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The new public encounter: Where citizens meet the state-bot

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Abstract. This document gives an overview of the topic, research questions and current status of the authors PhD project. This research aims to investigate the impacts of digitalization of the interaction between state and public, also known as public encounter, on the citizens perception of their government. More specifically the author wants to find out whether the use of Information and Communication Technologies (ICTs) influences how the citizen perceives their government and if so whether it is possible to design these ICTs in a way that will foster a positive perception. The citizens perception of their government will be evaluated by assessing a given set of public service values. The goal is to develop a framework which can guide the design and implementation of digital public encounters in a way that contributes to a positive citizens perception of their government. The research focuses on the Norwegian context by investigating the nature of public encounters between government institutions and citizens.

Introduction

Today, our everyday lives rely heavily on the use of digital tools. They are already embedded in nearly all societal functions, from healthcare to education and banking to traveling. Although the digital tools applied vary from field to field, what many of them have in common is the replacement of physical human-to-human interactions (Hassani et al., 2021; Sætra & Fosch-Villaronga, 2021). The physical human-to-human interaction is often replaced by self-services, automatization, or a digital interaction. This trend is also visible in the public sector through the digital transformation of governments and their institutions – turning into electronic (e-) governments. E-governments are meant to increase well-being, democratic values, transparency, participation, and accountability. Furthermore, the use of Information and Communication Technologies (ICTs) in governments have opened an opportunity to change the relationship between government and citizens in a way that contributes to the goals of better government which is more responsive to the needs of citizens, more democratic, more efficient, and more transparent (Bekkers & Homburg, 2007; Castro & Lopes, 2022).

One very important aspect of governments and its institutions is the interaction or contact between public officials or the state and citizens, also known as public encounter. The public encounter includes citizen-state interaction within the context of public service provision, but also other interactions such as voting, lobbying, and asking citizens for advice (Lindgren et al., 2019). Traditionally, the term public encounter described the face-to-face contact in a physical environment (Bartels, 2013). The introduction of ICTs in public administrations and other government services is shifting the public encounter away from face-to-face contact into digital environments, such as websites and mobile applications. ICTs which can be found in public service provision and state-citizen interactions are webpages, digital platforms, chatbots, computer games, virtual reality and augmented reality. While public service provision is mostly making use of webpages, digital platforms, and chatbots, other areas such as citizen participation in urban planning processes are using 3D-models (static, animated or virtual reality models), communication platforms, and computer games to facilitate citizen interaction (Hanzl, 2007). Virtual and augmented reality are also being tested for collaboration and meeting situations.

The environment or space in which a public encounter occurs can influence the citizens perception of their government. Lindgren et al. (2019) states that the shift to digital public services changes the nature of the public encounter by changing the when, where, and how of the interaction as well as what each actor does and the skills that are required to perform a task. In the case of the Norwegian Labor

and Welfare Administration (NAV), the digitalisation process has already led to decreased accessibility through non-digital channels (Helsetilsynet, 2022).

Several scholars point out that research on the effects of shifting the public encounter away from face-to-face interaction towards digital interactions and its implications for citizens perception of their government is not sufficient and in need of empirical studies (Bartels, 2013; Buffat, 2015; Lindgren et al., 2019).

To evaluate the impact that ICTs have on the citizens perception of their government, a framework developed by Bannister and Connolly (2014) can be used. The framework proposes a taxonomy of public values for assessing the impact of ICT in the public service sector. The term value can be defined as “a mode of behavior, either a way of doing things or an attribute of a way of doing things, that is held to be right” (Bannister & Connolly, 2014). The values relevant for this study relate to the public sector and are therefore termed public sector values. The framework by Bannister and Connolly (2014) divides values into duty oriented, service oriented and socially oriented values and represents a core set of administrative values. An overview of these values is presented in Table I.

From a CSCW perspective the public encounter can be seen as a collaborative process that involves citizens and public officials. Public encounters are an example of practices that cross organizational boundaries and involve multiple stakeholders. It can be described with the boundary resources model developed by (Ghazawneh & Henfridsson, 2013). Boundary resources are defined as “the software tools that serve as the interface for the arm’s-length relationship between the platform owner and the application developer” (Ghazawneh & Henfridsson, 2013). Gong & Li, (2023) have adapted this model to define e-government platforms where boundary resources “enable and stimulate collaboration among government agencies”. Thus, the boundary resource model can also be used to define the interface for the relationship between citizens and public officials. These boundary resources ought to be designed to enable collaboration.

CSCW literature has investigated other cases where organizational boundaries are crossed with the help of technology, as for example assisted living technologies and care services (Procter et al., 2014) and navigating healthcare services (Gui et al., 2018).

Table I Proposed taxonomy of public values for assessing the impact of ICTs by Bannister & Connolly (2014)

Duty oriented	Service oriented	Socially oriented
Responsibility to the citizen	Service to the citizen in his or her different roles	Inclusiveness
Responsibility to the elected politicians of the day	Respect for the individual	Justice
Proper use of public funds	Responsiveness	Fairness
Compliance with the law	Effectiveness	Equality of treatment and access
Efficient use of public funds	Efficiency	Respect for the citizen
Integrity and honesty	Transparency	Due process
Facilitating the democratic will		Protecting citizen privacy
Accountability to government		Protecting citizen from exploitation
Economy/parsimony		Protecting citizen security
Rectitude		Accountability to the public
		Consulting the citizen
		Impartiality

Objectives

This research aims to investigate the impacts of digitalization of the interaction between state and public, also known as public encounter, on the citizens perception of their government. More specifically the author wants to find out whether the use of Information and Communication Technologies (ICTs) influences how the citizen perceives their government and if so whether it is possible to design these ICTs in a way that will foster a positive perception. The

citizens perception of their government can be evaluated by assessing a given set of public service values. The goal is to develop a framework which can guide the design and implementation of digital public encounters in a way that contributes to a positive citizens perception of their government. The research focuses on the Norwegian context by investigating the nature of public encounters between government institutions and citizens.

The key research questions of this PhD are:

RQ1: How does the use of ICTs in public encounters influence the citizens perception of their government with regards to public service values?

RQ2: How shall (digital) public encounters be designed to foster positive citizens perception of their government?

Methodology

This research project will investigate the public encounter, interaction between state and citizen, in different settings. It is a real-life, contemporary event which can best be studied through a case study.

Yin (2018) defines three conditions, (1) the form of research question asked, (2) the control the researcher required to have over the events, (3) the degree of focus on contemporary versus historical events, that relate to different research methods. A case study is thereafter recommended for research projects asking How? - and Why? - questions, where the researcher does not require control over the events, and contemporary events are studied (Yin, 2018). All three conditions are met in this project.

Different data collection methods will be utilized at different stages in the research. These methods include observations, interviews, and content analysis of related documents. Other forms of interaction with participants, such as meetings, workshops or focus group discussions, can be part of the data collection. Observations will be documented in field notes, while all interviews will be recorded. The data will then be analysed to develop a comprehensive understanding of participants thoughts, opinions, emotions, and experiences. A qualitative data analysing tool such as NVivo will be utilized.

The different stages of a case study research are plan, design, prepare, collect analyse, and share (Yin, 2018).

Other competing research strategies for this project could be a survey or ethnography. However, the growing implementation of e-government services and therefore increased number of digital public encounters are a recent and rapidly changing phenomenon which require new theories and concepts to understand its impacts on society. Such is difficult to acquire with a survey

which focuses rather on existing theories. An ethnography has a lot in common with case study research, however it is mainly based on observations for data collection and may use interviews as additional technique while the case study can be based on quantitative and qualitative data which compliments one another to shape a holistic image of the studied phenomenon (Suryani, 2008).

Findings to date and next steps

This research project has just begun, and no data has been collected to date and therefore no findings are present. The author is currently working on an extensive literature review to build the theoretical framework on. The literature review will show if the chosen framework by Bannister & Connolly (2014) is in fact suitable or whether other frameworks or metrics fit better. Furthermore, will the author get in contact with relevant groups to start collecting data for the first case study. The first case study will involve the Norwegian Labour and Welfare Administration and investigate their interaction with citizens within different spaces such as physical, digital, and potentially hybrid spaces. One interesting and potentially challenging aspect of this case study will be the involvement of end-user of NAV (citizens) and to generate data from this group. The author is interested to learn about other researchers experience on this topic and the methodological approaches that were used.

Contributions

My research is investigating the very specific interaction between citizens and public officials and how digital tools shape and influence this interaction. This interaction inhibits a special form of collaboration between the actors. My research will motivate discussions and insights around this special form of collaboration.

Furthermore, my background in urban planning with a focus on citizen participation and user centred design connects well to the main concepts in CSCW. While urban planning is looking at how people utilize urban spaces (collaboratively), CSCW is focusing on how people utilize technologies collaboratively. Viewing CSCW from an urban planning perspective, where social interactions and participation are at the core, can contribute to interesting discussions.

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Biography

Michaela Schmidt is a Phd candidate at the Department for Computer Science at the Norwegian University of Science and Technology (NTNU). Her research interest concerns the impact of digitalisation on society and on the societal aspects of sustainability.

Her background is in urban planning with a focus on citizen participation and user centred urban design. The current digitalisation of cities and urban environments, often presented under terms such as Smart Cities and electronic governments, are motivating the investigation of societal aspects of this transformation process.

Statement

My main motivation to attend the doctoral colloquium is to discuss my research topic as well as research approach and receive constructive feedback. Coming from an urban planning background I hope to get new insights from the field of CSCW and ideas on how to better connect my research topic to the concepts of CSCW. I am very interested in learning more about qualitative research in computer science.