



Digital Solutions to What?

- WPR as a Model for Public Servants Seeking a Better Grip on Their Local Digitalization Policy

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Abstract. Public-sector digitalization has gained traction over the years, and with it has come a flood of official documents (policies and grey literature) highlighting what the (digital) future is supposed to look like and proposing a range of digital solutions to inspire action. Such policies and strategic documents propose what will be important in future societies. In this paper, we employ the policy-analysis framework, ‘what’s the problem represented to be’ (WPR), first developed by Bacchi. We conducted a workshop with a Swedish municipality, inviting key actors to work with the idea of digitalization to re-read their digitalization policy in light of the WPR framework. The purpose of this paper is to investigate what surfaced when the policymakers and public servants used WPR to dissect their own digitalization policy. The results show that the key actors’ reflections centred around the value of the policy itself, and the WPR framework seemed to enhance their ability to reflect upon the usability of the policy and the work needed to implement and evaluate it. Furthermore, they pinpointed that the digitalization policy appeared rather naïve in terms of contextual factors (lack of recontextualisation on the municipal level) and hindrances (lack of resources to tackle existing hindrances).

Keywords: Digitalization · e-Government · policy analysis · WPR

1 Introduction

Public-sector digitalization has gained traction in recent years, bringing with it a flood of official documents (policies and grey literature) highlighting what the (digital) future is supposed to look like and proposing a range of digital solutions to inspire action. Such policies and strategic documents illustrate what may be important in a future society, and as Keeney (1996) states, strategic objectives – if enacted properly – provide direction for all decisions within an organisation. Thus, while policy analysis is a rich field in political science, with a variety of available frameworks (for further reading, see Dunn, 2015), there are fewer studies in information systems research analysing the idea of digitalization with the help of established policy-analysis frameworks bridging disciplinary gaps and making interdisciplinary contributions. This study aims to contribute to this area and earlier research such as Savoldelli et al., 2012, Bolgherini, 2007 and Goldkuhl, 2016 who all raise questions on the linkage in between policy and practice also pointing

to the uniqueness of public sector contexts. (Salvoldelli et al., 2012) showed in their study of two decades of e-Government research that one dimension of the ‘adoption paradox’ is transparent and trustworthy policy decision making processes (Salvoldelli, 2012). Bolgherini stress the political, social and cultural nature and claims that these are downplayed by a focus on massive technological intervention (Bolgherini, 2007). Whereas Goldkuhl in his literature review highlights what he calls the policy principle and argues that in public sector the IT artefact is policy-ingrained (Goldkuhl, 2016).

One tool that is increasingly having an impact in political science is Bacchi’s (2012) ‘what’s the problem represented to be’ (WPR) framework, and WPR has been used in studies of digitalization policies (see, for example, Sundberg, 2019; Syrstad Høydala and Haldar, 2021; Nyhlén and Gidlund, 2022; Duval Jensen et al., 2022). Sundberg (2019) identified that the overall problem identified with WPR is that digitalization is described as providing certain benefits but the only way to reap these benefits is to adapt to digitalization itself. Sundberg (2019: 8) concludes, “However, since no alternatives to the proposed development are presented, digitalization is ascribed autonomous features, as a solution in search for problems”. In a study on digitalization of the Norwegian education system, Syrstad Høydala and Haldar (2021) found that the overall problem to be solved that surfaced was that the education system should use digitalization to provide digitally competent future citizens and workers. Nyhlén and Gidlund (2022) investigated three levels of digitalization policies (EU, national, and sub-national) and conclude that policymaking is trapped in a form of technological determinism, with the answer to every societal problem being assumed to be digitalization in one form or another, without further recontextualisation. Duval Jensen et al. (2022) studied healthcare documentation in Denmark and identified that digital healthcare documentation appears to be the solution to most problems and that a standardised documentation contributing to a lack of individualised healthcare. As these earlier studies indicate, the WPR framework provides insights that might otherwise be hidden during the policymaking process – consciously or unconsciously overlooked – but which may come to the surface during practical work in the different local contexts.

To contribute to the stream of research above, trying to further enlighten the relation in between digitalization policies and their enactment on an overall level and on goal achievement and transparency of what is supposed to be solved in specific, this paper utilizes Bacchi’s WPR model but in a slightly different setup. The aim of the study focused on how policymakers and public servants themselves could re-read their digitalization policy with the support of the WPR framework. The study involved a semi-structured workshop in a Swedish medium-sized municipality, with key actors chosen by the head of digitalization. The purpose of this paper was to investigate what surfaced when the policymakers and public servants used WPR to dissect their digitalization policy.

The structure of this paper is as follows. Section 2 presents Bacchi’s (2012) What’s the problem represented to be (WPR) framework. Section 3 details the method and analysis applied in this paper, while Sect. 4 presents the results and analysis. Finally, Sect. 5 gives the concluding remarks and makes suggestions for future research.

2 Theoretical Framework: What's the Problem Represented to Be?

Carol Bacchi (2009) explains that policy has a key role in government and is part of how governing takes place. Bacchi (2009) states that the perception of policy is a good thing that indicates that something needs to be fixed, and if something needs to be fixed there has to be a problem. However, this problem is not always described or even named. In response, Bacchi (2009; 2012) created the 'what's the problem represented to be' approach and describes it as follows: "The 'WPR' approach is a resource, or tool, intended to facilitate critical interrogation of public policies. It starts from the premise that what one proposes to do about something" (Bacchi, 2012: 21). WPR thus identifies not only the problem the policy seeks to solve but also how this problem is represented. A WPR analysis is guided by the following six questions (Bacchi, 2012: 21):

1. What is the problem represented to be in a specific policy?
2. What presumptions or assumptions underpin this representation of the problem?
3. How has this representation of the problem come about?
4. What is left unproblematic in this problem representation? Where are the silences? Can the problem be thought about differently?
5. What are the effects are produced by this representation of the problem?
6. How and where has the representation of the problem been produced, disseminated, and defended? How could it be questioned, disrupted, and replaced?

The first question seeks to clarify the problem addressed by the policy, while the second question targets the underlying premises of this representation of the problem. Question 3 examines the contingent practices and processes that created this understanding of the problem, thereby highlighting a space for challenge and change (Bacchi, 2012). The fourth question critically examines the gaps and limitations in this representation of the problem, opening up the possibility of alternatives. Similarly, question 4 opens up a space in which to imagine different futures. Question 5 reflects on the effects or consequences of this problem representation and how it limits what can be talked about as relevant (Bacchi, 2012). Finally, question 6 seeks to increase awareness of the problem representation, also encouraging to think about how the policy could be replaced.

When WPR is used to question, re-read, and analyse one's own policy or proposal, the framework's thinking and ideas then become part of the material to be analysed. Bacchi (2012) argues that policies are not the best way of solving a problem, but they can determine what will be done and what will not. Hence, the purpose of the WPR analysis is to critically examine the conceptual logic and assumptions of public policies. In this way, Bacchi (2012) explains, that the view of the public becomes governed by problematisations rather than policies.

In this study, we used the WPR framework to contribute to the vast field of research into good governance, including the importance of transparency and accountability (Hood and Heald, 2006). More specifically, like Bozeman and Bretschneider highlighted already in 1986 and Rochelau and Wu (2002) and Wang et al. (2018), i.e. the differences between initiatives in private and public information systems – (or, as better known today, the digitalization of the public versus the private sector). Bozeman and

Bretschneider (1986) described the differences as greater risk-aversion, divided authority, multiple stakeholders with competing goals, short-term budgets related to political management, highly regulated procurement processes, and many links between programmes and organisations driven by legal requirements and other public limitations. Furthermore, a literature review by Agostino et al. (2022) found that discussions of accountability issues in public-sector digitalization have primarily been published in public administration journals (see, for example, Mergel, 2017; Wang et al., 2018). Whereas accounting journals focusing on private-sector digitalization, overlooking the public sector. The review by Agostino et al. stresses the importance of accountability in translations in order to deal with what they describe as more multicentric and blurred processes, and translations and the role of translators (Agostino et al., 2022). This is also why we chose to focus on translators as key actors working to clarify digitalization policies.

3 Empirical Material and Methodology

The purpose of this paper was to investigate what surfaced when policymakers and public servants used WPR to dissect their digitalization policy. The research and empirical material were gathered during a semi-structured workshop in a medium-sized Swedish municipality. This municipality, like many other Swedish municipalities, invests substantial resources in digitalization. The participants in the workshop, selected by the municipality's head of digitalization, were five employees working with digitalization questions in either the municipality or one of the municipality companies. The selection process was based around finding suitable employees that work with digitalization both on a strategic but also concrete level in the municipality. The participants role in the municipalities are displayed in table 1 below. The workshop, as explained previously, was developed around Bacchi's WPR framework (described in more detail later in this section), and the theme of the workshop was the digitalization policy.

Table 1. Participants role in the municipality

Participant number	Role in the municipality
Participant 1	Head of Digitalization
Participant 2	Chairman of the municipal companies' IT council
Participant 3	Digitalization strategist
Participant 4	Business developer
Participant 5	Unit manager for digital development
Participant 6	Information Security Coordinator

The objective of the workshop was for the key actors to question and problematise the current digitalization policy. The municipality was about to embark on creating a new policy and they wanted to identify the strengths and weaknesses of the current policy

to be taken over into the new iteration. The policy document was selected with the help of the head of digitalization, as the municipality had a wide range of official documents touching on digitalization and this document was deemed the most appropriate for the task at hand. The digitalization policy selected is centred around five goals or perspective namely: digital safety, digital competence, digital leadership, digital sustainability and digital innovation.

The workshop began with the authors giving a brief presentation on policy analysis and then Bacchi's (2012) WPR approach and presenting the six questions (see Sect. 2). The questions were translated into Swedish and presented in everyday language:

1. What problem does the policy identify?
2. What underpinnings are the problem description based upon?
3. Is there anything taken for granted or presented as unproblematic in the policy?
4. Are there points of view other than those described in the policy?
5. What happens if one follow or does not follow the policy?
6. How was the policy created? How could it be replaced?

The question formulations were modified from the original to adapt them to the study context, keeping in mind that the participants had no prior experience with policy analysis. Thus, this modified set of questions was better aligned with the topic of the workshop and to the targeted participants. Prior to the workshop, the participants were sent a PowerPoint document (containing these questions) in which they could take notes throughout the workshop, and they were given a copy of the digitalization policy chosen for discussion. After the WPR presentation, the participants divided themselves in three pairs and went into different rooms to begin their analyses. After 45 min, the participants were asked to come back to discuss their findings for another 45 min. During the workshop, the participants were asked to type their reflections into the PowerPoint documents, under each of the six questions; and these notes were gathered at the end. As there were only three pairs, most of the empirical material could be presented.

The empirical material gathered for this paper consisted of the notes made by the participants during their analysis sessions, combined with field notes taken by the authors during the workshop and discussions. The material was subject to a directed qualitative content analysis (Hsieh and Shannon, 2005). As the material and workshop were structured by the six WPR questions. This gave that, the workshop was semi-structured, and the participants worked with one question at a time, and this order gently led the participants through an increasingly critical examination. The concept of using WPR for public servants is something that Bacchi (2012) touches on whom state that applying these six questions in relation to one's own policy or proposal allows the policymaker to incorporate their own thinking into the material. As such, in this study, the participants conducted the initial analyses, and their analysis were then re-analysed. This is a slightly different approach to the one described earlier. The advantage of this approach is that the empirical material then included not only the policy itself, but also the key actors' analyses of the same, which provided a richer and more interactive picture of the policy in its context.

4 Results and Analysis

As mentioned above, the analysis involved two sets of empirical material: the key actors' notes from their analyses, as guided by the six questions, and the notes taken throughout the workshop to support reflections that the participants made that might not be included in their own notes. The analyses strictly followed the order of the six WPR questions, and the directed qualitative content analysis (Hsieh and Shannon, 2005) ensured that the answers to these questions (expressed as text notes in the Power Points and as verbal expressions in the reflection part of the workshop that were collected as field notes) provided the results.

4.1 What is the Problem Represented to Be?

None of the groups identified any clear statements uncovering problems (WPR1) to which digitalization would be the solution in the given policy. However, they did identify a set of implied challenges, such as the “digital leap”, explaining that the municipality must commit to digitalization efforts to reap the benefits of enhanced services and increased efficiency, with a competitive race embedded in that. Moreover, the policy included a range of goals and a vision that the municipality wanted to achieve, such as being open, equal, and attractive municipality; being the best school municipality; being a municipality in which it is safe to grow old; decreasing unemployment; increasing occupation; and being environmentally sustainable. However, these goals did not have a clear connection to the challenge on which the policy had been built on. This is in line with the findings of Sundberg (2019), who argues that we must adapt to the digital society in order to reap its benefits, but this is so taken for granted that we miss explaining the mechanisms behind a competitive stance.

The second (modified) WPR question (WPR2) asked about the underpinnings of the problem description. One group referred to the five goals of the policy, and the other two took up analysis of the surroundings, such as identifying the (mega)trends and taking stance in official national and pan-national documents and strategies. It is common in Swedish municipalities to use the goals of the national digitalization strategies. However, as pointed out by some of the participants, these strategies do not translate well to the local challenges and the capacity of local operations, thus contributing to a rather naïve and unreflective enactment of national policies.

The third question (WPR3) asked the participants to identify what had been taken for granted or represented as unproblematic in the policy. Here, the participants reflected on the lack of problem insights that appeared to assume there would be no roadblocks or hindrances to achieving the goals set out in the policy (partly related to the abovementioned unreflected or even naïve stance). Also taken-for-granted was the availability of the resources for achieving the goal exist and will be provided and architecture, and infrastructure is available. This in line with the Nyhlén and Gidlund (2022) finding regarding taken-for-granted(ness) that is reproduced, though in this case it is being assumed that digitalization will occur. In a similar manner, Heidlund and Sundberg (2021) identified that few other alternatives to digitalization were being presented to stakeholders.

The fourth question (WPR4) sought to gauge whether there were points of view other than those presented in the policy. Here, the groups explained that the views taken in

the policy were based on national strategies and suggested that the policy lacked a clear connection to the municipality and its core operations. One group asked, “What does the citizen want and need?”. This touches on something interesting; while it can be difficult to talk about the citizen in any overarching national policies, as identified by Schou and Hjelholt (2019), this can be beneficial in smaller settings, such as the municipal context.

Question five (WPR5) strayed somewhat from Bacchi’s original model but was nonetheless important, as it sought to capture what would happen if one followed (or did not follow) the policy. Here, the participants reflected on that they might not follow the strategy today. They said that there seemed to be no clear assignment of whom should evaluate whether the policy goals had been achieved and what the consequences would be if they had not.

The final question (WPR6) asked the participants how the policy had been created and how it could be replaced. While they were uncertain about the former, they all had ideas about how it could be replaced and made more meaningful. One idea involved the “digital transformation plan”, which is narrower and showed how the municipality could benefit from digital transformation grounded in a “citizen first” principle.

As Bacchi (2012) states, a WPR analysis of one’s own policy can provide additional insights that can then become part of the material itself. As such, this workshop not only invited a critical examination and identification of the shortcomings of the current policy, more so it also contributed by providing inspiration and learning. During the discussion of these findings, many ideas and lessons emerged with regards to the creation of the new policy. Two key points arose. First, the policy should be more closely tied to the municipalities’ own operations and must clarify how digitalization can add value to these. Second, the participants noted the lack of problems identified in the current description, as well as the lack of resources and evaluation protocols; hence, future policy should be more grounded in problems than in vision and goals.

5 Concluding Remarks

The purpose of this paper was to investigate what surfaced when policymakers and public servants used WPR to dissect their digitalization policy in order to contribute to earlier research stressing the importance of understanding the political aspects of digitalization in public sector (Salvodelli et al., 2012, Bolgherini, 2007 and Goldkuhl, 2016). As such this study’s objective is to add to the existing more theoretical and conceptual contribution by putting forward empirically-based nuances on the enactment of policies in practice. The paper highlights how policymakers and public servants themselves could re-read their digitalization policies with the support of the WPR framework. As shown in earlier research, the process of translations is vital to ensure accountability (Agostino et al., 2022), and tentative results show that emerging critical digital-accountability issues are multicentric accountability, the blurring of accountability roles and boundaries, increasing relevance of translation processes and translators’ roles (Agostino et al., 2022).

In this study, the key actors’ reflections centred around different aspects of the value of the policy itself. The WPR framework seemed to support their ability to reflect upon the usability of the policy and the work required to implement and evaluate it. The

participants indicated that the policy appeared rather naïve in terms of reference to contextual factors (a lack of recontextualisation at the municipal level) and hindrances (a lack resources for tackling existing hindrances). Hence, they stated opinions on that future policies should be narrower in the sense of, targeting specific problems faced by the municipality and connecting the policies to their operational capabilities. Overall it is problematic when digitalization policies present digitalization as a solution to all challenges per se (similar to the findings of Nyhlén and Gidlund, 2022), rather than responding directly to local problems. This is in line with the results by Agostino et al. (2022), which stress the need for critical issue of local translation processes.

Our results indicate that WPR appears to be a promising tool for public servants to analyse their own policy proved to be a success in this context. The participants found the questions and areas of discussion to be useful, and they gained deeper insights into policy construction by using the framework to dissect their own current policy. With policymakers and strategists analysing and questioning their own policies in this way, the next generation of digitalization strategies could move away from the discourse of describing digitalization as the only alternative and such become a goal in itself to provide more contextualised and transparent narratives. As for future research we encourage scholars to pursue this type of empirical work, including the policy makers in the process of analysing their own policies, to substantiate arguments of the importance of political aspects of public sector digitalization. While we choose Bacchi's WPR approach there are of course a multitude of policy tools that can be applied and it would also be interesting to do a similar study in other contexts such as higher-level government (national). This approach could, as Bacchi (2012) states, contribute to ensuring the public is governed by problematisation, rather than policies.

References

- Agostino, D., Saliterer, I., Steccolini, I.: Digitalization, accounting and accountability: a literature review and reflections on future research in public services. *Financ. Account. Manage.* **38**(2), 152–176 (2022)
- Bacchi, C.: *Analysing Policy*. 1st edn. Pearson Higher Education, Australia (2009)
- Bacchi, C.: Introducing the 'what's the problem represented to be?' approach. *Engaging with Carol Bacchi: Strategic interventions and exchanges*, pp. 21–24 (2012)
- Bolgherini, S.: The technology trap and the role of political and cultural variables: a critical analysis of the e-government policies. *Rev. Policy Res.* **24**(3), 259–275 (2007)
- Bozeman, B., Bretschneider, S.: Public management information systems: theory and prescription. *Public Adm. Rev.* 475–487 (1986)
- Dunn, W.N.: *Public Policy Analysis*. Routledge (2015)
- Duval Jensen, J., Ledderer, L., Beedholm, K.: How digital health documentation transforms professional practices in primary healthcare in Denmark: a WPR document analysis. *Nurs. Inq.* e12499 (2022)
- Goldkuhl, G.: E-government design research: towards the policy-ingrained IT artifact. *Gov. Inf. Q.* **33**(3), 444–452 (2016)
- Heidlund, M., Sundberg, L.: How is digitalization legitimised in government welfare policies? An objectives-oriented approach. In: *EGOV-CeDEM-ePart-**, pp. 199–207 (2021)
- Hood, C., Heald, D.: *Transparency: The Key to Better Governance?*, vol. 135. Oxford University Press for The British Academy (2006)

- Hsieh, H.F., Shannon, S.E.: Three approaches to qualitative content analysis. *Qual. Health Res.* **15**(9), 1277–1288 (2005)
- Keeney, R.L.: Value-focused thinking: Identifying decision opportunities and creating alternatives. *Eur. J. Oper. Res.* **92**(3), 537–549 (1996)
- Mergel, I.: Building holistic evidence for social media impact. *Public Adm. Rev.* **77**(4), 489–495 (2017)
- Nyhlén, S., Gidlund, K.L.: In conversation with digitalization: myths, fiction or professional imagining?. *Inf. Polity (Preprint)* **27**, 1–11 (2022)
- Rocheleau, B., Wu, L.: Public versus private information systems: Do they differ in important ways? A review and empirical test. *Am. Rev. Public Adm.* **32**(4), 379–397 (2002)
- Savoldelli, A., Codagnone, C., Misuraca, G.: Explaining the egovernment paradox: an analysis of two decades of evidence from scientific literature and practice on barriers to egovernment. In: *Proceedings of the 6th International Conference on Theory and Practice of Electronic Governance*, pp. 287–296 (2012)
- Schou, J., Hjelholt, M.: Digitalizing the welfare state: citizenship discourses in Danish digitalization strategies from 2002 to 2015. *Crit. Policy Stud.* **13**(1), 3–22 (2019)
- Sundberg, L.: If digitalization is the solution, what is the problem? In: *European Conference on Digital Government*, pp. 136–IX. Academic Conferences International Limited (2019)
- Syrstad Høydal, Ø.S., Haldar, M.: A tale of the digital future: analyzing the digitalization of the Norwegian education system. *Crit. Policy Stud.* **16**, 1–18 (2021)
- Wang, C., Medaglia, R., Zheng, L.: Towards a typology of adaptive governance in the digital government context: the role of decision-making and accountability. *Gov. Inf. Q.* **35**(2), 306–322 (2018)