Public Values and Technological Change: Mapping how Municipalities Grapple with Data Ethics

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Introduction

Increasingly, Dutch municipalities use novel data practices for public management. These range from data analysis for more efficient waste management, to generating novel data sources for analysing criminal activities, to combining various data sources for predicting social welfare fraud (Redactie Gemeente.nu, 2016; van Ark, 2018). A process of decentralisation has delegated many tasks from central government to municipalities without giving them more resources and capacities. Local governments often see data practices as the most efficient way to deal with additional tasks and to

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distribute limited resources in a just and effective way. These data practices (such as predictive analysis, the automatic collection of records, the use of dashboards, combining various datasets and the capturing or digitisation of previously inaccessible or unavailable records) are not just replacing or innovating older practices, but are seen as a welcome solution to a shortage of resources and capabilities (Vermeulen, 2015: 139; Maarse & Jeurissen, 2016: 224).[1] However, data projects are not free from ethical issues and there is a real possibility that such a project affects public values. A recent example of this played out in the city of Rotterdam when discriminatorily processed data from residents of two entire neighbourhoods were used to detect a risk population of citizens that *might* commit social welfare fraud. The backlash to this activity has placed the ethical issues surrounding data practices within the purview of political debate and journalistic scrutiny (Redactie Nieuws Digitaleoverheid.nl, 2020).

There is an emerging debate in critical data studies on the use of algorithms in public management (e.g. Eubanks, 2018; O'Neil, 2016), which indicates that data practices are changing citizenship and democracy (e.g. Hintz et al., 2019). The argument in this debate emphasises that technology, in this case data, models and their automated analysis through algorithms, carry and transform values. Many scholars have focused on this relationship between (public) values and (emerging) technologies (Bannister & Connolly, 2014; Bertot et al., 2010). However, in this debate and in the broader public debate on the data practices of government organisations, there is little to no attention paid to how these practices are influenced by their resources, their experience and knowledge about data practices and their thinking about public values. Very little empirical research has been carried out on the subject. Evaluating data projects in public administration calls for a method to structurally connect these values to the data projects, the municipalities' operational capacities and how they legitimate their actions.

Over the past few years, the authors of this chapter have immersed themselves within this field to help municipalities detect possible ethical issues in their data projects and to gather research insights. We used an

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[1] Examples for these data projects include a monitor for predicting foundation rot (City of Zaanstad), a model for predicting early school leavers (City of Dordrecht), automatic number plate scanning for parking space management (The Hague, Leiden, Utrecht and others), predictive analysis for waste management, social benefit fraud, and housing violations, the use of software for simulating traffic flows, construction, water management and policy effects.

ethical deliberation tool called the Data Ethics Decision Aid (DEDA) which helps participants working on a data project to become aware of and discuss the ethical aspects that are relevant to the project.[2] The Utrecht Data school provides this impact assessment as a service to companies, government organisations and NGOs. This chapter describes how the assessment of data projects with the DEDA enables participatory observation, granting insight into an organisation's data practices, their awareness of data ethics and how policy objectives are translated into data projects, which then carry or transform public values. Simultaneously, the Data Ethics Decision Aid enables municipalities to review their data projects while considering the ethical issues at stake. Our assessments with DEDA therefore have a dual-use function: they serve as a process through which municipalities can establish possible ethical problems within data projects and adapt the design accordingly, but the process is also used by the authors as a participatory observation method.

We will analyse our findings through the framework provided by Mark H. Moore's 'strategic triangle'. Mark Moore introduced the strategic triangle in his book *Creating Public Value* (Moore, 1995); it is a framework for understanding governmental public value creation. Moore argues that in order to create public value an iterative process is needed, where public management needs to move back and forth between their operational capacities, the authorising environment (which includes the political sphere as well as civil society) and the public value they aim to create. Moore's triangle provides a way of broadening the debate about public data practices to discuss how the decisions that are taken within local government on a managerial level are embedded within their operational capacities and their practices of legitimation.

In the first section, we describe how the DEDA works and how it gives us insight into the current data practices of Dutch local governments. The second section introduces Mark H. Moore's strategic triangle as a lens through which we are able to map the relations between legitimation, operational capacities and public values as they appear in the data project assessments. We use data obtained through our DEDA workshops to show how public value creation, operational capacities and the authorising environment interrelate when data projects are set up in local government. The aim is to understand how data practices affect our understanding of

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[2] For more information about DEDA, See Utrecht Data School, DEDA: <https://datas-chool.nl/deda/?lang=en>

citizenship and democracy, and how they transform government organisations and their practices. Our chapter shows that the Data Ethics Decision Aid is an effective way of immersing deeply into the local government sector and collecting rich data on the organisations' data projects, their operational capacities, and how they address ethical issues and value questions. By introducing our approach, we hope to provide a new perspective for critical data studies, which focuses on the practice rather than the theory of doing data ethics. This provides empirical richness to the data justice debate. It also provides a more nuanced perspective on the widely heterogeneous data practices and the responses to the challenges raised by them. It also allows for identifying possibilities for intervention that has the potential of lasting social impact, rather than maintaining an analytical distance and merely commenting on technological and social transformation. From our analysis we draw conclusions on the ways in which ethical deliberation sometimes fails, and how the political sphere and civil society can sometimes be excluded from decision making surrounding data projects.

Method: Participatory Observation with DEDA

The Data Ethics Decision Aid (DEDA) was developed by the Utrecht Data School (UDS) at Utrecht University.[3] In 2016, Aline Franzke, Mirko Tobias Schäfer, and a group of Applied Ethics students collaborated with data analysts, project managers, the data protection officer and policy advisors from the City of Utrecht to develop a process for reviewing data projects in view of ethical issues. This resulted in the first version of DEDA, which since then has undergone several revisions and updates.[4] At its foundation lies a broad understanding of data ethics, as phrased by Luciano Floridi: "the branch of ethics that studies and evaluates moral problems related to data [..], algorithms […] and corresponding practices" (Floridi & Taddeo, 2016). DEDA actively contributes to increasing awareness of

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[3] Utrecht Data School is a research and teaching platform investigating the impact of datafication on citizenship and democracy. The researchers look specifically at how datafication affects public management, transforms the public sphere and manifests in public space. Insights are gathered through research projects with external partners being active in either one or more of these areas.

[4] See Utrecht Data School, DEDA: <https://dataschool.nl/deda/?lang=en>

data ethics and how data practices can carry and transform values.[5] These types of values[6] can be organisational, individual, public and anything in between. It helps participants to recognise values embedded in the design of the project or values that could be affected by the project. They reflect how their own actions, the policies of their organisation, and regulation affect both their project design and its impact on various stakeholders. The dialogical process reveals a great deal of unexpected and easily overlooked issues that could not have been tackled when checking the boxes of a guideline or the many AI and data ethics manifestos listing broad ethical principles.[7] Through this process, our research yields a direct impact even before we have analysed the data from our observation.[8] (Image 1)

The purpose of the workshop is, therefore, twofold. First, the workshops function as a way of raising ethical awareness among participants, supporting them in identifying ethical concerns within their data projects and facilitating the documentation of ethical decision making. Second, the DEDA is a research tool, through which we collect data for our research. It offers us a point of entry into Dutch governmental organisations and provides an opportunity to study data practices and the implications of datafication first-hand.

The workshop is requested by (local) government organisations, private companies or other organisations. In the case of municipalities, the request is most often motivated by a data project that is scheduled to start,

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[5] Participants report their knowledge of data ethics through a brief questionnaire before and after a DEDA-workshop; this provides information about the learning impact of DEDA workshops.

[6] There is no foundational, guiding theoretical conception of values supporting DEDA, merely a common-sense understanding of values being fundamental beliefs that guide action.

[7] For an overview of AI and data ethics manifests and guidelines see the excellent inventory at Algorithm Watch: <https://algorithmwatch.org/en/project/ai-ethics-guidelines-global-inventory/>

[8] The impact also manifests in the adoption of DEDA in the field of public management in the Netherlands. The Association of Dutch Municipalities (VNG) has integrated DEDA into their Data Awareness Day hosted regularly for municipalities and hired a designated DEDA advisor; the consulting firm Verdonck Kloosters & Associates holds a license to use DEDA and carry out assessments, and DEDA has been covered frequently in professional publications in the sector of public management. See: VNG Magazine, DEDA geeft zicht op ethische kant van data, 22.10.2018, <https://www.vngrealisatie.nl/nieuws/deda-geeft-zicht-op-de-ethische-kant-van-data> or iBestuur, De vraag is: wat willen we met data?, 6.2.2019 <https://ibestuur.nl/praktijk/de-vraag-is-wat-willen-we-met-data> or Binnenlands Bestuur, Utrecht blij met ethisch beslissingsmodel data-projecten, 18.5.2017, <https://www.viag.nl/nieuws/2017/05/18/utrecht-blij-met-ethisch-beslissingsmodel-data-projecten>

Image 1 Assessing a data project with DEDA

which prompts organisations to call for a workshop to identify the ethical issues within their data project.[9] The participants consist of the various employees involved in the data project, often accompanied by the organisation's data protection officer. Policy advisors and domain experts related to the project also participate in the workshop. The role of UDS in these sessions as moderators is to guide the group in such a way so that all relevant topics will be discussed, and to ensure that everyone involved has a say. The moderators do not play a normative role in the process but a facilitating one, in which they merely ensure the process is carried out correctly and responsibly and in such a way that the participants document their process for later reflection and accountability. The moderators from UDS who are present during the workshop observe and take fieldnotes, as

[9] This workshop does not replace the legally required Data Protection Impact Assessment (DPIA): https://autoriteitpersoonsgegevens.nl/nl/zelf-doen/data-protection-impact-assessment-dpia

well as provide an expert opinion within the workshop process by helping the participants recognise ethical issues and values embedded in the project.

DEDA serves as an 'anthropological vehicle' to immerse ourselves into organisations not merely as researchers but as credible experts who gain privileged insight (Schäfer & van Es, 2017). This manner of doing research is informed by methodological approaches in communication and culture studies (Jahoda et al., 1975), anthropology (Malinowski, 2002/1922), and science and technology studies (Latour & Woolgar, 1979). With their groundbreaking study *Die Arbeitslosen von Marienthal*, Jahoda, Zeisel and Lazarsfeld set an example for the researcher's immersion into research object's domain, gaining trust and developing novel means of data collection, while simultaneously making an effort to improve the situation within the domain being studied. Malinovski is best known for shaping the anthropologists' imperative to follow the native point of view. In his inquiry into the social dimensions of trade in the Southern Pacific, he actually revealed—just as Woolgar and Latour have done with their participatory observation laboratories—how technology or artefacts affect and shape social relations (Malinowski, 2002/1922). Using ideas from actor-network theory (ANT) (*follow the actors!*) can be very powerful because it allows us to analyse the power relations between actors, both human and non-human.

Because a workshop using the DEDA is an educational exercise first and a research tool second, it can be approached as a kind of participatory observation. We involve ourselves in the practices of municipalities with the participants of our research.[10] The DEDA workshops can also be seen as focus groups for our research, giving us insight into the concerns of their organisation (Krueger & Casey, 2009). However, we did not carefully select the participants of the workshops like researchers usually do for focus groups, we ask the organisation to compose a group and to include

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[10] Our research with DEDA relates to participatory observation rather than to participatory action research (PAR). Kemmis et al. (2013) name two core features of action research. First, the researcher recognises the capacity of people living and working in particular settings to participate actively in all aspects of the research process. Second, research conducted by participants is oriented towards making improvements in practices and their settings by the participants themselves (Kemmis et al., 2013, p. 4). The DEDA as a tool is designed to fit these criteria, the participants of our workshop set the agenda and are involved in all aspects of enhancing their data practices. However, in our research with DEDA, the participants of the workshops are not actively participating in the research. They are still research subjects, not participants.

participants from different departments to provide for a diversity of expertise during the workshop. We take the diversity of the group into account in our fieldnotes and in our analysis.

We borrow from these methods, but do not fully subscribe to any of these. Our method is distinctive from these in several aspects:

- Our role is not limited to being researcher-observers, but also being expert participants. The DEDA and the researchers in their role as experts have a direct impact on the organisation. It is not merely observing but also actively participating in the organisation's efforts to develop responsible data practices.
- DEDA is the 'vehicle' that grants us access to governmental organisations, and also funds our research, as we charge for our workshops. The latter emphasises our role as experts. Being experts, actively shaping and affecting data processes at societal organisations, makes us complicit but also provides more insight than being merely an observing researcher. It also allows for more effective impact within the organisations.
- By contrast to other forms of field research, we do not observe one site or one specific group for a longer period. With our workshops we see many different projects and organisations at a similar point in a process, during the start or early development of a data project. Because of this we are able to observe similar moments of reflection within many different organisations and relate those moments to many different projects. We do not know how the organisation carried out the findings and the decisions made during the workshop. However, we do get to distinguish different trends because of the variety and quantity of projects and organisations where these workshops take place. Furthermore, this method allows us to discern similarities and differences across a range of governmental organisations.

Insights from workshops are collected by taking fieldnotes. We have been collecting observations using the DEDA since 2016 and the structuring of these observations has seen many revisions. We have carried out workshops with over sixty organisations. For the purpose of this chapter, we have used our analysis of our fieldnotes from eleven of these workshops. There are always at least two researchers from UDS present, so the workshop is well-moderated while the researchers also have time to make

fieldnotes. Though we do not have any explicit topics that guide these fieldnotes and try to make notes in a very 'open' way, we are guided by our prior experiences and informed by theory. During the taking of fieldnotes, we try to make note of what participants say, how they justify their actions, what explicit and implicit moral statements are made and what kind of project they are working on. We try to take into account the nature of the organisation (when looking at their explicit and implicit values), the backgrounds of the participants (role in the organisation, skills, and the views they express towards the project, the organisation, and data issues in general) and the group dynamic (how participants interact with each other). After the workshop, the researchers discuss the fieldnotes they made. During this discussion, everything that was written down is documented and provided with the necessary information on the context of the fieldnotes. After our discussion we document our notes in Nvivo, where we do qualitative, open coding to organise our findings into different subjects. All fieldnotes have been coded by more than one person. Through extensive coding, in multiple sessions over the course of a few years we have created a 'short list' of recurrent themes. Next to open coding, our coding process has been informed by the three angles of Moore's strategic triangle: operational capacities, authorising environment and public value outcomes.

Analysis: Moore's Triangle Made Tangible

Mark Moore designed the strategic triangle in his book *Creating Public Value* (Moore, 1995). The triangle is a way for those who govern to think about how public value can be created. Moore has a broad conception of public value. He argues that "the aim of managerial work in the public sector is to create *public* value just as the aim of managerial work in the private sector is to create *private* value" (Moore, 1995: 28, italics in original). He conceptualises public value as value for society, produced by public resources, which can both be "collective things that are individually desired" as well as "political aspirations that attach to aggregate social conditions" (Moore, 1995: 52). The first would concern products that cannot be provided through market mechanisms, the second would concern the proper distribution of wealth, rights and so on (Image 2).

Moore argues that in order to create public value, public managers need to consider which values need to be created, but at the same time consider their operational capacities, which involve finance as well as the
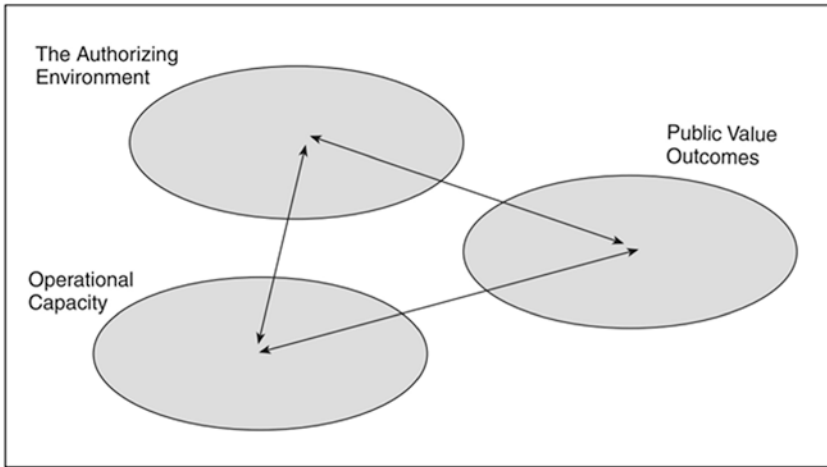
Image 2 the strategic triangle of public value, in: John Benington and Mark H. Moore, "Public Value in Complex and Changing Times", Public Value: Theory and Practice 1 (2011), 5

knowledge and expertise present in the organisation and the authorising environment, where the mandate for creating public value emerges. Public value, operational capacities and the authorising environment are three angles of a triangle that describe the strategy of creating public value. The three angles are seen as three processes that need to be in alignment in order to create public value, that is, these three angles of creating public value are interrelated and should be considered in an iterative process. Which value can be created depends on the operational capacities, but a public manager should also consider how capable her organisation is in the creation of public values and change their capacities accordingly. Operational capacities can be enhanced or developed. This can, however, depend on the other two angles. Creating public values will involve moving back and forth between the three angles while making trade-offs and renegotiations along the way (Benington & Moore, 2011; Moore, 1995).

The DEDA relates to Moore's triangle in two ways. First, it borrows from Moore's insights, and is designed in such a way that it makes participants think about their personal and organisational values, the goals they want to achieve with a project while asking questions about the means they have to achieve the project and how they can authorise it. Second,

our research with the DEDA helps us gain insight into the practice of the three angles. We see how civil servants think about public value and which outcomes they want to achieve. We also see what they are capable of, the means they have and the means they lack. Finally, we see how they approach the authorising environment, how they try to gain legitimacy, communicate about their project to politicians as well as the broader public and their conceptions of transparency. Most importantly, we see how these three aspects influence one another: how the iterative process of the triangle is performed in practice, not only within a single organisation, but throughout various governmental organisations.

Operational Capacities

Moore describes the operational resources that the organisation has at their disposal as "finance, staff, skills, technology" (Benington & Moore, 2011: 4). Of the three angles of the strategic triangle, the operational capacity is the most straightforward one. Moore mostly uses it as a way of holding managers accountable for their use of resources (mostly funds), as well as for the creation of "adaptable and flexible organizations as well as controllable and efficient ones" (Moore, 1995). A public manager is responsible not just for taking their operational capacities into account, but also for managing their organisation in such a way that they have the operational capacity to create public value outcomes. Moving between the authorising environment to gain support and, as a consequence, possibly better operational resources is an important element of creating public value. During the DEDA workshops, we have gained insight into the operational capacities of municipalities and how this relates to their data practices.

Data literacy is one kind of operational capacity that we could study with DEDA. During our research, we take note of the organisation's commitment to data-driven practices and evaluate the data literacy of the project's participants. This differs very much across different organisations as well as within organisations. Some have more experienced civil servants than others. Some have hired data scientists, others have trained their own personnel in data skills. We have also encountered many government organisations who lack staff with experience in data research. Data literacy was easy to gain insight into, because the data literacy of the participants directly influenced the quality of the ethical discussion. One workshop at a large municipality showed that discussion flowed easily due to the

presence of people with both data skills and domain knowledge [FN13/02/2019],[11] while a workshop at a different large municipality showed how participants were clearly limited by their lack of data skills, for instance, by not understanding the concepts of anonymisation, pseudonymisation and generalisation [FN15/10/2018].

Shortage of expertise also becomes evident when participants discuss who is responsible for the data project. In a lot of municipalities, it is clear that an alderman—or woman—is ultimately responsible for the data project, but there are concerns that they do not have the necessary expertise about the project to be aware of all of its complexities. In one municipality a participant said: "*I believe the alderwoman had never been sufficiently informed when she had to make her decision* [about the project]"[12] [FN01/04/2019]. Different versions of this statement were repeated during many of the DEDA workshops we moderated, in different organisations.

It can also be the case that there are experts, but that they are not involved in the project. In one workshop with a large municipality it seemed to be the case that the person with the necessary expertise was excluded from the project design process. This was the FG (*functionaris gegevensbescherming*), who should be responsible for thinking about issues of privacy on any data project. When we talked to this person after the workshop, it turned out that he had in no way been included in the project. His attendance at the workshop was the first time he heard about it. He told us that he thought the design of the workshop was unacceptable and he would never approve of it [FN13/12/2018]. This is an example where the person with the required expertise had no responsibility whatsoever for the project. Even when expertise is present in an organisation, it can be the case that it is not harnessed.

Data literacy can be low among civil servants and politicians and when the necessary expertise is present, a municipality may lack the structures necessary to make use of the expertise. As a consequence of this lack of data literacy, many municipalities lean on the expertise of external parties,

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[11] In this chapter we refer to illustrating examples with a mix of observations and English translations of quotations using [FN#DATEOFWORKSHOP] as a reference. When English translations of quotations are used, the original Dutch quotations can be found in a footnote. For anonymisation reasons we refer to the relevant parties as small, medium or large governmental organs

[12] Original in Dutch: "Volgens mij is de wethouder nooit goed geïnformeerd geweest toen zij daar een besluit over moest nemen."

like consultants or developers. For this reason, consultants find themselves in positions of power. They can often negotiate to be part or sole owner of the data being used. A participant of a large municipality observed: "*We do not have the required expertise, so at the moment we are dependent on external parties.*"[13] The participant indicated that being dependent on external parties was something undesirable and something that they wanted to change in the future [FN15/10/2018]. During one workshop with a large municipality, we noticed that participants themselves could not explain why specific techniques had to be used for that data project. The use of these techniques was proposed by an external party hired by the municipality. This external party had convinced the municipality that these methods would be the best for achieving a specific goal. However, no one from the municipality could explain exactly why these methods were necessary or proportional. The justification for this was just that the external party thought these methods were the best [FN13/12/2018].

In this last case, the civil servants' lack of expertise and the involvement of an external party made ethical deliberation about the project almost impossible, precluding any possibility of transparency and justifying the project to the public. Here we see how the operational capacities of local government influence the authorising environment and public value creation. It can become harder to be transparent about a project when an external party is involved, or when those communicating about the project to the public are not familiar with its technical details. It also makes it impossible to think about the public values that are at stake in the project.

Authorising Environment

Moore's triangle involves an angle called 'authorising environment', where creators of public value have to find support and legitimacy for executing their plans. Building legitimacy and support from the public is essential for creating public value outcomes. It is achieved by "building and sustaining a coalition of stakeholders from the public, private and third sectors" (Benington & Moore, 2011: 4). This involves the support and mandate of elected politicians, but may also include authority from other parties, be it individuals, stakeholders or other organisations.

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[13] All quotes have been translated from Dutch. We will provide the original Dutch quotes in the footnotes. Original: "We hebben de expertise niet in huis dus op dit moment zijn we afhankelijk van externe partijen."

Using the DEDA gives us insight into some aspects of the authorising environment of local government in the Netherlands. Data projects often involve issues of mandate. We mostly work with civil servants who are not responsible for the political aspects of the projects. They further develop policy as decided upon by the political institutions of the municipality. However, it is not the case that civil servants are not involved in the process of authorisation. During our research, we have seen several ways in which this involvement takes shape. With data projects in particular, it can be hard to distinguish the ethical and political aspects of projects from mere practical issues. It seems like civil servants only have to make some technical choices: which data to use, where to store the data, which data to store, how to design the algorithm and so on. It is only when discussing these questions explicitly and elaborately, that most civil servants realise that each of these questions is political.

One illustrative example comes from a workshop we moderated in September 2018 at a large government organisation. The data project was about modernising a government website. The project was initially not regarded as controversial or ethically complex. There were two options for the project: either personalising the website so that every citizen would see a different version, tailored to his or her needs, or keeping the website non-personalised, so that every visitor sees the same page and the same government information. The participants quickly related this discussion to the public value of equality and equal access to government information. Personalising the government website would mean that citizens would no longer have the exact same access to government information. And who decides what an individual sees and what he/she does not get to see? How can this process be made transparent and accountable? The participants of the workshop concluded that they did not have the mandate to make such decisions and that this discussion should be held within the political sphere by those with a political mandate [FN26/09/2018]. Because data projects often seem straightforward and 'value-free', civil servants can overlook the politically sensitive aspects of the project and make decisions that should be discussed in the political sphere.

After this realisation of how many political aspects are involved, the civil servants need to act on it. They may decide that they can estimate the political intentions of their assignment and translate that into the shaping of the project. They may decide that they do not have the authority to make these decisions and make sure the political council discusses them. Civil servants often have to decide in this way what is discussed as a

political consideration and, therefore, what gets included in the authorising environment and what does not. Recognising when civil servants have a mandate and when they do not, is related to their data literacy and ethical awareness. It can be only after extensive discussion during a workshop that participants realise that they do not have the necessary mandate to make this decision.

Another thing we have noticed concerning the authorising environment is that for many data projects, responsibilities are dispersed and unclear. Somewhere along the way, from the commencement of the data project and the presentation of the final results or visualisation, responsibility gaps emerge. It is often unclear who is responsible for the different stages of the data project. For example, in a large municipality a participant said: "*We have not distributed the roles well yet within our organisation, so often the different responsibilities within a data project end up with the same person.*"[14] The speaker indicated that this happened because only one person took on these responsibilities [FN03/04/2019]. Questions concerning responsibility include issues regarding the responsibilities of the Data Privacy Officer (DPO) or *Functionaris Gegevensbescherming* (FG). In a workshop for a large municipality they noted that the DPO had only approved of a single project using a Data Privacy Impact Assessment (DPIA) because the DPO was not included in every project, plus it was not clear to them how to conduct a DPIA [FN01/04/2019]. In these cases, there is an awareness of the ethical aspects, but it is unclear how and where and with whom these should be discussed. Participants do not know what the authorising environment should include, and how they should give it shape.

Both examples show a relation between the operational capacities and the authorising environment. If data literacy and ethical awareness are absent in the organisation, it is impossible for the civil servants to recognise ethical and politically sensitive issues and make sure they are discussed in the political sphere. If the organisation is not well prepared to embed the responsibilities that come with conducting a data project in the organisation, responsibility gaps emerge and it is unclear who is accountable for the project. Because data projects are still relatively new and disruptive, it

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[14] Originally in Dutch: "*Wij hebben de rollen binnen onze organisatie nog niet zo goed verdeeld, dus vaak komen de verantwoordelijkheden binnen dataprojecten bij dezelfde persoon terecht.*"

is unclear what gets included in the authorising environment, and when and how the project should be discussed by politicians and civil society.

Public Value Outcomes

Moore describes creating public value as the aim of managerial work in the public sector. We have seen how civil servants' perceptions of public value outcomes is dependent on the operational capacities of the organisation (data literacy) and its authorising environment (clear mandate and responsibilities). During our workshops, we have noticed two other interesting aspects of public value creation in local government. The first involves the civil servant's capacity to think about public value outcomes. In general, we see that civil servants tend to focus on the public good. This became especially apparent when moderating a workshop in October 2018 in a small municipality. A relatively large percentage of their population struggled with debt and financial issues. They wanted to start a data project, therefore, that helped them strengthen their poverty prevention policies. This data project would consist of an algorithm that could identify individual citizens with a high risk of finding themselves in financial trouble in the future. The municipality would then offer help to these people so that their situation would not worsen, ultimately preventing them from situations such as bankruptcy. During the entire session, which lasted three hours, participants would regularly ask questions like: "*When do we make the citizen feel happy and glad?*".[15] They were very aware of how the municipality could come across: showing up at someone's door unannounced and offering help can also be experienced as extremely patronising and invasive. The citizens' point of view was always at the forefront of the discussion. This was reflected in the goal of the project, which the participants agreed upon at the very start of the session: enhancing citizens' wellbeing. We observed (among other things) implicit value expressions when they expressed the need for being non-discriminatory towards citizens: "You have to be able to connect with people without labels or judgement and make them a non-committal offer"[16] [FN02/10/2018].

We have seen that overall, civil servants are very well-equipped to ethically justify their decisions. We have used the DEDA mostly with

[15] Original Dutch quotation: "Wanneer wordt de burger gelukkig en blij?"

[16] Original Dutch quotation: "Je moet zonder label of oordeel bij mensen binnen komen en ze een vrijblijvend aanbod kunnen doen."

municipalities or other forms of local government, but have done a few workshops within commercial organisations as well. What we learned was that by comparison, civil servants have a mindset for thinking about public value. The public interest is the main driver of their activities. We never consciously noticed how well civil servants can deliberate on public value until we saw how different this was for employees of commercial organisations. In our (limited) experience, participants from commercial organisations have trouble thinking about the ethical implications of data projects and the consequences of their projects for others in general. The maximisation of profit, instead of the public good, was at the centre of most discussions with these commercial organisations. During a workshop with a large commercial company in spring 2018, this point was specifically illustrated by one participant who said: "*all this talk of clients, let's just pretend for the sake of the efficiency of this data project that the clients do not matter*."[17] Another participant during the same workshop could only think of one value that mattered within their organisation besides profit: maintaining a good reputation [FN02/02/2018]. For civil servants, however, thinking about the citizen first was the norm during most workshops.

Though the ethical awareness of civil servants was generally very high, we have seen that ethical deliberation about data practices can be seen as an obnoxious box that needs to be ticked. This is the second interesting aspect of public value creation we noticed during the DEDA workshops. Participants sometimes seem to think that by doing a DEDA workshop, they have taken care of ethical considerations. DEDA itself is then used as a means to wash their hands of ethical concerns. According to Elletra Bietti, 'ethics washing' occurs when an organisation makes an effort to self-regulate their ethical choices, with no need to involve other societal or political influences. For her, the biggest problem with ethics washing is that it can narrow the scope of the debate and, though it can have a good outcome in some questions of procedural fairness, distracts society from addressing structural problems with the technology (Bietti, 2020). Our workshops can be seen by organisations as a way for them to self-regulate the ethical choices involved in their projects. We try to make clear that DEDA can help point out where ethical problems occur, but cannot replace a political or societal discussion that needs to be had about these issues. Mostly this message hits home. However, we have seen that when

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[17] Original Dutch quotation: "Al dit gepraat over klanten, laten we even omwille van de efficiëntie van dit data project even doen alsof the klanten er niet toe doen."

our workshop is seen as a '*moetje*',[18] it narrows the focus of the discussion. It takes more effort to get the participants to consider the broader questions about the project, most importantly whether or not the project should be launched in the first place. In these cases, the participants use the workshop to keep the ethical issues of the project out of the authorising environment.

In a few instances, the DEDA was seen as an 'ethical assessment' that could provide a green light for a data project. To give an example, the city council of a big municipality decreed that every data project has to undergo an ethical assessment of sorts, besides the (Data) Privacy Impact Assessment that was already mandatory by law. This led to a DEDA workshop for multiple projects, where project managers stated that it felt like a '*have-to*', a process that they themselves did not choose, but had to do because of decisions from higher up [FN08/01/2019] & [FN13/02/2019]. Some participants even expressed a wish for DEDA to be more like a checklist [FN15/10/2018]. In another workshop it became clear that some participants felt that as long as they walked through the DEDA poster and answered the questions, their projects would be ethically sound. They then tried to use ethical issues that arose during a workshop as indicators on how to best change the narrative of their project. For example, by reframing their project as a pilot, or wanting to break the ethical rules in order to find out where the limits are [FN08/01/2019]. In our role as advisors, we think this is problematic, and have always tried to prevent the DEDA from being used in such a way. We do this by making sure participants understand that we can help them to have the discussion about the ethics of their project but cannot tell them what decisions to make nor tell them or others that what they are doing is right. Referring to the concept of the honest broker introduced by Roger Pielke, we understand our role not as activists, consultants, or advocates, but as researchers/experts who merely point to the range of options available to policy makers (Pielke Jr, 2007). However, some workshops still ended with municipalities asking us questions concerning the further implementations of their results [FN08/01/2019], [FN13/02/2019] and [FN15/10/2018]. This is a moment where we have to emphasise that we are not responsible for decisions about the implementation of the results of their discussion. In all of these examples, ethical deliberation was not used to think about how to

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[18] A 'have-to', named as such by one of our participants [FN08/01/2019]& [FN13/02/2019].

safeguard public values in data projects, but as a way of preventing further discussion by 'checking the ethics box'.

We have seen that ethical aspects of data projects are getting more attention than some years ago. There is a growing demand for tools that help to take ethics into consideration and there is more attention being paid to ethical issues concerning data projects in the public debate. However, we have also seen that along with this development, ethical assessments have become a part of the authorising environment, that can be mobilised to legitimise a project and create a narrative to gain public support for the project. We are not the first to point out that 'ethics' and 'public good' are in themselves not neutral terms but terms that are mobilised in the discussion around emerging technologies (Washington & Kuo, 2020). We need to take care and be critical of ways in which the DEDA itself can be mobilised. However, our insight into the practices of local government also gives us special insight into how this mobilisation of ethics works. Ethical deliberation is in these cases not integrated into the entire process of developing a project but is added on at quite a late stage during the development of the project [FN08/01/2019] and [FN13/02/2019]. At this stage it is very difficult to change the design of the project, the only thing that can be changed is the narrative in which the project will be presented. This kind of thinking precludes ethical deliberation about public value creation.

Conclusion

Working with the DEDA provides unique access to organisations and privileged insights into the ways they use data practices to meet their policy objectives. Our research makes explicit how organisations are challenged in applying new technologies while constituting legitimacy and safeguarding public values. It also highlights the dynamics between the three pillars of Moore's triangle: operational capacity, authorising environment and public value outcomes. As researchers we have a front row seat to the inner-organisational dynamics that unfold with the application of novel data practices. We also learn how they affect our understanding of citizenship and democracy as they transform public management processes, and capture citizens as data subjects. As such, datafication and data projects can carry or transform public values.

In this chapter, we have shown how DEDA makes Moore's triangle tangible. What we have tried to show is that public values are deeply

affected by data projects and thoroughly interwoven with the operational capacities of an organisation and its authorising environments. First, in regard to operational capacity, we see that there can be significant limitations to data literacy and ethical awareness in Dutch municipalities. There also seems to be a strong correlation between these two. When public servants lack data literacy they are unable to recognise the ethical issues they will invariably exist in their data projects. This lack of expertise also causes organisations to rely on external partners. The need to rely on an external partner can affect the ability of an organisation to be transparent about their data project, which in turn affects the authorising environment. This relationship between governments and external partners raises further questions on how the former's values are affected by the collaboration with the latter. This highlights the tension between the (lack of) operational capacity and the expression of public values.

Second, the authorising environments in which data projects are situated are the same politically charged environments in which any governmental project is situated. The DEDA workshops show that data is also political, which in itself is not a novel conclusion. What *is* a novel insight, and one that also illustrates a tension between operational capacity and authorising environments, is that a lack of expertise can cause actors in this field to overlook the political aspects of their data projects, which can result in responsibility gaps. With the development of data projects, it is often unclear what the political mandate covers and it is, therefore also unclear how civil servants should approach the authorising environment and shape it. In our observations we saw that the aldermen can be poorly informed, sometimes even questioning the *raison d'être* of the entire data project while not understanding the ins and outs of it. This forces some of the political and ethical decisions into the hands of (back-end) data scientists with no political mandate.

Third, we have seen that among the civil servants who took part in our workshops, there can be a tendency to see ethical deliberation as a '*moetje*', which undermines the ethical discussion among civil servants, especially when the ethical deliberation is involved at a very late stage in the project. This mindset also prevents the ethical discussion being held in the authorising environment, or can even lead to the ethical assessment being mobilised to argue that the discussion about a data project does not need to be held with politicians or stakeholders.

Our purpose in this chapter was twofold. First, we hope to have shown that this kind of research can be a very fruitful way to gain new

perspectives in both data practices and the practice of public value creation. Second, we have shown some instances of how civil servants relate to their own role as public value creators and how data practices complicate this role. Further research into how DEDA functions as a tool is needed. Due to the snapshot nature of a DEDA workshop, our experiences with and the results above are based on this one moment in time. We hope to be able to carry out further research into the long-term effects of ethical deliberation through DEDA for government organisations.

By investigating the data practices of Dutch local governments with DEDA, we have been able to gain insight into the practical context in which ethical problems of data practices arise. We can tentatively make some suggestions on how to improve ethical decision making in local government. Higher data literacy can likely increase ethical awareness and deliberation about data projects. Both because it makes ethical deliberation within the organisation possible, and because it pre-empts the need for external partners, who make open ethical deliberations more difficult. Ethical awareness would also benefit from a better internal structure in organisations such as municipalities, so that they know how to divide responsibilities and apportion accountabilty for data projects.

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