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MAKING SPACE FOR DIGITAL STATECRAFT

The work of consultancy models in an audit of police digitalisation

by Gro Stueland Skorpen & Hilde Reinertsen

Models for "digital transformation" are the current idiom for guiding digitalisation practice within key Norwegian state agencies, including the police. In this article, we follow how a team of state auditors encounter these models as they seek to evaluate the digitalisation work of the Norwegian Police Service. As we show in this paper, these models offer a clear direction for managers struggling with achieving digital change. Yet while proposing distinct steps to follow and criteria to fulfil to enable the complex organizational and technological development processes that allow them to reach "digital maturity", the models stop short of giving a specific recipe for how to get there. Through a detailed empirical study, we explore how such models, developed and promoted by management consultants, enter the public sector by means of books, meetings, and PowerPoint presentations. We show how the auditors and police officials engage with these models in different ways: For the auditors, they are tried out as a methodological aid in the process of evaluating the object of police digitalisation. For the police officials being audited, their chosen model helps them carve out a space for digitalisation, thereby becoming a useful aid in their internal political struggles. We argue that for the police, the model's authority comes from their being solid and opaque at the same time. This paradox turns out to be highly productive and enables the model to act as a placeholder delineating a space for action for the police officials struggling to digitalise their sector.

Keywords: Management models, digital transformation, digitalisation audit, police

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Introduction

"What is the alternative?" The question came from a digital advisor within the Norwegian police administration during a meeting between key police officials and an audit team from the National Audit Office (NAO). The audit team was mandated to conduct a broad investigation of the police's digitalisation work, a so-called performance audit that in the end would be highly critical of what the police had achieved and how their work had been governed by their superiors in the Ministry of Justice and Public Security (NAO, 2023). The digital advisor's question came as a response to the auditors' enquiry into how the police were using a specific model of "digital transformation" to aid their efforts of digitalisation. The scene produced a string of intriguing questions about the police and how to achieve and assess digitalisation: How can a model gain a level of authority to the extent that it *has no alternative*?

Rather than taking the digital advisor's question literally and look for alternatives to digital transformation models, this article tries to listen to and analyse the implied authority of such models. Zooming in on the models themselves, their characteristics and agencies, we look at how the auditors and the police use models for digital transformation, and we make the argument that although the models eventually are scrapped as tools for the auditors' enquiry, they create momentum and space for political action for the police staff working with digitalisation. They do this by enhancing the police's authority as the police navigate between the interests of superiors in the Ministry of Justice, colleagues more interested in active police work than in digital services, and citizens with ever-increasing expectations of the police's and the state's digital service provision. Indeed, the police's trouble with technological transformation and digitalisation has been a contested matter for several years (for studies of the Norwegian case, cf. e.g. Flinterud & Lundgaard, 2023; Gundhus et al., 2019, 2021; Lundgaard, 2021; for international examples cf. e.g. Chan, 2001; Terpstra et.al 2022). The Norwegian police's difficulties with maintaining and replacing ageing critical infrastructure, ensuring interoperability across technical systems, and improving digital interaction with citizens have also repeatedly caught the attention of external evaluators and auditors, including the National Audit Office (BCG, 2020; DFØ, 2023; NAO, 2018, 2021a, 2021b, 2022a, 2022b). In 2022, the consistent lack of results on the part of the police's digitalisation efforts, even despite the sustained scrutiny, raised the concern of the National Audit Office again: What could explain the Police Service's enduring shortcomings in their efforts to digitalise?

In analysing the digital transformation models at play in this case, we build from a definition of "model" developed by Margaret Morrison and Mary S. Morgan in their book *Models as mediators* (1999). These authors investigate the role of models in science and argue that models do more than simply represent a given theory or a phenomenon in the outside world. Rather, models must be understood as "autonomous agents" whose autonomy is what allows them to function as "mediating instruments" between the theory and the world (Morrison and Morgan, 1999, p. 10). Morgan further argues that models and the world they represent must be seen as "two spaces of exploration [that] are not always clearly demarcated" (Morgan, 2012, p. 37). In the context of our case this understanding of models is highly productive, as it enables us to approach models as empirical objects in their own right and explore how they create an interface between a "small" world in the model and the "big" world beyond it. While the empirical story in this article is about how management models from the consultancy world are sought out by governmental agencies struggling to perform their tasks of digital statecraft, it simultaneously pursues the analytical concern of understanding the *work* performed by such models. Digital transformation models offer simplification of the complicated political terrain of digitalisation and holds promises of a particular form of future (Delgado, 2021), one that can be reached by following their prescribed steps. Making the models of digital transformation the focal point of our analysis, we pursue the following research question: *What work do digital transformation models do?* In answering this question, we follow how two distinct models enter and impact the audit of the police. We also analyse the models in their own right as textual and visual devices that give shape to how the problem is understood and offer directions for how it may be solved (Asdal & Reinertsen, 2022).

Our analysis suggests that a key feature of digital transformation models is how they allow their users to carve open a space for digital change, what we may understand as a "space of placeholding" (Lettieri, 2024). When understanding a model as a potential placeholder with the ambition of carving out space for this vast thing referred to as "digital transformation", we suggest that what makes the digital transformation models so productive is their simultaneous vagueness, genericness, and concrete materiality, enabling their users to fill in the specificity of their own organisation. Thereby working as transformative devices (Asdal & Reinertsen, 2022), they also energise the direction of digitalisation, envisaging the future of the police's service provision as a digital one. As such, they have what Rachel Douglas-Jones calls *a moral charge* (2019): They premise that what *could* be otherwise also *should* be otherwise, and that this "otherwise" should be digital.

This article proceeds as follows: After presenting our analytical framework, methodology, and empirical field, we lay out our analysis in three parts: First, we introduce the two models of digital transformation that play a role in our empirical case. Second, we show how the state auditors try to work with these models in their enquiry into the Norwegian police. Third, we turn to how the auditors work to assess how the police are using their chosen model. In the conclusion, we discuss the paradox that the models' authority stems from their being both solid and opaque, qualities that enable them to build momentum for digital change without giving a clear recipe (Morgan, 2012) for precisely how to make it happen.

Analytical framework: Models for enquiry, models for authority

Since the field's inception, science and technology studies (STS) has paid close attention to how knowledge is produced and circulated. The now classic laboratory studies, with their rich ethnographic studies of how science is done in practice (Latour & Woolgar, 1986; Latour, 1987; Knorr-Cetina, 1981) showed how scientists engage in a range of social and textual activities in order to transform the world "out there" into data, data into analysis, and analysis into research publications, all by means of "inscription devices" such as annotation charts, protocols, spreadsheets and databases (Latour & Woolgar, 1986). Paying attention to the material and semiotic properties of such devices has given rise to the STS strand of material semiotics (Law, 2008, 2010; Akrich, 1992), and this article works from within this tradition by paying close attention to how digital transformation models work as specific forms of material-semiotic objects that emerge, circulate, and have effects (Asdal & Reinertsen, 2022). This way of approaching models as empirical objects entails that there are no objective or innocent models simply reflecting the world out there; all models are made and infused with conceptual and visual choices (Daston & Galison, 2000). As noted in the introduction, models should be considered "autonomous agents" (Morrison & Morgan, 1999, p. 10) that work as "means of investigation and enquiry" (Morgan, 2012, p. 256). Consequently, we need to examine why "a particular model is built, what questions it is designed to answer, and what uses it is put to" (Morgan, 2012, p. 6). Furthermore, models do not merely passively represent the world they are made to depict, they also *intervene* in it (Hacking, 1992; Morrison & Morgan, 1999). In order to grasp this combined capacity of models to both investigate and intervene in the world, we extend Morgan's notion of models used for enquiry, to also explore what we propose to term "models for authority": In other words, their ability to fortify resolve to go in a particular direction and prescribe clearly how to do so by "boxing in" their subject-matter (Bauer et al, 2020). As such, models are "epistemic genres" (Morgan, 2012) with a distinct "style of reasoning" (Hacking, 1992). Genres are not static categories; they are means with which to intervene rhetorically in a given situation, i.e. a form of "social action" (Miller, 1984). Building on this view, we study how models work as textual and visual devices shaping the readers' understanding of a phenomenon (Asdal & Reinertsen, 2022).

The STS literature on models discussed above has predominantly been concerned with models at work in the natural sciences and in economics (Bauer, 2024; Daston & Galiston, 2010; Hacking, 1992; Morgan, 2012; Morrison & Morgan, 1999). As these studies show, models often come across as self-evident and unassuming, black-boxing their own process of creation. Increasingly, scholars are employing this approach to study the work of models in other fields, including government and management, that involves a wide range of management tools (Baden Fuller & Morgan, 2010; Chiapello & Gilbert, 2019, Doganova & Eyquem-Renault, 2009; Reinertsen & Asdal, 2019). Taking a cue from Doganova and Eyquem-Renault's article "What do business models do?" (2009), we extend this approach to exploring what it is more specifically that digital transformation models do.

For the actors on both sides of the audit encounter in our empirical story, the choice of model is no theoretical exercise. It is chosen to do particular forms of work, to gain a desired effect. To achieve this, our actors look beyond their own organisations, the state, and Norwegian borders, as they reach for advice from management literature and consultancy firms. This landscape may be conceptualised as a trading zone (Galison, 1999) in which state actors and consultants seek one another out. More pointedly, we explore how instances of sovereign state power are combined with consultant knowledge models to make up a specific configuration of the national sovereign state (Amoore, 2013). This configuration is part of a current economy of knowledge that connects the nation-state to the transnational field of, in our case, digital consultancies. As such, this article answers Amoore's call to study the "critically unexamined" closeness of commercial consultants to the state (Amoore, 2013, p.18).

Digital transformation models emerge from within the field of management consultancy, but in this empirical study, they are headed for public sector agencies. Here, we build on work in STS on the "ordinary" political and bureaucratic work of state practice (Asdal & Hobæk, 2016, 2020; Maguire & Wintereik, 2021; Reinertsen, 2016). In studying the work of auditors who study the work of police administrators, who in turn grasp for tools from digital consultants, we draw on Amoore's understanding of states' sovereignty not as monolithic wholes, but as "the distinctive practices of authorization that enable private consulting, risk management, and software [...] engineering to flourish as expert knowledges, to act as though they were sovereign, as proxy forms of sovereignty" (2013, p.6). Our probing of the momentum added by digital transformation models does however not extend to a study of organisational change, which has its own literature of considerable breadth (see e.g. Kotter, 2012). Instead, our material-semiotic approach entails that we zoom in on the models as objects in their own right to observe *in detail* what these specific models do to achieve momentum. While the lines between consultants and the state are being blurred in practice, as noted by Amoore, the "epistemic genres" of management consulting distinguish themselves clearly from those of both science and government. Among the genres and tools explored in the research literature are business models (Baden Fuller & Morgan, 2010; Doganova & Eyquem-Renault, 2009), growth estimates (Reinertsen & Asdal, 2019), pdfs (Gitelman, 2014), and PowerPoint slides (Engen & Asdal, 2024). While often overlooked as research objects, such seemingly mundane documents may hold great importance. In the case PowerPoint slides, their minutely designed style and genre attest to their importance, making them "rock-solid" (Bourgoin & Muniesa, 2016) and "invincible" (Berglund & Werr, 2000) while at the same time being what Chong in an ethnography of management consulting terms "arrestingly opaque" (2018, p. 1).

These characteristics point to how consultancy models achieve their authority, and as such they can help our analysis of what work the models do. In drilling further into this, we draw upon Lettieri's concept of *the placeholder*, understood as a space "that leave[s] room for something that might change, transform, and transverse" (Lettieri, 2024, p. 82). The term "placeholder" separates the digital transformation model from what Lettieri refers to as "a condition of "voidedness": "A placeholder is not a blank spot or a gap but is itself a filler; it does not passively allow events to transpire but provokes a response" (2024, p. 86). This prompts us to explore *how* digital transformation models carve open a space for digital change and what it subsequently helps fill in.

Methods and materials

The encounter between state auditors and police administrators makes up the ethnographic field for this article. The studied actors all come from governmental agencies of prominence and authority. Both the National Audit Office and the police embody and exert core functions of the state apparatus – the police through their societal monopoly on violence and access to means of control and investigation, the auditors through their unmatched access to all governmental offices, accounts, and document archives at the state level. The Police Service (in Norwegian: *Politi- og lensmannsetaten*) is governed by the Police Directorate (*Politidirektoratet*), which in turn is subordinate to The Ministry of Justice and Public Security (*Justis- og beredskapsdepartementet*). The Police's IT Unit (*Politiets IT-enhet*) is subordinated the Directorate. Given that the audit team we follow in this article concentrated on the governing and implementation of digitalisation, the auditors mainly related to staff in the Directorate, but Ministry staff were also present in some meetings. The audit team we follow work in the National Audit Office of Norway (NAO), an agency with great institutional gravitas (Bringselius, 2017; Johnsen, 2019) and a distinguished position within the Norwegian constitutional system (Espeli and Nilsen, 2016). As the Norwegian Parliament's instrument of control over governmental agencies, NAO conducts both financial audit of state accounts (*regnskapsrevisjon*) and performance audits (*forvaltningsrevisjon*). The audit studied in this article is an example of a performance audit, which investigates whether state agencies carry out their tasks in accordance with the "will of Parliament" and provide citizens with adequate public services. The institutional authority of the office means that while there is an ongoing internal discussion within the office about the methods of audit, the often hard-hitting critique in their audit reports are rarely challenged in the public sphere.

Methodologically, the article is based on ethnographic fieldwork conducted by the first author within the National Audit Office of Norway between 2021 and 2023.The most intensive part took place from August 2022 to January 2023, when the first author spent most workdays in the audit office, participating in meetings and talking to audit office staff more informally. She followed their daily working life as closely as possible (Hagen & Skorpen, 2019; Rabinow, 2016), while centring on three ongoing audit processes of which the audit of police digitalisation was one. She took part in the audit team's internal weekly project meetings, video meetings with police officials and one physical meeting at the Police Directorate headquarters. During the meetings with police officials, the auditors introduced the ethnographer as "a researcher" studying the audit team, after which she asked for their consent to her being there (which was given in each instance). In addition to ethnographic observation, the material for this article includes two semi-structured interviews with the team leader from the police audit and one with his superior, each lasting about one hour. The extraordinarily broad access to engage in participant observation within the audit office (Bernard, 2011) enabled the first author to observe what the auditors did and said between themselves, rather than relying on interview data. In all conversations and interviews with auditors she made sure to check and triangulate her observational data, and shared raw analysis with the auditors to secure valuable feedback. All interlocutors have been anonymised; auditors have been given first name pseudonyms while police officials are identified by their formal roles.

Out of the ethnographic fieldwork grew an understanding of the importance of the materiality and agency of the documents the auditors used, including the documents that contain the specific digital transformation models we encountered (in a book and a PowerPoint file brought into the audit office). As a result of these observations, we further developed the methodological scope to include "document ethnography"; a conceptual and methodological effort to understand how documents move around the audit and police offices, but also how the documents themselves may be understood as *sites* whose spaces can be studied for their textual qualities, their agencies, and their interactions with other actors and sites (Asdal & Reinertsen, 2022, p. 16-25). This approach is informed by Bruno Latour's maxim to "follow the actors" and see what they do (Latour, 2005), which in our case entailed following both the auditors and the models at work. This move has informed an analysis conducted by both authors in a classically hermeneutical manner (cf. Ricoeur, 2016 [1981]), where we started from questions arising from the ethnographic data, to exploring possible theoretical framings, to engaging in close reading of documents, and back again to the ethnographic data and the research literature. The many hermeneutical iterations have led to the theoretical framing being deeply embedded in our analysis of the empirical data.

Two models of "digital transformation" enter the audit office

Through our analytical lens of material semiotics, we will in this part view and analyse the digital transformation models as *devices*, as objects that are used for specific purposes and to elicit specific effects. From there, we look at how they build their authority, and discern what, exactly, they produce or enable.

To approach the question of why digitalisation was so hard to achieve for the Norwegian police, the audit team started by asking how to design their investigation. It was during this early period that digital transformation models entered our study, and they did so in the form of a blue book, tucked under team lead Anders' arm as he came to the weekly team meeting. When the book came out from under his arm, the project team and the ethnographer found a slim volume with a matte blue, soft cover, with the title set in white letters. This book, it turned out, was also actively used in the police's efforts to digitalise. In the following, we therefore probe the material-semiotic properties of the model proposed both in this book and in a similar model picked up by the audit team, before we turn to explore what work these models do for the auditors and police respectively.

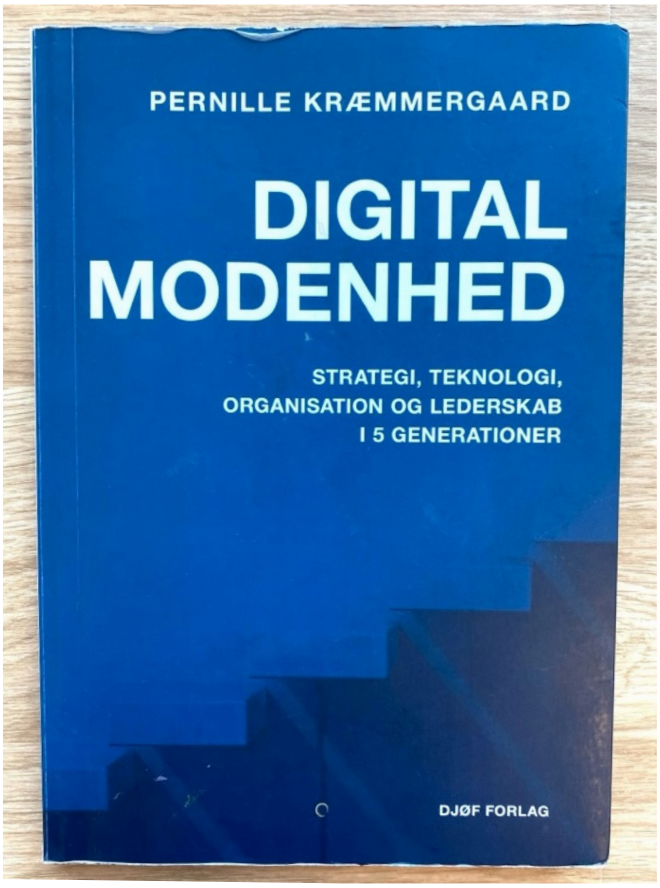

Figure 1. Front cover of Pernille Kræmmergaard's book Digital modenhed ("Digital maturity'), published by Djøf forlag 2021. Reprinted with permission

Digital transformation as stairs to climb

The book picked up by the auditors was titled *Digital Maturity: Strategy, technology, organisation and management in 5 generations* [our translation from Danish] by Danish digital consultant Pernille Kræmmergaard (Kræmmergaard, 2021a), who had previously published a book entitled *Digital Transformation* (Kræmmergaard, 2021b). Vaguely visible on the cover of *Digital Maturity* are five stair-like steps (cf. fig. 1) that embody the key concept of the book and constitute Kræmmergaard's model of digital transformation, literally drawing up how to achieve digital maturity in an organisation. Kræmmergaard refers to the five steps as *generations*, thus placing them along a timeline. The five generational steps are described in detail in successive chapters, where they are conceptualised as stages of digital development any organisation or business must go through. In Kræmmergaard's view, this development will have a particular pattern, taking an organisation from (1) *automation* and using IT as a system; to (2) *standardisation* and using IT as infrastructure; to (3) a change in *mindset*, where digitalisation adds new services and products; to (4) the development of *seamless services*, and finally (5) the *personalisation* of services for each user (fig. 2, Kræmmergaard 2021a, p. 18).

There is a clear directionality to this model: How far an organisation has come is contingent upon its effort and ability to climb the stairs, but the boxed-in steps are also distinct empirical phenomena, placed in historical time. For example, in highlighting the importance of agility and flexibility for digital transformation, Kræmmergaard asserts that "being agile [...] is crucial from Generation 3 onwards" (Kræmmergaard 2021a, p. 71). In the more detailed visualisation presented in Figure 2, Kræmmergaard combines graphic elements with written text, yet the book is mainly narrative in form. The style of writing is direct and without jargon, rather adopting a form of pragmatic storytelling: What is often in the IT world referred to as a "lack of interoperability", she calls "many individual solutions existing side by side" and a "spaghetti" (2021a, p. 39).

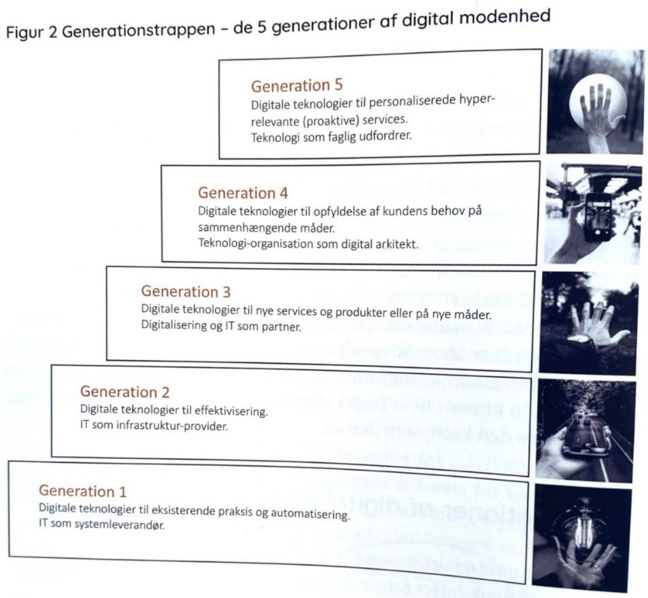

Figure 2. The steps toward digital transformation in Pernille Kræmmergaard's book "Digital Modenhed" ("Digital Maturity"). Facsimile of page 18. Reprinted with permission.

When discussing what is needed to undertake a digital transformation, Kræmmergaard invokes an audience with managerial responsibilities and little digital confidence: "As a leader, you must understand how, within your business or organisation, digital opportunities can create new value for customers and citizens" (Kræmmergaard 2021a, p. 8). After the introduction, the next five chapters are dedicated to each generational step, while chapter 7 outlines which competences are needed to climb the stairs, chapter 8 gives an overview of the interplay between strategy, technology, organisation and management in each generation, before chapter 9 asks in its title simply: "Where are you? Where do you want to go?" (Kræmmergaard, 2021a). We suggest that the model's pragmatic action-orientation and allusion to the agency of the managers themselves does the rhetorical work of allowing the reader to envisage themselves in a digital future. In appealing to the not-so-digital manager, the model offers a feasible path toward digital sophistication, reachable simply by following the right steps in the right order.

The model builds its own authority by repeatedly underscoring its connection to research, although Kræmmergaard also distances herself from the academic style. Both books present Kræmmergaard as having "25 years of experience doing research", and this is stated also on the website of her consultancy firm, The Digital Leadership Institute. In *Digital Maturity*, she points out that the title of her PhD thesis is "quite a mouthful", signalling to her readers that they do not need to worry about professorial tendencies (Kræmmergaard 2021a, p. 8). This produces a combination of authority and ease that also characterises the model itself: While giving a clear direction and a fixed order of developmental stages, the model stops short of being a recipe (Morgan 2012) that describes precisely *how* to go about doing digital transformation. Instead, it retains the style of reasoning of a normative prescription, letting the readers know the direction they should go in and what it looks like when they have arrived, without specific directions on how to get there. At the heart of the model, then, there is an open space, a generic quality, that functions as a placeholder (Lettieri, 2024) to be filled in by the empirical reality of the reader. This produces an authority that can be converted from the page to the world by the readers and capitalised upon in their own organisation. This is how the authority and directionality of the model offers momentum and direction that can be used to create space for digital change.

Digital transformation boxed up as criteria to assess

A second digital transformation model also entered the audit investigation. This version introduced itself to the audit team and the ethnographer during the first few months of the police audit, when a group of state auditors from another European country came to visit. The group gave a presentation on the approach they used to audit digitalisation work, which they in turn had obtained from the major international consultancy firm Deloitte.[1]

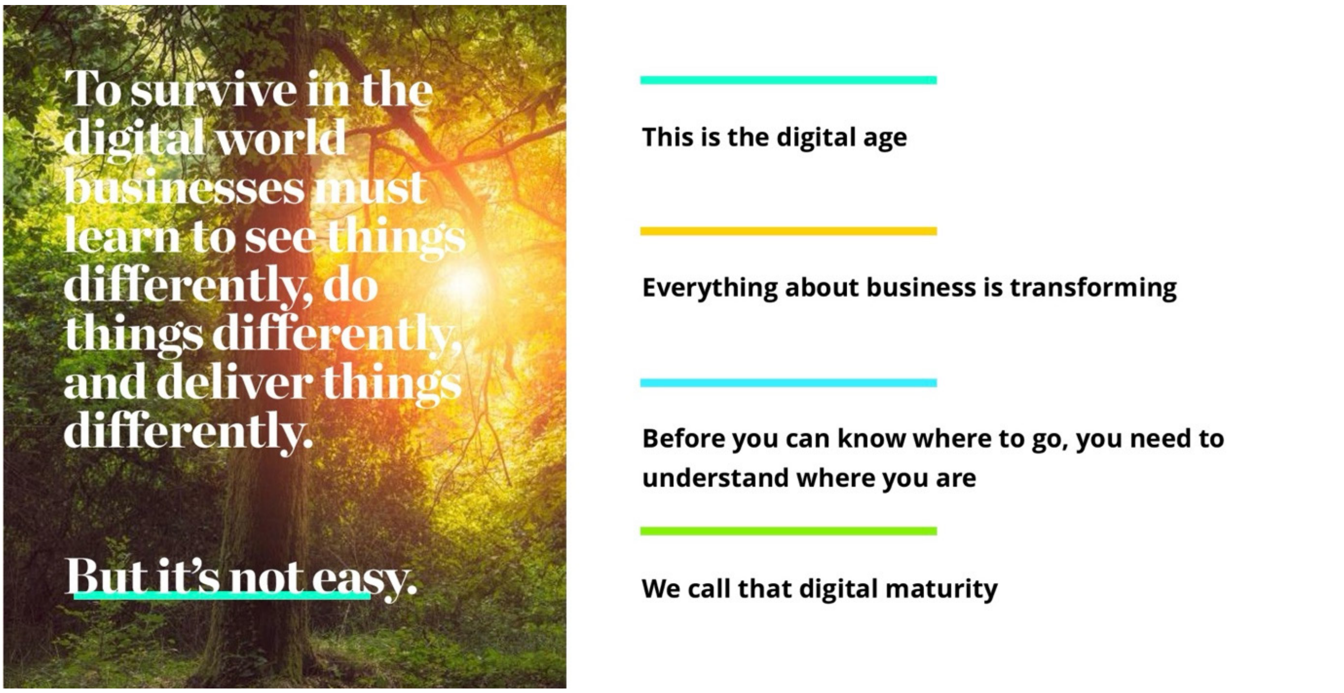

Figure 3. Screenshot of page 5 of the PowerPoint presentation titled "Digital Maturity Model. Achieving digital maturity to drive growth". Downloaded from Deloitte.com 23 February 2024. Reprinted with permission.

1 While the full version of this model could not be shared with us, as it had been purchased from a private consultancy, we have since confirmed that a PowerPoint presentation with a limited version of the model is available through the website of the consultancy Deloitte, who made and owns it. We refer to this version here, with permission.

Figure 3 shows one of the slides in the Deloitte deck. The text on the slide states that when conducting a digital transformation, businesses "must learn to see things differently, do things differently, and deliver things differently". Like Kræmmergaard, Deloitte conveys empathy with its target audience in management – "it's not easy". This message is supported with an aesthetically pleasing image where sun is filtered through dense, green foliage (fig. 3). In a later slide, the soft feel is replaced by a firm set of boxes visualising five "core dimensions" with 28 "sub-dimensions" for how to assess digital maturity, which are further divided into 179 "digital criteria" (see fig. 4). The bars of boxed criteria are represented in attractive colours, and the visual load of the deck as a whole is polished and generic. The sheer number of criteria add an unassailability and "rock-solid" appearance to the slide deck (Bourgoin & Muniesa, 2016). The fact that it is introduced to the Norwegian audit team by a team from another supreme audit institution helps it attain this position in our specific case.

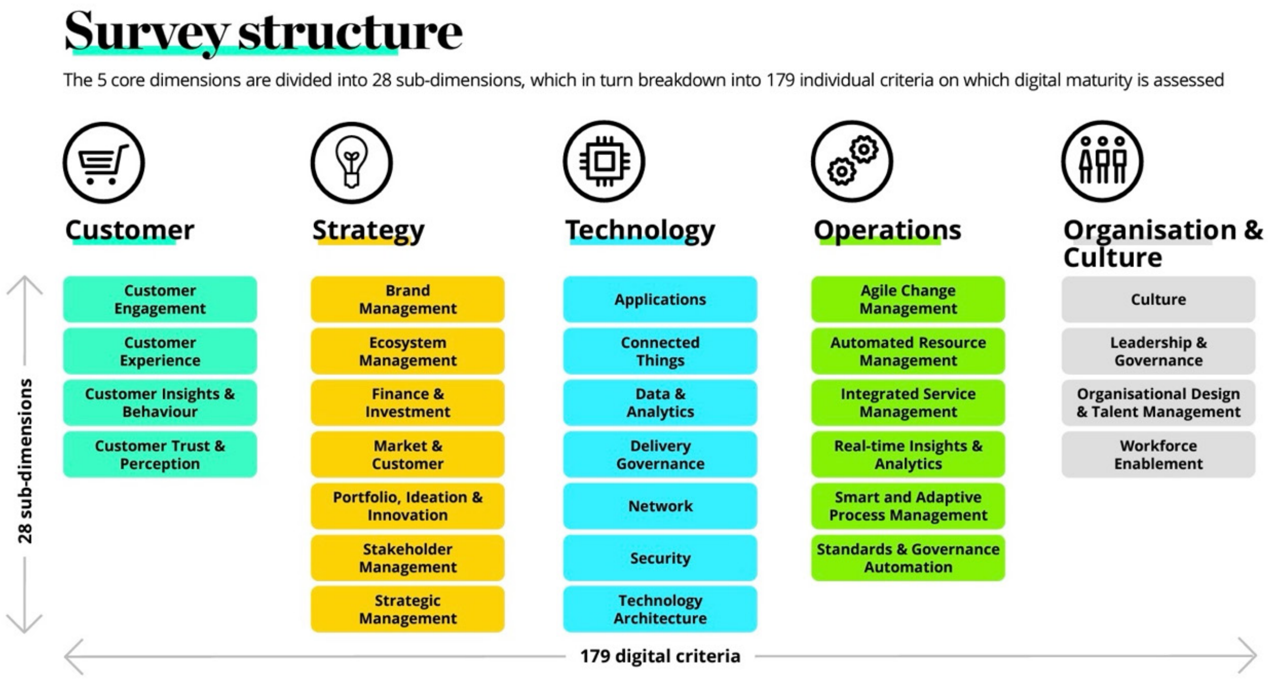

Figure 4. The 28 boxed-in categories for assessing digital maturity listed in Deloitte's model. Screenshot of page 11 of the Powerpoint presentation "Digital Maturity Model. Achieving digital maturity to drive growth". Downloaded from Deloitte.com 23 February 2024. Reprinted with permission.

The Kræmmergaard and Deloitte models recast digital transformation as a way of achieving "maturity", thus implying that this is a linear, natural, and desirable aim, and subsequently offer ways to help their main audience undertake this process. Their style is indeed different; while Kræmmergaard employs a form of pragmatic storytelling with a personal and embellished style, Deloitte employs an unassailable visual style with strictly delineated boxes and categories. They both assert the need for change, and they both leave open precisely how to do it. The two versions of the digital transformation model that are analysed here share a style of reasoning (Hacking, 1992) that is action-oriented (Reinertsen & Asdal, 2019). In Kræmmergaard's case, the ordering contributed by the aesthetic of the generational steps, the simplification provided by the direct address, and the connection to research in combination add to the authority of the model. For the Deloitte model it is the polished visual load and the detailed categories that help build its authority. Both models employ an affective register, speaking directly to the reader about what is difficult and what the reader needs and wants to achieve. While Kræmmergaard uses a simple and direct form of address to forge an alliance with the reader and underline the model's authority, Deloitte uses a pleasing visual load and a "rock-solid", unassailable aesthetic (Bourgoin & Muniesa, 2016). Each model in their distinct ways produce an "arrestingly opaque" quality (Chong, 2018, p. 1) that arguably stems from their refusing to state exactly what a digital transformation is and how it is performed: Instead of offering a recipe (Morgan 2012), the Kræmmergaard model envisages the future where the reader wants to go, while the Deloitte model establishes criteria for what it means to be there. Their authority, unassailability, and opacity make their message seem both applicable and enticing, and the slides and the book could speak to and work for almost any organisation. What these models do, then, is to help create momentum and space for digital change – thereby potentially working as placeholders (Lettieri, 2024) for digital transformation. Yet what happens when these models are put to work in practice by the auditors and the police, respectively? This is what we turn to in the following two sections.

Models for enquiry: Making "digital transformation" an object of audit

In line with our analytical tack, we now turn to how the digital transformation models (Kræmmergaard's and Deloitte's) entered the audit process. Understanding the models as material-semiotic devices (Asdal & Reinertsen, 2022), we follow them around the empirical field (Latour, 2005) with the aim of describing what work they do in the specific process of auditing the police's digitalisation efforts.

The designated audit team would meet every Wednesday in meeting room 6423 in their modern office building in central Oslo. Anders introduced first the Kræmmergaard model and later the Deloitte model to his colleagues, and they started assessing their respective merits. In several meetings, the audit team poured over a slide showing the criteria of the Deloitte model, considering them as means to assess digital maturity (fig. 4). In these conversations, they would often pull the Deloitte version of the digital transformation model up on the screen in the meeting room to discuss the criteria in detail. They engaged with Kræmmergaard's book in much the same way, often reaching for it as a form of material, visual aid. "I will just show you the model in the book …" Anders said to the ethnographer in one conversation, before leafing through his edition of Kræmmergaard (2021a) to find "the stairs", as we came to think of Kræmmergaard's five generation typology. When he found the figure, he proceeded to talk *from* it. In the process of auditing ongoing digitalisation work, repeatedly referred to by the auditors as "a moving target", the material and authoritative form of the model seemed to provide some comfort. It was significant that the book was quite literally something to hold on to as the auditors were entering a complex empirical landscape of the digitalisation efforts of the Norwegian police, including the diverse yet interconnected aspects such as the maintenance of aged infrastructure, digital service provision to citizens, and the Ministry's governance of the sector.

The auditors' search for the analytical handle on police digitalisation went on for the first few months of the audit. They tried to define digitalisation and digital transformation as audit objects, in close interaction with relevant research literature. They found few contributions on how digitalisation was to be audited, so to do this, the team initially engaged with management literature about digitalisation in general (e.g. Unruh and Kiron 2017), as well as research literature on the digital transformation of the Norwegian Welfare Administration (NAV) (e.g. Bernhardt et al., 2019). Anders also set up a reference group for the audit with Norwegian digitalisation researchers as members. The absence of literature on auditing digitalisation may explain why Anders, an avid user of research, continued to explore the Deloitte model, which had been introduced by their international colleagues, as best practice for the audit team on how to think about digital transformation from an auditors' perspective.

While entering the audit office via different routes, both models had their origin in the trading zone of digital consultancy. The Deloitte model had been bought by the visiting audit team, and Kræmmergaard's model came to Anders' attention through a conversation with a Norwegian management consultant experienced in working with large, complex digitalisation projects within the Norwegian state. This consultant planned to go on a training course with Kræmmergaard and thought this Danish version of the digital transformation model was the most relevant for Norwegian bureaucracy at that time. Consultants had brought these perspectives to Norwegian bureaucracy for a while – when we asked around about the emergence of ideas about digital transformation and maturity, several interlocutors directed us to the web article "The Advantages of Digital Maturity" co-written by MIT researchers and a director of Capgemini Consulting (Westerman et al., 2012), that makes the case for why business organisations should embrace digital transformation. This article exemplifies that while digital transformation models was initially developed for the private sector, public sector agencies soon came to be users of these same models. In Norway, one key explanation for this is the lack of clear direction from the state itself that public sector agencies could take guidance from. As the audit team explained to the ethnographer, the Norwegian Digitalisation Agency, which is the state agency responsible for coordinating and supporting the state's digitalisation efforts, used to have their own model for digital transformation, but it was no longer in use. Public agencies thus needed to find support for the complex and costly work of their digitalisation efforts elsewhere. This led to their seeking out advice from non-state-actors, effectively external consultants such as the one Anders had talked to and who had pointed him toward Kræmmergaard.

Not buying the model

While continuing to interact with the digital transformation models, the auditors did not uncritically buy into them. At one point, they seemed fascinated with one of the bullet points of the Deloitte approach that listed the need to audit an organisation's "culture" as a part of assessing its digital maturity. Similarly, a team member asked sardonically about another criterion: "What is a 'clear vision'? How do we tick that one off?" Although they were introduced to reduce complexity in managing digital transformation, the models brought out new complexities for the audit team. "We'll just follow this, and we'll be fine", Anders said in his dry way one day, while pondering the long list of assessment criteria in the Deloitte model. As well as not *buying into* the methodology of digital transformation models, meaning they would not only accept it wholeheartedly and without problematisation, they also would not buy the models as products of consultant knowledge, i.e. paying money to use them. Given that auditing the work of the state was their mandate, they seemed reluctant to leave more to consultants than necessary. The rationale for this was often presented as being financial, but the ethnographer on several occasions encountered a critical attitude in the audit office toward the role of consultants and their usefulness within Norwegian bureaucracies. Still, consultant knowledge was indeed present in the audit office. At the time of this particular audit process, the National Audit Office relied on external consultants for their ongoing capacity building for data storage in a cloud infrastructure. And while the audit team did not buy the consultancy models, they actively engaged with them. They viewed their methodological scrutiny of the models as an integral part of the job of assessing digitalisation. But their own methodological light-footedness and their probing and testing of the digital transformation models also spoke of the auditors' confidence in their ability to evaluate complex knowledge objects such as the model well, without involving the consultants in their core task of audit.

Models as inspiration, not tools

Because the auditors had not bought the Deloitte model and thus abstained from entering the trading zone of digital consultancy themselves, it was available for them in part to see, but not to use in full. Anders suggested that his team use both models (Kræmmergaard's and Deloitte's) to find the *themes* of the audit, but not *apply* them directly as frameworks to encompass their whole analysis. For the auditors, this became something of a balancing act; they allowed themselves to be inspired but made sure that they were not applying the model to their own subject-matter. When asked about the use of the different models at play in the audit process, Anders said:

> I think I use them as knowledge [...] I try to design [the audit] in a way that is more knowledge-based, more than following [the models] to the letter. It would be nice to just take the model and say "check, check, check" [checking off whether the police met the criteria for digital maturity]. But then it would just be superficial. We wouldn't have time to go thoroughly into any of the themes if we were to check everything.

We see how Anders considers the models as part of the knowledge needed to make a thorough audit, on a par with all the different methodologies the team assesses and the input he receives from the interlocutors he engages with. The models thus in themselves become objects to assess, not methods to apply, and in the end the models are used to inform and inspire the consolidation of relevant audit themes. Partly, this is because the auditors are not conducting a digitalisation project, and so they are not themselves in the market for a methodology of how to do that. But ultimately, the audit team walks away from the digital transformation models as tools for enquiry (Morgan, 2012) for their audit, too. In the end, they are mentioned only twice in the final audit report (NAO, 2023).

How, then, did "digital transformation" become an object of audit? We have seen how the audit team engaged with two different models of digital transformation (the Kræmmergaard model and the Deloitte model), while also probing the wider field of digital transformation research and consultancy. Anders continued to try different methodologies and share them with his team, using research to support the enquiry. He also involved in-house IT staff who were usually not involved in audit directly, drawing on their expertise on the challenges of digitalisation. There was an ease in Anders' and the other auditors' way of looking at the different models of digital transformation and the accompanying research literature, a certain methodological light-footedness that said any approach could be tried on for size. In this way, the models remained what Morrison and Morgan call "mediating instruments" (1999); they were used as "models for enquiry" into their audited object, and the light-footedness of the audit team took advantage of the relationship between the model and the world not being "clearly demarcated" (Morgan 2012, p. 37). Instead, the team used the space left open by the model to try things out, without committing to any model originating in the trading zone of digital consultancy. Therefore, the audit team could also easily leave the models behind once their own analysis firmed up and they no longer needed their openness.

Models for authority: Making "digital transformation" an object of government

In this third analytical section, we zoom in on the model of digital transformation that had been adopted by the Norwegian police (the Kræmmergaard model). As in the previous section, we continue to follow the auditors, yet now focussing on how the auditors tried to assess the role of digital transformation models in the police. We will show how the police applied their model of choice not as a "model for enquiry" (Morgan 2012) as in the case of the auditors, but rather, we will argue, as a "model for authority": It helped the police administration force open a space for digital action, thereby working as a counterweight vis-á-vis the political priorities of the Ministry of Justice and Public Security.

Digital transformation as the only alternative

Unlike the auditors, the Norwegian Police Service were in fact customers of Kræmmergaard's: They not only used the model from her books, they also bought services from her consultancy firm. At the time of fieldwork, those tasked with strategic digitalisation work in the police's IT Unit had developed a close relationship with Kræmmergaard as consultant and had meetings with her personally. Adopting her terminology, they planned to discuss how technology changes so quickly that "in two generations" digital competence levels within the police organisation would be radically changed for the better. There was an acknowledgement of police staff's low level of digital competence in this statement, and this was echoed by the auditors, who in internal meetings spoke of the lack of digital competence within the police force. These descriptions drew on imagery of an ideal type of a police officer who is practical and action-oriented. Most police officers probably did not join the force to sit in an office, as one auditor put it. This impression of a police force that was lagging behind the digital status quo of the nation was not anecdotal. It had been documented in a previous performance audit of the police (NAO, 2022).

The low "entry-level" of digital competence among police officers added to the complexity of the digitalisation process the Police IT Unit were tasked with, and so did the fact that the Police Service has a history of being closely governed by the Ministry of Justice and Public Security. As the formal target of the audit, the Ministry took part in some of the meetings between auditors and police. The Ministry's governance of the police came up at regular intervals; notably when the Ministry were not themselves present. One problem statement (*problemstilling*) in the audit was centred on the quality of governance of the police's digitalisation. The sentiment that the police were being kept on a tight rein by the Ministry of Justice, more than what was usual for state agencies, permeated the conversations between the auditors and the police officials in the Directorate. Anders said in the meeting about the digital transformation model:

> We can see that the Ministry is deeply involved in the nitty-gritty ("langt nede i materien"). There is a lot that is done because the Ministry asks for it.

The final audit report from the police team was scathing on the theme of the Ministry's governance of the police's digitalisation work. The third main conclusion in the report stated that the Police Directorate and the Ministry of Justice "have not governed the Police Service with a sufficiently long-term view" ("har ikke vært langsiktig nok") and that this had "hindered the improvement of digital services for users and more efficient use of resources in the Police Service" (NAO, 2023, p. 8 [our translations from Norwegian]).

While the responsible ministry was deeply involved in "the nitty-gritty" of police administration in a manner that served to hinder digitalisation efforts, the ministry responsible for state digitalisation had a hands-off approach to governance. As noted in the previous section, the Norwegian Digitalisation Agency did not at the time this study was conducted provide state actors with models or frameworks to aid them in processes of digital transformation. This helps explain why the police entered the trading zone of digital consultancy in search of methods and advice: There was no counterweight to the pressures of their own ministry to be found within the public sector. In order to gain the necessary authority vis-à-vis their superiors, they thus went outside the state to attain a knowledge model that could give them the necessary authority to their efforts of digitalisation. The key meeting between representatives from the Police Directorate, the Police IT Unit and the auditors was set up specifically to discuss the digital transformation model in use by the police (the Kræmmergaard model). At one point, an internal auditor from the Police Directorate asked whether the state audit team would challenge the digital transformation model itself and the way the police used it. The question lead to a terse reply from the digital advisor from the police administration: "But in 2022, what is the alternative?"

A model with no alternative clearly holds great authority. The comment from the digital advisor within the police served to show how the digital transformation model was imperative to them and to the digital expertise they represent within the police. The police officials tasked with digitalisation used the space opened by the model to do the work of organising, canvassing for, and rallying around their digital development process, known as a "transformation". The boxy steps leading toward increasing levels of digital maturity builds an epistemic authority that could be used politically: If the police managed to employ the model to carry through digital change, their success might carry more weight with the Ministry. We therefore suggest that what the Kræmmergaard model offered the police in this political terrain, was help with carving out a space for digital action, giving them the necessary authority to counter the demands from the Ministry on the one hand, and from colleagues disinterested in digital development on the other. Yet while Kræmmergaard's model helped the police administrators carve out this space, what did they eventually fill this space with?

Making space for Agile methods

Key to the police's way of working toward a digital transformation was one particular corollary: so-called "Agile methodology". A management theory originating in the world of IT development that prescribes that organisations should be organised in small autonomous teams with a shorter production cycle, this methodology has become central to many digitalisation projects in the Scandinavian welfare states (Papazu, 2024). It is often used to implement digitalisation projects referred to as "transformations". In the police's digitalisation work, the digital transformation models appeared to supply the vision of what the digital future should be like for Norwegian bureaucracies, while Agile was the underlying method or set of techniques with which "digital transformation" was carried out in a practical, day-to-day sense. As part of their investigation, the audit team became interested in projects carried out by the Welfare Administration (NAV), as NAV had used Agile methodology and promotes this as a success, and tried sometimes to compare their audit object (police digitalisation) with the digitalisation work that was underway in NAV. The police's IT director had herself been recruited from NAV and was thus well versed in NAV's way of working. Although often referring to research literature that nuanced the understanding of Agile as an optimal approach (e.g. Bernhardt, 2021; Vestues et al., 2022), audit team lead Anders said in one conversation:

> Agile is the method everyone in the private sector agrees on now. We have left the large projects behind. The large government agencies have had projects like that, and they have not gone well.

As the auditors worked on their investigation of police digitalisation, they routinely informed key actors in the police along the way. During this process, something happened: We could see an emerging alignment between the auditors and the police, as the auditors came to understand the problems the police were grappling with more deeply, and the police came to see that the auditors understood that the Ministry's way of governing posed a challenge to the long-term and well-planned processes that digitalisation work demands. Ultimately, the final audit report with its harsh critique of the Ministry of Justice and Public Security helped do the work the police administration had initially employed the model to do: Carve out a space for digitalisation work within their organisation.

Stopping short of approving Agile

Over the course of the audit, the auditors went from initially speaking about digital transformation models to, towards the end, only speaking of Agile methods. Anders consistently called Agile "the new way of working". In a meeting towards the end of the audit process, Anders said explicitly to the police officials present that the audit team could not give Agile "a stamp of approval":

> I don't know if you think we have given Agile a stamp of approval. But Agile is the industry standard. You employ a methodology that is widely acknowledged as good. Still, it is difficult for us to say how it will go.

Anders later told the ethnographer that he based this statement on several sources, including an evaluation report of the Agile digital transformation of the Welfare Administration (NAV) conducted by the consultancy PWC. Among its conclusions was that the Agile teams became too autonomous in NAV, that legislative hindrances were not factored in early enough in development cycles, and that projects were poorly managed (PWC, 2023). The concession from Anders that the police were working in accordance with the industry standard thus appears to be mostly a pragmatic stance: Agile is the method that is available to the police, but despite employing the state-of-the-art solution to large-scale digitalisation in bureaucracies, the audit found that the end result of this choice was still highly uncertain and that there was still room for fault. Anders' review of the research literature on Agile showed that digitalisation work conducted with the use of this methodology was not necessarily guaranteed success, but it was the best they had.

For the police, we suggest, the model worked as a "model for authority", rather than as a "model for enquiry" (Morgan 2012) as we saw was the case for the auditors. More precisely, what it does is to work as a "placeholder" (Lettieri, 2024), carving out a space for digital action which the police administration used to introduce a new mode of working within their organization, that of Agile methodology. However, the model's placeholding capacities can be used for more than diligent work in what the police referred to as "Agile product teams": We argue that the space the model creates is also political, in that it creates momentum for moving in a particular direction – toward the digital future. The authority of the model, stemming from its directionality, fortifies the police administration in relation to the Ministry. This provides a kind of epistemic counterpressure that the audit, given its harsh conclusions about the Ministry's governance, comes to strengthen. In this sense, the audit report and the digital transformation model ultimately join forces to strengthen the authority of the police administration's efforts of digitalisation.

Conclusion: Carving out space for digital statecraft

In their book *Models as mediators*, Morrison and Morgan write: "Just as one needs to use or observe the use of a hammer in order to really understand its function, similarly, models have to be used before they will give up their secrets" (Morrison & Morgan, 1999, p. 12). In line with this approach, we have in this article probed a specific kind of model: management models employed to enable "digital transformation" of public sector organisations. Empirically, we have followed an audit team from the National Audit Office in Norway from they define a problem question that asks why the police continued to run into major problems in their digital development processes, to they conclude that the police have not succeeded in increasing efficiency or creating more user-friendly services through digitalisation (NAO, 2023). As we followed the auditors, we observed how they encountered models of "digital transformation" developed by private consultants, one of which was being implemented by the police. These models became a key topic in the audit process itself, which led us to also make them the focal point of this article.

We have focused our analysis on the two specific models that entered our empirical field: one created by Danish consultant Pernille Kræmmergaard and another from international consultancy firm Deloitte. Both models cast digital transformation as a way of achieving "maturity" and offer ways to help their audience undertake this process. As our analysis shows, the two models have different rhetorical and visual styles, yet they both assert a need for change, and they both leave the specifics of how to do it open. They share an opaque quality that arguably stems from their refusal to explicate precisely what a digital transformation *is* and how it is to be performed. The two models share a style that serves to establish an authority and unassailability that in turn create momentum and space for digital change. We argue this means that what the models in fact do, is to carve out a space – they work as a placeholder for digital change (Lettieri, 2024). This is different from models that function as recipes for what should be done, and in which order (Morgan, 2012). In contrast to these, the digital transformation models' strength lies in lending their users the authority to demand this space to be opened within their own organisations, in our case the police.

Building on Morgan's notion of "models for enquiry" (Morgan, 2012) to suggest also the notion of "models for authority", we have shown how the Kræmmergaard model's placemaking capacities was what made it highly useful for the police – but that this particular capacity also was what made it less useful for the auditors in their search for methodological tools in auditing their object of police digitalisation. After having looked into different versions, they never actually bought the models, neither financially nor methodologically, and ultimately scrapped them as an audit tool. The work the models eventually did for the auditors was to help them decide on what questions to ask, thereby limiting their role as "models for enquiry" in the audit process. In contrast, the Kræmmergaard model clearly helps the police to build authority in their internal political struggles by helping them carve out a space for digitalisation and give a clear direction to their work. As the Kræmmergaard model simplified the complicated political terrain of digitalisation and lent them a much-needed authority, it remained a valuable political tool, creating momentum for staff in charge of digitalisation in their efforts to convince the leadership of the Directorate and Ministry of the urgency of the matter. For the police, we suggest, this authority is founded in the model's paradoxical qualities of being both unassailable and opaque – it both takes for granted that it is right and blurs the view into its interior.

We suggest that the *action-orientation* of these models, which also aligns them with other tools of business and management (Doganova & Eyquem-Renault 2009, Chiapello & Gilbert 2019, Reinertsen & Asdal 2019), is the reason they work better for police than auditors. The police need to urgently take action – it is imperative to *do* something, while the imperative in the auditors' knowledge production is of a different kind; they are more concerned with posing and answering the right questions. We have argued that the model's momentum and clear direction served to energise the police's digitalisation efforts, and we have shown how one specific example of this is how the model prescribes new forms of working in the public sector, notably Agile methodologies, emerging from IT development. In addition to helping make space for digitalisation, the model thus also helps making space for new modes of working within the public sector bureaucracies.

As we have seen in this article, when it comes to managing digitalisation, public sector agencies seek out the advice and tools from private sector consultants on a grand scale. We have suggested to conceptualise this exchange as a trading zone (Galison, 1999) in which sellers and buyers of digital transformation models meet. As we have seen, the police bought not only the readings, but also the services of the Danish consultant Pernille Kræmmergaard, thus meeting her not only in the trading zone but also inviting her into their own organisation. For their part, the auditors move around the trading zone as they evaluate the police, trying out samples and observing sellers and buyers alike. Our study offers a glimpse into how public servants bring home goods from the international trading zone of digital consultancy, but the auditors also represent a case where the outcome is different, as no purchase is made. The trading zone metaphor serves to highlight how forms of privately owned expertise such as the one materialised in models for digital transformation contribute to new modalities of digital statecraft. Private and public forms of authority can proxy or stand in for each other in ways that are not altogether straightforward to see or understand, but where one result is that consultancies ultimately contribute to proxy forms of state sovereignty (Amoore, 2013).

In our empirical case, this situation is brought about because the knowledge needed for carrying out digital statecraft is not provided by the state agency responsible for digitalisation. But it is also brought about because the Ministry of Justice, as the audit report shows, has not been helpful in creating the needed space for digitalisation. Since the data collection for this article was carried out, a new digitalisation strategy for Norway has been launched (Ministry of Digitalisation and Public Governance, 2024). It remains to be seen whether this becomes a hands-on tool for bureaucracies. In the situation described here, where the state itself abstains from offering clear direction or indeed models of what good digital statecraft may be and how it may be achieved, our analysis shows that seeking out the trading zone of digital consultancy is what staff needs to do in order to make something happen. Indeed, for them there is no alternative.

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