

In search of the citizen in the datafication of public administration

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Abstract

The administrative reform of the datafied public administration places great emphasis on the classification, control, and prediction of citizen behavior and therefore has the potential to significantly impact citizen–state relations. There is a growing body of literature on data-oriented activism which aims to resist and counteract existing harmful data practices. However, little is known about the processes, policies, and political-economic structures that make datafication possible. There is a distinct research gap on situated and context-specific empirical research, which critically interrogates the premises, interests, and agendas of data-driven public administration and how stakeholders can impact them. This paper therefore studies the conditions of participation in public administration datafication. It asks the overall research question of how citizens are problematized and included in policy and practitioner discourse in the datafication of public administration. The paper takes Norway as its case and applies Cardullo and Kitchin’s scaffold of smart citizen participation at the system level. It makes use of a unique empirical insight into the field, consisting of a survey, interviews, and an extensive document analysis. Unexpectedly, we find that citizens and civil society are rarely engaged in this administrative reform. Instead, we identify a paternalistic, top-down, technocratic approach where the context, values, and agendas of datafication are obscured from the citizen.

Keywords

Public administration, datafication, citizen participation, civil society, Norway, artificial intelligence

Introduction

Citizens are increasingly faced with datafied services in their interactions with public administration (Misuraca and van Noordt, 2020). This paradigm shift in the public sector is leading to profound changes in the way modern public administration learns about, engages with, and responds to citizens (Redden, 2018; Dencik et al., 2019). This paper asks the overall research question: *How are citizen perspectives problematized and included in policy and practitioner discourse in the datafication of public administration?* It examines both *who was consulted* in the policy-making process guiding this administrative reform and *the discourse within the resulting policy and among practitioners in the field*. Taking Norway as our case, we perform an empirical investigation to obtain a better understanding of how, where, and when citizens are included in this process. We apply a multi-method approach, which includes a content analysis of key policy documents and a secondary analysis of data from surveys and interviews with practitioners. Datafication research, as with administrative reform itself, is still in a nascent phase in both Norway and beyond (Broomfield and

Reutter, 2021). This provides an opportunity to investigate datafication in the making and contribute to the critical understanding of who datafication serves, what is intended to be optimized and for whom, and who gets to decide (Ruppert et al., 2019; Zuboff, 2019; Crawford, 2021).

The datafied and disempowered citizen is an important object of investigation (Gabrys, 2019; Hintz et al., 2019). Early research on the role of citizens in digitalization has been predominantly framed around the idea of citizen empowerment, due to increased possibilities for participation and the enabling of new interactions between citizens, and citizens and the state (Mossberger et al., 2007; Chun et al., 2010). However, this research fails to grasp the complexity of how data are used to categorize, classify, and

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profile citizens' activities and behavior (Hintz et al., 2019). Data activism studies have come to the fore in recent years. This field investigates how citizens react to and resist problematic data practices (Meng and DiSalvo, 2018; Lehtiniemi and Ruckenstein, 2019), rather than studying the conditions of participation in the production and implementation of datafication. To understand the emergence of the datafied citizen, Barassi (2019: 426) stresses that "we have much to gain if we focus on process, on the multiple ways in which individuals are being turned into datafied citizens, on the policies and political-economic structures that make this datafication possible." Consideration is needed around how state–citizen relations are configured through datafication with the premises, interests, and agendas demanding to be critically interrogated in context (Dencik et al., 2019). Critical data studies have paid scant attention to the experiences and negotiations of non-expert citizens living with data (Kennedy et al., 2020). Some empirical research is emerging, such as that by van Zoonen (2020), who found in a case study of Dutch municipalities that datafication often escapes democratic decision-making, and that citizens as key stakeholders are not actively informed, let alone invited to participate. This paper contributes to this literature.

Norway is a particularly interesting case to investigate. Datafication lies at the heart of the future imagery of the Nordic welfare state (Kaun and Dencik, 2020). The Norwegian government has collected vast amounts of data on the population for decades, and it is stressing the enormous value and untapped potential of this perceived goldmine (Difi-rapport, 2018: 7). "Data is the new oil" has become a powerful metaphor in a country currently in search of something to replace its massive oil sector. There is widespread trust in government, which "intersects with the popular belief that technological progress is inevitable, apolitical, and problem free" (Sandvik, 2020: 2). Participation is also a fundamental component of the Norwegian welfare state. Corporatist and consensual decision-making, which relies upon the inclusion of societal stakeholders, in addition to academics, public servants, and the private sector, is deemed to be a key element in the construction and implementation of policy (Christiansen et al., 2010).

A recent study of the participatory turn in Norwegian public administration has found clear indications of citizen inclusion and grassroots involvement in climate change, energy, family, and gender policy fields (Krick et al., 2019). One would expect this to be replicated in the datafication field. However, during a preliminary analysis of our data, we found the citizen to be virtually absent. This triggered a secondary analysis to study how citizen perspectives are problematized and included in policy and practitioner discourse—from a system-level perspective. We situate the case within Cardullo and Kitchin's (2019) scaffold of smart citizen participation, as it provides an

analytical framework to discuss citizens' roles, the nature of their involvement, and the underlying discourse at several levels of public administration. Our findings expose an unexpected dearth of citizen participation in both the planning and implementation of the datafied public administration in Norway.

Prior to introducing the analytical framework and research design of the paper, we further elaborate on the concepts of a datafied public administration and citizen participation. This allows us to frame the problem and highlight what is at stake. The analysis then provides empirical insights into the inner workings of public sector datafication. This paper then culminates in a discussion of the role and agency of citizens in this process.

Background and previous research: data-driven public administration and citizen participation

The production and recirculation of data interests those who exercise power. It is therefore irresistible to the modern state and its executive powers of public administration (Ruppert et al., 2019). The modern state and data are already inseparably interwoven, as the availability of statistical information is a condition and necessity for any democracy (Desrosières, 1998). Data accumulation and recirculation in ever more aspects of citizens' lives beyond statistics is, however, a more recent phenomenon. The logic of datafication is envisioned to be integrated as a key component of how decisions about citizens are made across their social, political, economic, and cultural participation, disrupting the social world in all its forms (Kennedy, 2018; Hintz et al., 2019). While digitalization refers to a process of converting analog information into binary code so it can be processed by computers, datafication describes the process of quantifying every aspect of the world so that it can be analyzed (Mayer-Schönberger and Cukier, 2013). Public administration datafication aims to promote the idea of data as an asset to be integrated into policy making, service delivery, organizational management, and innovation (van Ooijen et al., 2019).

Datafication is predominantly associated with big-tech; however, the powerful and pervasive imaginaries associated with it penetrate both the private and public sector (Mayer-Schönberger and Cukier, 2013). This paper situates datafication beyond big-tech and within the realm of public administration. It regards datafication as a socio-technical process characterized by the ever-growing utilization of advanced methods to analyze and recirculate data (Kitchin, 2017). Datafication operates with the logic of categorization, classification, scoring, and selecting (Dencik et al., 2019). Recirculating government data is a prerequisite. Marrying public and private data is a further ambition. This is both an extension of previous data practices and a

profound change, as data is now imagined to drive decision-making in all aspects of public administration in ever more complex ways. It is built on the overall ideological foundation of dataism—a belief in data as the enabler of a better, more effective, and objective society (van Dijk, 2014). This is a paradigm shift, bringing with it a new form of knowledge production (Yeung, 2020). While the concept of New Public Management (NPM) focused on the integration of private sector management ideas into public administration, datafication is primarily concerned with a reform of knowledge production practices and algorithmic forms of ordering. Huge amounts of data and complex analysis promise a supposed ability to reveal a hidden mathematical order to the world that is superior to direct experiences (McQuillan, 2018; Dencik et al., 2019).

The datafied public sector is far from a benign instrument, leading to the grand realization of the ever-elusive efficient and effective public administration. Citizens are increasingly surveilled and governed, with data speaking for and about individual lives, extending beyond individual choice or control (Barassi, 2019). Data collection, storage, retrieval, and analysis make objects and subjects visible, enhancing the ability of public administration to understand, predict, and control (Hintz et al., 2019). Providing public administration with a golden view of society and empowering the state (Dencik et al., 2019). Data are not mere representations but instead generative of new power relations, which “may seriously erode capacity for democratic participation and individual flourishing” (Yeung, 2017: 119).

Citizen participation in public administration is a well-established research field that studies how democratic societies have increasingly involved citizens in policy production and implementation (Roberts, 2004; Bingham et al., 2005). Some researchers purport that multi-actor collaboration in the form of co-creation is filling the void left after the demise of NPM in Europe (Ramaswamy and Ozcan, 2014; Torfing et al., 2019). As Mellouli et al. (2014) pointed out, smart government requires engagement with citizens and interactive processes, both among citizens and between citizens and government, to create and implement public policies and decisions in a transparent and responsible manner. Concern is, however, voiced about data imaginaries and the role of citizens in Nordic data visions (Tupasela et al., 2020). Healthy state–citizen relations in democracies rely on the ability of citizens to scrutinize and challenge public sector decisions and processes, which according to Kaun and Dencik (2020) is increasingly threatened by datafication. There are several studies on participation in smart city projects (e.g. Benouaret et al., 2013; Berntzen and Johannessen, 2016); however, a distinct research gap remains in the broader context of datafication of public administration.

Citizens are increasingly concerned with how data are used and in which contexts (Kennedy et al., 2020). There

is a growing body of literature around data activism where citizens react to and resist harmful data practices (Milan, 2016). This form of activism is primarily reactive, based on bottom-up initiatives largely concerned with how citizens can influence existing systems that have already produced negative outcomes (Beraldo and Milan, 2019). It also relies on technology and data experts and therefore tends to be dominated by elites (Kennedy, 2018). Critical data studies have paid scant attention to the experiences and negotiations of non-expert citizens living with data (Kennedy et al., 2020). One exception is Van Zoonen (2020), who, in her study on Dutch municipalities, found that “despite the municipal goals of dialogue and self-direction, a top-down practice of control is emerging, which has its roots in the notion of ‘data steering’ and which leaves no space for citizens or other stakeholders” (2020: 4). As datafication has the potential to impact state–citizen relations, it is vital to investigate how both non-expert citizens and their representatives in the form of civil society, as key stakeholders, are envisioned by and engaged with during the entire process—from policy production to implementation.

Analytical framework

This paper studies the degree to which citizens are included and able to challenge the premises, interests, and agendas of datafication (Dencik et al., 2019) by (a) examining *who was consulted* in the policy-making process and (b) *the discourse within resulting policy and among practitioners in the field*. A number of models across different disciplines could be used to assess and investigate these questions, including analysis of spaces of participation (Cornwall, 2002) and investigations of participation as communicative action, where citizens’ understanding of their decision-making power is assessed (Chang and Jacobson, 2010). As this paper requires an analytical framework that encompasses both the nature of citizen involvement itself and problematizations, we have chosen to situate the Norwegian public sector datafication process within Cardullo and Kitchin’s (2019) scaffold of smart citizen participation. This builds upon Arnstein’s (1969) ladder of participation, providing a typology of citizen roles, the form and nature of citizen involvement, and the political discourse underlying datafication efforts. We treat participation as a situated practice, framing citizens’ possibilities with reference to actual political, social, and practical particularities rather than idealized notions of democratic practice (Cornwall, 2002).

Cardullo and Kitchin’s (2019) scaffold provides this paper with a candid analytical base from which to investigate and discuss the conditions of participation in the datafication of the Norwegian public administration. We adapt the scaffold by applying it to study different levels of public administration. Rather than concentrating on specific projects, we investigate how citizens are included and problematized

Table 1. Adapted and condensed scaffold of smart citizen participation (Cardullo and Kitchin, 2019).

Form and level of participation		Political discourse/ framing	Modality
Citizen power	Citizen control Delegated power	Rights, social/ political citizenship, commons	Bottom-up
Tokenism	Partnership Placation Consultation Information	Participation, co-creation Civic engagement	Top-down
Consumerism	Choice	Capitalism, market	
Non-participation	Therapy Manipulation	Stewardship, technocracy, paternalism	

during the policy production process and the implementation phase. This allows us to produce a contextualized critique of an administrative reform that is circulated and enacted throughout the public administration, as recommended by both Barassi (2019) and Dencik et al. (2019).

The scaffold (Table 1) has four levels of participation, as elaborated by Cardullo and Kitchin in the following ways.

First, **non-participation** affords citizens limited rights and possibilities for changing outcomes. Instead, they are nudged and steered toward certain behaviors, perceived as users, patients, and learners, and reduced to data points. Services are delivered on their behalf and supported by a strong technocratic paternalistic impulse. Citizens are neither included in nor consulted about how datafication processes are formulated, produced, and deployed. They are often subjected to new forms of governance that further dissolve transparent and democratic processes, due largely to the proliferation of hybrid configurations in the form of public–private agencies, new administrative units, and “experts,” which often operate beyond the state.

Second, **consumerism** encompasses the idea of the citizen as a consumer with a restricted range of control, selecting from a marketplace of a limited number of predetermined services. If citizens are consulted, it is in the form of feedback to specific pilots or products, thus tweaking existing designs. Consumerism is enabled by strong technocratic framing.

Third, **tokenism** consists of a lower form of sharing, informing, and shaping decision-making, intended to create transparency and accountability. Information is, however, predominantly unidirectional and shared only after key decisions are made. In its higher form, tokenism consists of placation and consultation. Citizens are given a voice via active feedback and participation in user testing. Placation is then about citizens suggesting alternatives with some ability to reshape plans and actions.

Tokenism largely reproduces the dominant interests of public administration and follows a predetermined course.

Fourth, **citizen power** is about the redistribution of power from those in control to citizens, where communities can negotiate and engage in datafication processes during the planning and execution phase, and citizens are provided with platforms to resolve differences.

These concepts form the basis of our analysis.

Methodology

A situated analysis of datafication allows researchers to understand underlying social mechanisms as well as the imaginaries of agents responsible for datafication (Dencik, 2020). Using interviews, a survey, and document analysis, we adopted a multi-method approach to answering the overall research question of how citizens are included and problematized in policy creation processes and practitioner discourse in Norway (see Table 2).

The first part of the research consisted of an analysis of policy-making processes, which aimed to ascertain how national datafication policy has been produced and who was consulted in the process, thus investigating how citizens were included. The method section of each document and the accompanying official information on the relevant web pages were collected and analyzed. These documents were selected because they are either central national datafication policy documents or vital inputs to policy, providing the foundation from which datafication is framed and actualized in Norway. A list and description of the documents can be found in Appendix A.

The second part of the research investigated the discourse in the field to understand how citizens are problematized and envisioned. Both policy and practitioner discourses were central. Some of the material analyzed was initially collected to map the public sector’s work with data-driven technology.¹ The empirical account given in this paper is based on an in-depth secondary analysis, which consists of a survey ($n = 35$) answered by practitioners in 26 public organizations and follow-up interviews with 12 entities (see Appendixes B and C). Practitioners who provided input to this study are system-level rather than street-level bureaucrats, as most activity can be observed here. The survey and interview sample consists of entities that operate at different administrative levels and vary in size, therefore presenting a diverse set of cases. Intelligence agencies were not included. Survey and interview responses were recruited from an informal public sector artificial intelligence (AI) practitioners’ network. The aim of the initial study was to obtain an understanding of how different public sector entities engage in new data practices and the challenges that practitioners encounter. Respondees were not asked directly about how they included citizens in their work, as the data was not initially collected for the purpose of this paper. While it could

Table 2. Multi-method research design to study policy production process, and policy and practitioners' discourse.

Part 1: Process	Part 2: Discourse
Method section of strategy and policy documents (<i>n</i> = 5)	Survey (<i>n</i> = 35)
Official webpages describing policy production	Follow-up interviews with public entities (<i>n</i> = 12) Key policy documents and reports (<i>n</i> = 5)

be argued that this affects the reliability of the material, we believe that this strips the interviews of socio-political desirability, as the survey and interviews were intended to map the actual practice of datafication.

Part 2 of the research included an analysis of key policy documents. This paper made use of an explorative and abductive analysis process, going back and forth between data and literature, and adding new data to further extend our understanding of citizen participation. The analysis was conducted in three stages. Stage 1 consisted of a general content analysis of the interview material. All mentions of users, citizens, clients, or residents were identified and analyzed within the context. In addition, all survey answers were screened for these concepts. Upon discovering the scarcity of the terms citizen or residence, we extended the content analysis to policy documents in Stage 2. Stage 3 then combined all data and analyzed its content in relation to Cardullo and Kitchin's scaffold and the key concepts of user-centric and needs-based approaches.

The Norwegian context

The Norwegian welfare state is built on the principles of solidarity, equality, participatory democracy, and the protection of vulnerable citizens. Corporative pluralism, where collaboration with externals and interdependent decision-making with interest organizations and business representative organizations, is deemed fundamental to policy making (Rokkan, 1966). This model encourages the inclusion of civil society and organized interests in both policy-making and implementation. There are regularized procedures for public participation in the formulation of new measures. The scale, scope, and rigor of consultation between interest groups and the political executive is a distinguishing feature of decision-making in the Nordics (Arter, 2004). Hybrid advisory public committees' assembling a range of different agents, such as academics, stakeholders, and civil servants, are an important feature for conflict resolution, knowledge production, and "input democracy" (Christiansen et al., 2010). Corporatism has come under threat in recent decades due to a reduction in the number of corporative institutions and increased lobbyism in the political sphere, where private-sector interests

dominate (NOU, 2003:19). A recent white paper on civil society (Meld. St. 10 (2018–2019) reaffirms and strengthens its role as a vital actor in public sector decision-making. It describes civil society as a direct participant in policy development, with a key role in protecting and strengthening civil rights and as a contributor to the development of norms and values, particularly when society is undergoing change.

The Nordics are regarded as data goldmines with massive amounts of high-quality granular data on citizens. This data collection practice emerged at the formation of the welfare state for decision-making purposes and to improve health and living conditions (Tupasela et al., 2020). There are hundreds of data registers, collecting data in areas such as tax, health, education, births, crime, and social security. Citizens are legally obliged to provide data. The personal number assigned either at birth or at the point of immigration follows individuals from the cradle to the grave (Frank, 2000). Most agencies use this number as the primary key to link datasets (Hovde Lyngstad and Skardhamar, 2011). Large amounts of "data exhaust" gleaned from digital interactions with the state are also collected. Public trust has given scope to expanding operations for data collection in recent decades (Tupasela et al., 2020). Data sharing is currently controlled by a strict and complex regulatory regime, with ongoing efforts to simplify this to break down the data silos and enable datafication.

The Norwegian public sector is large and fragmented. There are strict organizational, sectoral, and geographic boundaries where entities operate with a high degree of autonomy. A strategic body (SKATE) was founded to further public sector digitalization cooperation, and the Norwegian Digitalization Agency (Digdir) was established as a catalyst for the digitalization of the public sector. The responsibility for national digitalization policy lies with the Ministry of Local Government and Modernization (KMD), supported by Digdir.

Analysis: toward a datafied public administration

During a preliminary analysis of survey responses, we were intrigued by the discovery that practitioners ranked citizens' insecurity and willingness to accept AI/data use below all but one of the other challenges (see Figure 1). This provoked the question of how and when citizens are included in public administration datafication. Upon further investigation, we identified merely four mentions of the term "resident" or "citizen" in the interview material, contrasting with 79 occurrences of the terms "client/customer" or "user." This triggered our secondary analysis of the material and an investigation of policy and its production to ascertain the conditions of citizen participation. The results are presented below.

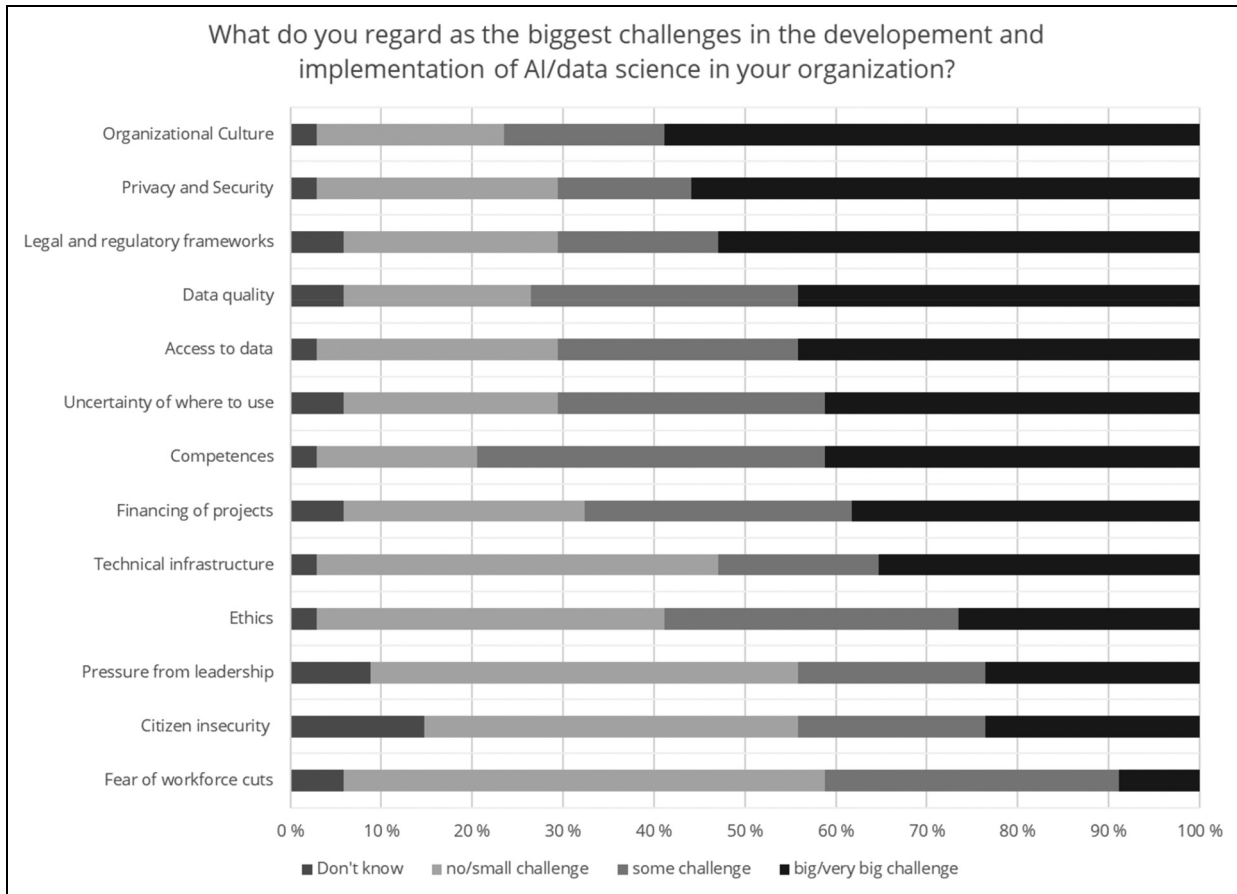


Figure 1. Perceived challenges to act upon, survey.

This is structured into three sections. First, we investigate the policy production process, asking who was consulted and exploring the main outcomes. Second, we focus on the discourse in policy and the practicing field, concentrating on the omnipresent concepts of user-centric and needs-based approaches. Finally, we analyze the idea of “doing the best for society,” often referenced by practitioners. This analysis provides us with a basis from which to answer the research question of how citizen perspectives are problematized and included in policy and practitioner discourse.

Policy production and its output

Policy documents play a crucial role in laying the foundations for public sector datafication. The production process presents an intriguing object of investigation. Norwegian policy-making is deemed to be characterized by decision-making that is corporative, consensual, and integrative (Arter, 2004). In this section, we trace whether this is the case for the development of datafication policy.

The Digital Agenda of 2016 marked a paradigm shift when data recirculation became central to digitalization

policy. An OECD report (2017) came hot on its heels, claiming the existence of untapped potential in Norwegian government data. These documents were instrumental in sparking the intensification of datafication in Norway, as evidenced by four major national datafication and digitalization policy actions in as many years. We investigate the process of producing these documents to determine how they were developed and who was engaged and consulted. Table 3 provides an overview of our findings.

The data sharing concept phase document (KVU) laid the foundation for many data policy prioritizations, particularly the digitalization strategy. It boasts of an extensive needs analysis to ensure that its proposed actions are rooted in user needs. Consultations were, however, limited to input from the private and public sector. We cannot find any attempt to engage directly with civil society or citizens. The process around the digitalization strategy paints a similar picture; four workshops for needs gathering were conducted, and over 300 people attended. There is no list of attendees publicly available; however, Difi states that “municipalities, county municipalities, state bodies and private companies from all over the

Table 3. Stakeholder engagement in Norwegian datafication policy-making.

2018	2019	2020	2021
Data sharing concept phase document (KVU)	Public sector digitalization strategy 2019–2025	Artificial intelligence (AI) strategy	Whitepaper for data-driven economy and innovation
Engagement with 50 stakeholders from the private and public sector.	4 workshops with 300+ attendees from the private and public sector.	11 events for the private sector, public sector, and technical AI research community; and 1 event organized by a trade union.	3 events targeted at the public sector, private sector, and education providers.
No open consultation	No open consultation	Open consultation, 51 submissions, 3 from citizen representatives, and 4 from trade unions.	Open consultation, 48 submissions, 2 from trade unions, 3 from civil society, and 2 from individuals.

country signed up” (Difi-rapport, 2018, 7). We found no reference to civil society involvement or any evidence that effort was made to engage with them as stakeholders.

In the AI strategy, we again found proclamations of an inclusive needs gathering phase. Events organized by the KMD were targeted at the public sector, the private sector, and the technical AI research community. One event was organized by a trade union. Workshops were supplemented by a formal open consultation. Analysis of the responses shows that citizen and employee representatives made up a mere 12% of the submissions. The consultation was in Norwegian, which would have hindered input from international civil society organizations active in this field.

The latest policy initiative is the White Paper for Data-Driven Economy and Innovation. It is premised on the assertion that data is a vital resource and must be further invested in as a source of innovation, new business models, and the improvement of existing digital services (KMD, 2021). The public sector, private sector, and education providers were invited to targeted events. The public consultation garnered a response pattern similar to the AI strategy. Two studies were commissioned: one from an expert group on “data sharing in the private sector,” and the other from a law firm on whether there could be a legal requirement for the public sector to share data. The expert group was comprised solely of representatives from the private sector and technical AI research communities (Ekspertgruppen, 2020). The law firm, in agreement with the KMD, consulted exclusively with the private and public sectors (Kluge Advokatfirma, 2020: 7). Despite the flurry of activity in recent years, only one hybrid public advisory committee has been planned to provide input, despite these being central to Norwegian consensual democratic deliberation (Krick and Holst, 2021). This committee will look at data-sharing regulations, with the aim of increasing data sharing from the public sector (KMD, 2021: 69).

By analyzing discourse in documents, we found that datafication is framed in overwhelmingly positive terms, envisioned to improve public services and spur value

creation in the private sector. It is deemed key to dealing with the growing complexity of society and a variety of economic and societal threats to the Norwegian welfare model. Economic assertions that the value of data is at least akin to that of oil, rely heavily upon a study (Menon, 2019), commissioned by the Confederation of Norwegian Enterprise (NHO), which is Norway’s largest business representative body. As the following statements depict, there is a discernible sense of urgency, with data not just seen as a major driver for domestic economic growth and an antidote to shrinking public coffers, but also as the solution to ensuring sustainability, understanding demographics, and growing the green economy.

We know that Norway will be affected by an aging population, climate change and increased globalization, and that we must work smarter and more efficiently to maintain competitiveness and the level of welfare in the years to come. Digitalization and new technology are the key to achieve this—and artificial intelligence will be central (KMD, 2020).

The government wants Norway to take advantage of the opportunities inherent in data for increased value creation, more workplaces, and an efficient public sector. Better utilization of data is important if Norway is to succeed in the transition to a more sustainable society and a greener economy (KMD, 2021).

According to policy documents, datafication is both necessary and inevitable. Recirculation of vast amounts of data within and between the public and private sectors is seen as a prerequisite. Strengthening cooperation with the private sector to realize improved and more effective services and to lay the foundations for innovation is highly prioritized. The private sector is considered a partner to fulfill the roles of supplier of data-driven tools, co-creator of public services, user of public data, and data provider to the public sector. The private sector has been considerably involved in the policy development process.

Conversely, civil society and citizens are underrepresented in the material. The citizen fills one role, as a “user” of services, as discussed below.

User-centric and needs-based approaches

As the previous section shows, we failed to find evidence that insights into citizen needs and perspectives are produced through widespread engagement at the policy level. Yet citizens are presented as a demanding entity, apparently requesting faster, better, and more efficient services to be enabled by datafication. In this section, we concentrate on the discourse in policy and the practicing field, focusing on the omnipresent concepts of “user-centric and needs-based approaches.” The term “user” is not reserved for citizens, as Norwegian policy defines users as “residents, voluntary, private, and public sectors” (KMD, 2019: 12).

User needs and placing the user at the center is seen as a major transformation for the Norwegian government and is a thread that runs through all digitalization policies since the Digital Agenda. The digitalization strategy states, “The user in the center is one of five key priorities in the Digital Agenda for Norway. The goal being that the user shall experience their encounter with the public sector to be coherent and effective, as one digital public sector” (KMD, 2019: 12). In this context, we can trace the origins of a discursive turn from citizen to user/customer, now pervasive throughout the sector and clearly apparent in the data. One interviewee stated that the focus on customers changes the way they work and refocuses attention toward the user experience. “If we say customers, we treat them a little differently [...] we have a slightly different mindset. So, we say what can we do now? What kind of machine learning case can we implement to improve the customer experience for our customers?” (Informant C).

A valid question from which to start is: What needs are being prioritized and attributed to the “user” to justify datafication, and from where do they originate? Justification is based on the premise that users are frustrated by a fragmented digital public service offering, which is not on par with services from the private sector. The origin of this is based on two studies performed for KMD by private market research companies, upon which the digitalization strategy relies heavily. The first, a quantitative study, found the following:

A total of 58 per cent of the population and 64 per cent of business owners responded that they were satisfied with the public digital services. In the population, 30 per cent responded that they believed that digitalization should increase, 44 per cent that the current level was sufficient, and 13 per cent that digitalization had gone too far (KMD, 2019: 14).

These results are hardly a resounding assertion of discontent, with the majority expressing satisfaction with the

status quo. Statistics such as the number of users of digital public services are included to justify demands. The other study was qualitative and found that the “user” wants “contact with the public sector that is fast, efficient and friction-free and that there is demand for, among other things, digital seamlessness between public organizations” (Kantar, 2019). The study questioned users regarding existing services and rule-based automation. Data-driven services were not explored. The study also found that few are concerned about the misuse of data by the public sector. This is relatively unsurprising, given the narrow scope of digitalization addressed. How, why, or on what premise the public sector should pursue datafication was not problematized.

We also discovered that many of the identified needs do not originate from direct engagement with citizens but from the public sector itself. Despite their connotations, user-centric needs-based approaches do not require citizen participation. The National Digitalization Council (2020) gives guidance that “one must stop to think about the user and start to think like the user.” When asked how public entities approach datafication, we discovered that practitioners themselves are an important source of the “demanding user” who needs to be served. The actual end-user is often absent during the needs gathering phase. Instead, they are an imagined entity—user stories and customer journeys abound. One interviewee stated that “of course we all have user stories, and we follow them up in development and so forth” (Informant B). Another said, “This is really just kind of brainstorming. Coming up with lots of ideas, good ideas that are good for the citizens, or our customers in this case, then this is very good, I think so, at least.” The interviewee went on to say, “This is what we mean, to give a better customer journey, better customer experience, user experience and all that” (Informant C). Several interviewees struggled to find demand for datafication from domain experts and street-level bureaucrats within their organization (Broomfield and Reutter, 2021). Needs then predominantly originated from data workers who placed themselves in the dual roles of end-user and supplier.

How, then, does the concept of user-centricity manifest itself? In short, user-centricity is about a solution rather than a process. Seamless services have been designated as the epitome of user-centric service delivery. The digitalization strategy states that user-centricity will be achieved through the development of seamless services based on life events, such as a “baby being born” (KMD, 2019: 16). Anticipatory services will be provided proactively, giving timely and personalized information and support while ensuring that data is easily accessible for all users. Everything is to be streamlined across organizational boundaries. Datafication is deemed a prerequisite for their realization: “Public sector shall exploit the potential of sharing and using data to create user-friendly services” (KMD, 2019: 4). Silos are to be torn down, allowing data to ebb and flow

across the public sector and, where relevant, also between the public and private sectors for co-creation of services.

We found examples of participation in seamless services. However, this is reserved for individual services. An example here is the “death and inheritance” service, which established 71 user needs from a broad mapping phase (Digdir, 2021). This mapping was conducted late in the process after many fundamental decisions had been made. A consultation was reserved for those who had been directly impacted by this particular life event. Citizens and civil society were not actively consulted on broader issues around datafication, such as where and how it should be applied, what should be prioritized, whether datafication is the optimal solution, and to what extent it should be implemented. Instead, those decisions were taken on their behalf.

Doing the best for society

Asserting that citizens are absent from datafication discourse in Norway would be an oversimplified account of the matter. As we have shown, citizens as both a discursive and actual participating entity are rarely engaged with in the early phases; however, they are considered. We frequently heard the phrase in interviews: “This should of course be done for the best of society.” In this section, we dig deeper to ascertain what this might mean and how it manifests itself.

It was apparent during interviews that practitioners see their work as benefiting society. Much of this perspective translates to creating efficiencies and providing improved and seamless user experiences. One interviewee stated, “Everything we do is about being more effective. We must use less money and make lives easier for our customers” (Informant D). As one might expect, this mirrors what is mandated by policy. Few reflected critically beyond these issues. An exception here was a group of interviewees who raised the challenge of societal responsibility. One interviewee stated that it is very difficult to know how far to go because “Society needs to be in agreement with itself as to what it wants” (Informant E), to which a colleague agreed and elaborated, stating that, “This is way over our heads.” As broader issues are neglected at the policy level, this pushes the responsibility for the interpretation of critical societal issues down to the organization and practitioner to interpret on a case-by-case basis.

Policy and practitioners also advocate for a variety of rights that need to be safeguarded in the recirculation of data, the guiding principle being that public bodies “shall share data when it can and protect data when it must” (KMD, 2019: 20). The idea of individual control and privacy is central here. Control issues are proposed to be solved by tools such as virtual assistants, which will give citizens insight into and control over their data (KMD, 2019: 16). Providing citizens with oversight on their data selves may contribute to legitimizing the recirculation of

data and give a false sense of control. Non-sensitive data is also deemed unproblematic to recirculate and proclaimed to be in the best interest of the economy and society to share as open data. The potential for harm with this data is unexplored in the data. The lack of attention to this is of particular concern in the Norwegian data context, given the immense amounts of data that can be linked across registers. Even when anonymized, this can give deep insights into the population (Kitchin, 2014).

Policy and practitioners are not ignorant of challenges. Many of the submissions to the AI Strategy’s consultation raised issues such as transparency, protection of public values, and the need to temper techno-optimism among politicians. The AI strategy regularly mentions ethics and refers to some challenges for the public sector, such as bias and explainability, but fails to further this discussion. Digdir and the Data Protection Authority are earmarked to provide guidance in this area, but this is still not forthcoming over 2 years after publication. Ethics scored low in the survey (Figure 1), with interviews exposing a general perception that if it’s legal, it’s ethical, and if it’s legal, it’s responsible. Many judged ethics to be irrelevant when working with non-sensitive data. Pertinent issues such as democratic oversight and the potential to change citizen–state relationships are not mentioned (Broomfield and Reutter, 2021) with no discussion around the potential for unforeseen consequences that many other jurisdictions have experienced (Alston, 2019; Gesley, 2020).

The digitalization strategy states that “The public sector shall be digitalized in a transparent, inclusive, and trustworthy way” (KMD, 2019: 8). Openness is regarded as important by practitioners, with one interviewee stating, “It’s not like we’re doing something all hush, hush in the back room. Everything is very transparent.” The current openness regime is premised on citizens having both the competence and capacity to investigate and assess. The Norwegian population is believed to be digitally competent relative to other countries. This is measured by questions such as “Did you access service X online?” or “Have you opened a word file lately?” (Kompetanse Norge, 2018). Given the complexity involved in datafication, it is unlikely that such competence is a sufficient basis for non-expert citizens to scrutinize the public sector. Beyond encouraging uptake of the introductory “Elements of AI” course, we found no actions to deal with the new demands that datafication brings to the openness regime.

Discussion: conditions of participation in a datafied public administration

How are citizen perspectives problematized and included in policy and practitioner discourse in the datafication of public administration? Public sector datafication has the potential to substantially change power dynamics between citizen and state, as it enhances the state’s ability to classify, control,

and predict citizen behavior, with the digital profiling of citizens emerging as a central action (Barassi, 2019; Hintz et al., 2019). Therefore, it is crucial to investigate the conditions of participation for citizens and civil society in its production and implementation. Applying Cardullo and Kitchin's (2019) framework to analyze overall discourse in the field, lifts the critique of datafied public administration to a system level and away from assessing single projects.

A recent study of the participatory turn in Norwegian public administration has found clear indications of citizen inclusion and grassroots involvement in climate change, energy, family, and gender policy fields (Krick et al., 2019). However, we find that this is not the case in the datafication domain. Citizens seem to be positioned within the "golden view" as passive stakeholders, often unable to engage with or challenge decisions that govern their lives (Dencik et al., 2019). This is despite great significance being placed on user-centric and needs-based approaches. If citizens are engaged, it is only at the latter stages, and if they belong to a specific user group, and they are not involved in many fundamental decisions. This would be akin to town planners developing a town plan together with builders and colleagues in the public sector and putting this forward to politicians without any public consultation around how the entire town will look. Possible alternatives for buildings and their use are never open for public debate but are pre-decided based on imagined user stories and builders' and architects' needs. Individuals are only invited into specific discussions on a particular building if they are deemed a potential "user" of that actual building. The architecture for Norway's datafied existence is decided on behalf of rather than together with society.

We found that civil society is rarely actively included by policy makers and practitioners regarding datafication, despite civil society being regarded as a vital actor in Norwegian democracy and considered crucial in policy production and the stimulation of debate during societal change (Meld. St. 10 (2018–2019)). In addition, the OECD (2017) has given clear recommendations to include civil society to bring different perspectives into the datafication discussion. The lack of involvement of civil society can perhaps be neatly explained away by the fact that there are few civil society actors in this field in Norway. There are, however, many international organizations, such as Access Now and Algorithm Watch, which could have been approached to provide a different perspective. There was no such hindrance to direct invitations for input to international companies such as Google, Microsoft, and IBM. This is an unexpected finding, as the Norwegian corporate model has a long tradition of including civil society and trade unions in policy and implementation processes (Christiansen et al., 2010).

Similar to van Zoonen's (2020) study in the Netherlands, we found datafication to be heavily influenced by internal public sector partnerships, leadership decisions, and close cooperation with the private sector, rather than by democratic

processes and citizen participation. The private sector is actively involved in both design and implementation, regarded not only as a potential user or supplier of services but also as a partner and co-creator. This engagement is obvious in the resulting policy prioritizations. The private sector is a vital actor in the Norwegian corporatist state model; however, so too are other stakeholders. A variety of threats to the model have been identified, such as a more pluralist society, organized lobbyism, and increased expertization (Krick et al., 2019). Datafication is portrayed as a highly specialized topic with strong private-sector interests seeking to influence policy making. We found that only one hybrid committee has been proposed. There has also been minimal engagement with the broader academic community beyond the technical academic AI community.

Datafication, therefore, becomes a particular example of the erosion of the corporatist model. A debate seems unwelcome, with only cheerleaders for the positive imaginaries of datafication invited to dine at the table. As Mergel et al. (2018) point out, there is a substantial difference between commercial enterprises driven by a financial bottom line and the ambiguous and multifaceted public sector, which has the bottom line of creating public value. Cooperating predominantly with the private sector can limit what questions are raised, considered, and prioritized (Redden, 2018; Brauneis and Goodman, 2019). This further contributes to invoking an idea of a corporate/government inside with power and in control, and a disempowered and unknowing citizenry outside in the datafication of society. Datafication can lead to an increased blurring of the lines between the private and public sectors, even in countries such as Norway, where this divide has traditionally been strong (Crawford, 2021).

It could be argued that direct citizen involvement is unnecessary, as public servants can represent the citizen. They are, after all, 'users' of public services themselves and can, as the Digitalization Council recommends, "think like the user." However, this is fraught with difficulty. First, as Cardullo and Kitchin (2019) point out, we are seeing a proliferation of technical and management experts, such as data scientists, project managers, and architects. Social scientists and public administration experts, who may be better equipped to consider broader societal questions, are rarely included (Broomfield and Reutter, 2021). Second, datafication affects citizens differentially (Kennedy, 2018). Public servants are hardly representative of society at large and are unlikely to be the most impacted by datafication. Thirdly, the rhetoric around datafication may make it difficult for public servants to raise concerns. Fear of being dismissed as resistant to change, disloyal to the cause, or unpatriotic, as Sandvik (2020) experienced when questioning the Covid-19 app, are all factors that could hamper internal debate. We were unable to investigate whether there was internal resistance to policy development, as most internal policy production correspondence relevant for this paper falls outside of Freedom of Information legislation.

Taking Cardullo and Kitchin's (2019) framework into account, we find that the discourse in the field remains largely instrumental and paternalistic. This is surprising and a clear digression from the inclusive corporatist model, which despite coming under threat, is still loyally adhered to in many other domains of Norwegian policy making. Datafication policy is produced through a top-down approach of non-participation. During implementation, and particularly the design of services, participation may extend to consumerism and tokenism. We did not detect any attempt to facilitate citizen power. Citizens and civil society actors were virtually absent in the planning and decision-making processes.

The predominant user-centric approach seems little more than a re-branding of top-down technocratic efforts of datafication (Kitchin, 2014). The discursive turn from a citizen to a user is itself entangled with changing power relationships and fits into the overall paradigm of NPM and the reconstruction of citizens as consumers. It can be argued that the idea of the citizen as a user breaks with the disempowered welfare state client, as it attempts to strengthen citizen relations with the public sector and signals that people are given more influence over services (Langergaard, 2014; Sørensen, 2000). Conversely, it can be argued that users/customers have different rights and relations to the welfare state than citizens, as citizenship is associated with agency and responsibility (Mik-Meyer and Villarsen, 2012). The user is expected to accept asymmetrical power dynamics, often taking a passive role, dependent upon services, and given little agency other than how services might be designed (Gubrium and Järvinen, 2013). Blurring the lines between these concepts runs the risk of eroding the political and democratic conditions of public administration. This is further complicated by merging civil society, citizens, and the private sector into the single term of "user" in the Norwegian context (KMD, 2019). Early research on citizen participation predicted an increase in the direct involvement of citizens in democratic societies as they become more decentralized, interdependent, linked by ICTs, and challenged by 'wicked problems' (Roberts, 2004). This has, however, not transpired in the datafication of public administration in Norway. Imagining the user is not citizen involvement; it is neither participation nor co-creation. The idea of user-centered datafication remains largely tokenistic, with public administration owning and controlling all projects or co-creating them with the private sector.

Framed in overwhelmingly positive terms, datafication in Norway is regarded as necessary, inevitable, and steeped in opportunity. The analysis shows that technology and data are not regarded as objects entangled with power by practitioners and policymakers. Their political dimension is simply not acknowledged, echoing the academic fields' concern of presenting data-driven technology as neutral and apolitical entities (Crawford and Boyd, 2012; McQuillan, 2018). This becomes a materialization of dataism, which

fosters a belief in data as the enabler of a better and more effective and objective society and, therefore, it is rarely questioned by involved parties (van Dijck, 2014).

Conclusion

This paper investigates how citizen perspectives are problematized and included in policy production and practitioner discourse in the datafication of public administration. It applies Cardullo and Kitchin's (2019) framework, extending it beyond smart cities to a system-level investigation of citizen participation. This serves to improve our understanding of how individuals are being turned into datafied citizens and the policies and political-economic structures that are making the datafication of the public sector possible (Barassi, 2019). We observe a paternalistic and top-down technocratic approach to citizen engagement in this administrative reform. Non-participation is particularly apparent at the policy level. We identify some tendencies toward consumerism and tokenism at the practitioner level; however, we fail to identify any evidence of citizen power. Bottom-up initiatives or grassroots contestations of datafication become difficult when the process itself is kept afar, and the discourse is paternalistic. Citizens and civil society are reduced to passive but demanding "users" to be served by the public sector. This is in direct contrast to the active engagement with the private sector during all phases—from policy production through to implementation.

This case study is limited in size; however, the system-level investigation highlights the importance of situated and context-specific approaches to public administration datafication. Further research is needed to deconstruct the inner workings of this administrative reform and the rationalities and processes behind it. Research should also investigate the intersection of the seemingly incompatible public administration paradigms of "datafication" and citizen participation.

The context, values, and agendas of datafication are often obscured from citizens. A crucial question is: Are citizens actively encouraged to discuss or challenge the datafication of public administration beyond how individual services might impact them? In short, the answer is "no." We find that they are not regarded as stakeholders or participants. Civil society is not invited to configure datafication beyond a few open calls for input. Citizens are neither included nor able to challenge the political rationalities shaping their datafied lives through institutionalized or more informal channels of participation. A public debate around datafication is deemed unnecessary in many Nordic countries (Snell and Tarkkala, 2019). Efforts seem to bypass democratic processes. The inclusive corporatist model so fundamental to Norwegian democracy is disintegrating in the datafication domain, as the socio-technical imaginary of data-driven public administration is presented as both inevitable and uncontested.

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Supplemental material

Supplemental material for this article is available online.

Note

1. The first analysis has resulted in a publication in the Scandinavian Journal of Public Administration. See Broomfield and Reutter (2021).

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