technologies." *Journal of Medical Internet Research* 19(11):e367.
- Grimen, Harald, and Anders Molander. 2008. "Kapittel 10: Profesjon Og Skjønn." Pp. 179–96 in *Profesjonsstudier*, edited by A. Molander and L. I. Terum. Oslo: Universitetsforlaget.
- Grindheim, Jan Erik, Knut Heidar, and Kaare Strøm. 2017. *Norsk politikk*. Oslo: Universitetsforlaget.
- Groover, Mikell P. 2010. *Fundamentals of Modern Manufacturing: Materials, Processes, and Systems*. John Wiley & Sons.



- Jaspers, Eva. 2016. "Values - Sociology - Oxford Bibliographies." Retrieved March 16, 2020 (<https://www.oxfordbibliographies.com/view/document/obo-9780199756384/obo-9780199756384-0182.xml>).
- Johannessen, Beatrice I. 2018. "Hvordan Representeres Kunstig Intelligens i Meningsartikler i Norske Riksaviser?" Bacheloroppgave, Universitet i Oslo, Oslo.
- Johannessen, Lars E. F., Tore Witsø Rafoss, and Erik Børve Rasmussen. 2018. *Hvordan bruke teori?: Nyttige verktøy i kvalitativ analyse*. Oslo: Universitetsforlaget.
- Jørgenrud, Marius. 2018. "Dataprogram kan nå fatte UDI-vedtak uten menneskers innblanding." *Digi.no*. Retrieved May 5, 2020 (<https://www.digi.no/artikler/dataprogram-kan-na-fatte-udi-vedtak-uten-menneskers-innblanding/436327>).
- Jørgensen, Marianne, and Louise Phillips. 2002. *Discourse Analysis as Theory and Method*. Thousand Oaks: SAGE Publications Ltd.
- Kline, Ronald, and Trevor Pinch. 1996. "Users as Agents of Technological Change: The Social Construction of the Automobile in the Rural United States." *Technology and Culture* 37(4):763–95.
- Kline, Ronald, and Trevor Pinch. 1999. "The Social Construction of Technology." Pp. 113–15 in *The social shaping of technology*, edited by D. A. MacKenzie and J. Wajcman. Maidenhead UK: Open University Press.
- Lamont, Michèle, and Virág Molnár. 2002. "The Study of Boundaries in the Social Sciences." *Annual Review of Sociology* 28(1):167–95.
- Lenert, Edward. 2004. "A Social Shaping Perspective on the Development of the World Wide Web: The Case of ICraveTV." *New Media & Society*.
- MacKenzie, Donald. 2019. "How Algorithms Interact: Goffman's 'Interaction Order' in Automated Trading?" *Theory, Culture & Society*.
- MacKenzie, Donald, and Judy Wajcman. 1999. *The Social Shaping of Technology*. Maidenhead UK: Open University Press.
- Merriam-Webster. 2020. "Definition of PROFILING." *Merriam-Webster*. Retrieved June 7, 2020 (<https://www.merriam-webster.com/dictionary/profiling>).

- Merton, Robert K. 1995. "The Thomas Theorem and The Matthew Effect?" *Social Forces* (74(2)):379–424.
- NOAS. n.d. "Slik jobber vi." *Norsk organisasjon for asylsøkere*. Retrieved March 22, 2020 (<https://www.noas.no/om/>).
- Nof, Shimon Y. 2009a. "3. Automation: What It Means to Us Around the World." Pp. 13–52 in *Springer Handbook of Automation*, edited by S. Y. Nof. Springer Science & Business Media.
- Nof, Shimon Y., ed. 2009b. *Springer Handbook of Automation*. Berlin: Springer Science & Business Media.
- Norwegian Centre for Research Data (NSD). 2020. "Hva må jeg informere om?" Retrieved May 15, 2020 ([https://nsd.no/personvernombud/hjelp/informere\\_om.html](https://nsd.no/personvernombud/hjelp/informere_om.html)).
- Oxford Reference. 2020. "Goal Displacement." *Oxford Reference*. Retrieved May 26, 2020 (<https://www.oxfordreference.com/view/10.1093/oi/authority.20110803095856969>).
- Phillips, Nelson, and Cynthia Hardy. 2002. "What Is Discourse Analysis?" Pp. 1–19 in *Discourse Analysis*. Thousand Oaks California: SAGE Publications, Inc.
- Pinch, Trevor, and Wiebe E. Bijker. 2012. "The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other." Pp. 11–44 in *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, edited by W. E. Bijker, T. P. Hughes, and T. Pinch. Cambridge: MIT Press.
- Rpf. 2015. "Historien til Rettspolitisk forening – Rettspolitisk forening." Retrieved March 22, 2020 (<http://www.rpf.no/?p=54>).
- Rubin, Herbert J., and Irene Rubin. 1995. *Qualitative Interviewing: The Art of Hearing Data*. London: Sage Publications.
- Save the Children Norway. n.d. "Om oss - English." *Redd Barna*. Retrieved March 23, 2020 (<https://www.reddbarna.no/om-oss/english>).
- Silverman, David. 2005. *Doing Qualitative Research: A Practical Handbook*. London: SAGE.

- Søndel, Geir. 2018. "Nå Kommer Robotene Til UDI. For Første Gang Har et Dataprogram Gitt En Familie Oppholdstillatelse i Norge." *Aftenposten*. Retrieved November 11, 2019 (<https://www.aftenposten.no/article/ap-3jgrLe.html>).
- Stilgoe, Jack. 2018. "Machine Learning, Social Learning and the Governance of Self-Driving Cars." *Social Studies of Science* 48(1):25–56.
- Stortinget. 2018. "Om høringer." *Stortinget*. Retrieved April 10, 2020 (<https://www.stortinget.no/no/Stortinget-og-demokratiet/Arbeidet/Horinger/>).
- Susskind, Richard E., and Daniel Susskind. 2015. *The Future of the Professions: How Technology Will Transform the Work of Human Experts*. Oxford University Press.
- Taylor, Stephanie. 2001. "Locating and Conducting Discourse Analytic Research." Pp. 5–48 in *Discourse as Data: A Guide for Analysis*. London: SAGE.
- The Ministry of Justice and Public Security. 2019a. "Høring - endringer i utlendingsforskriften om bruk av automatiserte avgjørelser, innhenting av opplysninger fra andre offentlige myndigheter m.m." *Regjeringen.no*. Retrieved November 11, 2019 (<https://www.regjeringen.no/no/dokumenter/horing---endringer-i-utlendingsforskriften-om-bruk-av-automatiserte-avgjorelser-innhenting-av-opplysninger-fra-andre-offentlige-myndigheter-m.m/id2662215/>).
- The Ministry of Justice and Public Security. 2019b. "Høringsdokument - endringer i utlendingsforskriften om bruk av automatiserte avgjørelser, innhenting av opplysninger fra andre offentlige myndigheter m.m." Hearing proposal, *Regjeringen.no*, Oslo.
- Tjernshaugen, Andreas, Ole T. Berg, and Jon Gisle. 2018. "Høring." *Store norske leksikon*. Retrieved March 22, 2020 (<http://snl.no/h%C3%B8ring>).
- Tokic, Damir. 2018. "BlackRock Robo-Advisor 4.0: When Artificial Intelligence Replaces Human Discretion." *Strategic Change* 27(4):285–90.
- Torrance, Jack. 2017. "Robots for Trump: Did Automation Swing the US Election?" *Management Today*.
- UDI. n.d. "About the UDI: Who Does What in the Immigration Administration?" *UDI*. Retrieved March 22, 2020a (<https://www.udi.no/en/about-the-udi/about-the-udi-and-the-immigration-administration/who-does-what-in-the-immigration-administration/>).

UDI. n.d. “Om UDI: Organisasjonskart og avdelingsbeskrivelser.” *UDI*. Retrieved March 22, 2020b (<https://www.udi.no/en/about-the-udi/about-the-udi-and-the-immigration-administration/organisasjonskart-og-avdelingsbeskrivelser/#link-4131>).

UNE. 2017. “This Is the Immigration Appeals Board - UNE.” Retrieved March 22, 2020 (<https://www.une.no/en/about-une/this-is-une/>).

Vagia, Marialena, Aksel A. Transeth, and Sigurd A. Fjerdings. 2016. “A Literature Review on the Levels of Automation during the Years. What Are the Different Taxonomies That Have Been Proposed?” *Applied Ergonomics* 53:190–202.

Wajcman, Judy. 2017. “Automation: Is It Really Different This Time?” *The British Journal of Sociology* 68(1):119–27.

Werth, Robert. 2019. “Risk and Punishment: The Recent History and Uncertain Future of Actuarial, Algorithmic, and ‘Evidence-Based’ Penal Techniques.” *Sociology Compass* 13(2):e12659.

All references used in this thesis has been included in the reference list.

Word count: 20808

# Appendix

## Appendix 1: Interview guide

### Intervjuguide

Er det greit at jeg gjør opptak? Det er kun for å få bedre notater og privatbruk.

#### Generell info om meg og mitt prosjekt:

Prosjektet mitt handler om å kartlegge forskjellige relevante aktører, og finne ut hva de mener om automatiserte avgjørelser i UDI. Masteren er samfunnsvitenskapelig, og ønsker å se på hvordan ny teknologi blir mottatt og forstått av forskjellige aktører, samt å se på hva slags ringvirkninger automatiserte avgjørelser har.

#### **Forbehold:**

- **Jeg er verken jurist eller teknolog, men sosiolog**, jeg ønsker å komme med et nysgjerrig utenfrablakk (se ting som folk i feltet tar for gitt)
- Jeg vil kanskje derfor stille noen litt **naive spørsmål**
- Selv om vi kommer til å fokusere litt på høringsbrevet og høringssvaret deres, er jeg **ikke nødvendigvis bare interessert i disse**, men mer **generelt om automatisering** og digitalisering i UDI og andre offentlige tjenester

Er det noe du lurer på?

#### Generelt om informanten og organisasjon:

- Hva er **[organisasjon]**
- Hva jobber du som i [organisasjon]
- Hva er din **utdanning og arbeidsbakgrunn?**

#### Om høringsvar-prosessen:

- Kan du fortelle meg litt om **prosessen** med å utforme høringssvaret deres?
- Hvem var involvert?
- Hvordan reagerte dere da dere først leste høringsbrevet fra departementet?
- Hvordan gikk dere fram for å utforme svaret?

#### Innhold i høringsvar:

- Kan du fortelle meg litt om **innholdet** i høringssvaret deres?
- Hva tenker du er de mest sentrale temaene i høringssvaret deres?
- Tenker du at det er noen tilfeller der det er **greit å bruke automatisering** i beslutningstaking? **Hvilke?**

- Hva tenker du er **ikke grei bruk**?
- Har du noen eksempler på saker dere har fått der **automatisering har vært i bruk**?
- Høringsbrevet understreker jo at teknologien ikke skal brukes i ”**skjønnsmessige avgjørelser**” – har du noen tanker om det?
- Er det klare **grenser mellom skjønn og ikke-skjønn** her, tenker du?
- Har du noen tanker om **hvordan departementet kan konkretisere** hva de mener med ”**forsvarlig skjønn**”?
- Forresten, bare for å forsikre meg om at vi er sånn ca på samme side: Hva forbinder du med **begrepe automatiserte og maskinelle avgjørelser**?
- Tror du høringssvaret deres vil **få noe å si for bruken av automatisering i UDI**?
- Hvordan jobber dere ellers for **å få gjennomslag for synspunktene** deres, i saker som denne, og for øvrig også ellers?

### Utover høringssvaret – om automatisering mer generelt:

- Har du noen **tanke**r om høringsbrevet som ikke ble dekt av **høringssvaret** deres?
  - Tenker du feks at det er noen **fordeler** med en slik teknologi?
  - Ser du for deg noen **fallgruver** som dere ikke tok opp? Hva var evt grunnene til at de ikke kom med i høringssvaret?
  - Tenker du at automatiseringen er en del av **en større trend** i feltet deres?
  - Hva tenker du om evt denne trenden?
  - Har du noen andre eksempler fra denne trenden?
  - Hvis vi skal prøve å se litt inn i **framtiden**: hva tenker du er **skrekk-scenariot med automatisering i UDI** (eller tilsvarende organisasjoner)?
  - Hva tenker du eventuelt er **drømme-scenariot**?
- 
- Er det noe mer du føler **vi ikke har dekt** – noe du vil legge til før vi runder av?
  - Er det greit at jeg tar **kontakt i ettertid** hvis jeg har noen **oppfølgingspørsmål**? (e-post)

## **Appendix 2: Consent form**

### **Vil du delta i et forskningsprosjekt om automatisering av profesjonell beslutningstaking?**

Dette er et spørsmål til deg om å delta i et forskningsprosjekt om automatisering av profesjonell beslutningstaking. I dette skrivet får du informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

#### **Formål**

Formålet med prosjektet er å få en dypere forståelse av innføring av teknologi som automatiserer profesjonell beslutningstaking. Prosjektet ønsker å se på hva forskjellige aktører og organisasjoner mener om en slik teknologi, hva de ser som fordeler og ulemper med teknologien, og hva de mener den har å si for forskjellige profesjonelle felt og organisasjoner.

#### **Hvem er ansvarlig for forskningsprosjektet?**

Prosjektet er en masteroppgave innen programmet Organisasjon, ledelse og arbeidsliv (OLA) ved Universitetet i Oslo. Oppgaven veiledes av førsteamanuensis Lars Klemsdal (UiO).

#### **Hva innebærer det for deg å delta?**

Hvis du velger å delta, vil dette innebærer det å la seg intervju (helst ansikt til ansikt, eventuelt over telefon). Dette vil ta omtrent 60 minutter. Alle deltakerne vil intervjues minst én gang, og for noen kan det også være aktuelt med ett eller flere oppfølgingsintervjuer.

#### **Det er frivillig å delta**

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle opplysninger om deg vil da bli slettet, med mindre de allerede er brukt i forskning. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

#### **Ditt personvern – hvordan dine opplysninger brukes og oppbevares**

Personopplysninger vil nedtegnes på lydbånd, og senere transkriberes som tekst. Informasjonen som registreres skal kun brukes som beskrevet i hensikten med studien. All informasjon som nedtegnes vil bli behandlet uten navn eller andre direkte gjenkjennende opplysninger, og lagres via kodenøkkel som oppbevares adskilt fra øvrige data og slettes ved prosjektslutt. Forskeren er underlagt taushetsplikt.

#### **Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?**

Prosjektet skal etter planen avsluttes 31.12.2020. Personopplysninger og opptak vil slettes ved prosjektslutt.

#### **Dine rettigheter**

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

- innsyn i hvilke personopplysninger som er registrert om deg,
- å få rettet personopplysninger om deg,
- få slettet personopplysninger om deg,

- få utlevert en kopi av dine personopplysninger (dataportabilitet), og
- å sende klage til personvernombudet eller Datatilsynet om behandlingen av dine personopplysninger.

### **Hva gir oss rett til å behandle personopplysninger om deg?**

Vi behandler opplysninger om deg basert på ditt samtykke.

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

### **Hvor kan jeg finne ut mer?**

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

- Masterstudent Beatrice Johannessen, student ved OLA (UiO), tlf: 97723732, epost: [beatrij@student.sv.uio.no](mailto:beatrij@student.sv.uio.no)
- Veileder Lars Klemsdal, førsteamanuensis ved UiO, tlf: 22857089 , epost: [lars.klemsdal@sosgeo.uio.no](mailto:lars.klemsdal@sosgeo.uio.no)
- Prosjektets personvernombud: [personvernombud@uio.no](mailto:personvernombud@uio.no)
- NSD – Norsk senter for forskningsdata AS, tlf: 55582117, epost: [personverntjenester@nsd.no](mailto:personverntjenester@nsd.no)

Med vennlig hilsen,  
Beatrice Johannessen

### **Samtykkeerklæring**

Jeg har mottatt og forstått informasjon om prosjektet ”automatisering av profesjonell beslutningstaking” og har fått anledning til å stille spørsmål. Jeg samtykker til:

- deltakelse i intervju
- publisering av bakgrunnsopplysninger som kan være indirekte identifiserbare

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet, ca. 31.12.2020

---

(Signert av prosjektdeltaker, dato)



## Appendix 3: Ethical approval

Meldeskjema for behandling av personopplysninger

03.02.2020, 11:03



### NSD sin vurdering

#### Prosjekttittel

Automatisering av profesjonell beslutningstaking

#### Referansenummer

132918

#### Registrert

20.10.2019 av Beatrice Irene Johannessen - beatrij@student.sv.uio.no

#### Behandlingsansvarlig institusjon

Universitetet i Oslo / Det samfunnsvitenskapelige fakultet / Institutt for sosiologi og samfunnsgeografi

#### Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Lars Klemsdal, lars.klemsdal@sosgeo.uio.no, tlf: 22857089

#### Type prosjekt

Studentprosjekt, masterstudium

#### Kontaktinformasjon, student

Beatrice Irene Johannessen, beatrij@student.sv.uio.no, tlf: 97723732

#### Prosjektperiode

01.01.2020 - 31.12.2020

#### Status

28.10.2019 - Vurdert

#### Vurdering (1)

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##### 28.10.2019 - Vurdert

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet med vedlegg 28.10.2019. Behandlingen kan starte.

### MELD VESENTLIGE ENDRINGER

Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde:

[https://nsd.no/personvernombud/meld\\_prosjekt/meld\\_endringer.html](https://nsd.no/personvernombud/meld_prosjekt/meld_endringer.html)

Du må vente på svar fra NSD før endringen gjennomføres.

### TYPE OPPLYSNINGER OG VARIGHET

Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 31.12.2020.

### LOVLIG GRUNNLAG

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

### PERSONVERNPRINSIPPER

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

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

### DE REGISTRERTES RETTIGHETER

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

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

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

### FØLG DIN INSTITUSJONS RETNINGSLINJER

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

Dersom du benytter en databehandler i prosjektet må behandlingen oppfylle kravene til bruk av databehandler, jf. art 28 og 29.

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

#### OPPFØLGING AV PROSJEKTET

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

Lykke til med prosjektet!

Tlf. Personverntjenester: 55 58 21 17 (tast 1)