

Experiences from an Interpretative Case Study of Innovative Public Procurement of Digital Systems in the Norwegian Public Sector

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ABSTRACT

We report experiences from doing an interpretative case study of innovative public procurement of digital systems. It is a complex case where the context of rules and regulations influences method and tool use. We present preliminary findings and discuss our experiences from using interpretative methods and a structured-pragmatic-situational approach.

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KEYWORDS

Interpretative case study, innovative public procurement, digital systems, digitalization.

1 The collaboration setup

The procurement of digital systems and services is a significant market, amounting to 11.7 billion kroner in Norway alone in 2018 (1.8 Billion Euro) [1]. Traditionally, when the public is procuring new digital systems, it uses a process with a very strict phased division, which is very different from current software engineering methods focusing on agility [2]. Several challenges are reported due to this strict process, such as handling various stakeholders, limited interest from vendors, due to payment model and standard government contracts, balancing different socio-economic objectives and specifying requirements before announcing tender [3]. Importantly, these processes do not sufficiently contribute to the government's goal of innovating the public sector.

In Norway, there is an initiative to mitigate these challenges by using a method called *innovative public procurements* (IPP) [4]. This method aims to mitigate the above-mentioned challenges through a more dynamic process where knowledge about procurers' needs must be transferred to potential suppliers,

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and suppliers' knowledge of possible technological solutions must be transferred back to procurers [5]. The ultimate goal is that the requirements that are emerging are not the sole view of the procurers, but rather a collaboration where knowledge is shared, and hence more innovative digital solutions can be brought forward in the public sector.

The unit under study here is the project managers and procurers that are using IPP. The research aims to understand both the public sector and the suppliers' perspectives.

2 Motivation and goals for the collaboration

While the motivation for IPP is commendable, several challenges exist that limit the use of IPP. There is a lack of collaboration between different actors, there is a lack of management support, and there is an aversion in procurement concerning taking risks. The goal of the collaboration is to mitigate these challenges by testing and evaluating digital tools in the collaboration to facilitate collaboration, process support and data sharing to decrease risk.

3 Methods and modes of engagement

Our research design for addressing our long-term research topic of collaborative digitalization in public sector is that of an interpretative case study [6]. An interpretive approach entails putting the practitioners' understandings of reality at the center of our analysis. Our interviewees represent emerging cases that are under construction, which will result in a comparative study of multiple digitalization cases to be presented in future publications. We are also taking a structured-pragmatic-situational approach to conducting the case study [7]. Currently we are in the framing cycle in our case study. Having gained access to several cases, we are collecting our initial data and "constructing and extending our theoretical lenses" (ibid, p. 164).

The reflections we present in this research in progress paper is primarily based two workshops and eight interviews with procurers and project managers in six Norwegian municipalities and one county administration office that have

experience from innovative public procurement (see Table 1 below).

Data source	Description	N
2 workshops	Procurers, Project manager	12
Dialogue meeting	Procurers, Project manager, Vendor representatives	6
Interviews	Procurers, project managers, IT-director	8
Total		26

4 Preliminary results

Preliminary results indicate how there are several challenges related to applying IPP. First, we find that there are new requirements put on procurers as public sector innovators. They must be open to intensive dialogue with vendors while at the same time deal with formalized procurement processes that constrains collaboration between the public sector and commercial vendors. Second, we find how the public sector essentially is rigged for purchasing off-the-shelf/COTS digital solutions. We observe how innovative procurements challenges this rigging and involves more continuous change processes. This involves taking more risk than one is used to – which is challenging. Third, we find that collaboration occurring in the network of public sector and commercial vendors is challenging. The collaboration is episodic, bureaucratic and formalized. The competitive nature of public procurement creates an environment characterized by a lack of trust.

Mitigating some of these challenges, tools are suggested that will be tested and evaluated moving forward. First, in terms of changing the procurer role, a process guideline tool is being developed that gives procurers process support, step by step in doing innovative public procurement. The goal is to offer support in doing unfamiliar tasks (such as market dialogue, establishing descriptions of needs, actor maps, relating to strategies etc.). Second, in terms of changing from buying COTS, moving towards more continuous processes, we find that experience sharing is key. Here we plan to use innovation management tools, that supports sharing ideas across units, getting access to previous and similar innovative procurements, and getting overview of relevant vendors for particular needs. Our preliminary findings indicate that learning from others that has done similar things is a key success criterion for managing IPP. Third and finally, to support more collaboration outside and beyond the dialogue meetings and one to one dialogue, collaboration tools, such as Slack, Microsoft Teams and Google should be used. These tools are already in use, however mostly internally within the procuring units, and not extended to the vendors. The reason is fear of sharing confidential information and unequal treatment of commercial vendors. It is therefore necessary to consider mechanisms that can protect information and ensure equality.

5 Lessons learned and implications

In terms of lessons learned, we have chosen to approach the case as an interpretative case study [6]. This seems relevant in this case, as the interpretative method focuses on how the actors in the case considers the challenges and opportunities at hand. Furthermore, it is relevant in approaching a case where tools is used, because the method is aimed at producing an understanding of the context of digital tools, and the processes whereby the digital tools influences and is influenced by the context. This is key, as the context in terms of existing practices, rules, regulations and organizational setup influences heavily.

Finally, we take a structured-pragmatic-situational approach to the case study [7]. It contains two main phases, a framing cycle and an augmenting cycle, with a total of eight steps. We are currently in the framing cycle, where we have started to conceptualize the phenomenon (step 2). While there is a lack of literature on IPP and the use of digital tools, we are turning to non-technical literature and read different theories from adjacent fields (such as innovation in the private sector). We are also collecting and organizing the initial data (step 3), focusing on open coding of the data, as the focus is on a recurrent phenomenon independent of time.

The implications so far are that using IPP has similar challenges as that which is reported for traditional public procurement. This is a challenge, as the IPP aims to mitigate the “strictness” of the traditional process. The IPP as a unit of study is a complex phenomenon with various stakeholders, and an influential context. The interpretative case study approach allows us to shed light on the context. Furthermore, the use of the structured-pragmatic-situational approach is helpful in finding a practical way of managing the complexity of the case.

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