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Service innovation through Digitalisation

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The advancement of Information and Communication Technologies (ICTs) creates new opportunities for public and private organisations. For government institutions specifically, the application of ICTs serves the purpose of increasing efficiency, transparency, trust, accountability and citizen participation [1], [2]. Additionally, it is seen as a driver for innovation within the public sector, including service and policy innovation [3].

Skålén et al. [4] define service innovation as the creation of new or the development of existing value propositions "by creating new or developing existing practices and/or resources, or by integrating existing practices and resources in new ways" [5, p. 154]. While there is growing demand and pressure on the public sector to become more innovative, there is disagreement about how to achieve this [4]. The service-dominant logic theories suggest that service innovation happens as organizations collaborate with other actors by integrating resources and practices into value propositions which are then offered to users [5], [6].
Further, is innovation closely linked to problem-finding and problem-solving practices as these relate to idea-generation. Frontline workers as well as users/citizens may see problems with existing value propositions and offer solutions that can develop existing or create new value propositions [4]. Value co-creation processes are a possible driver for service innovation as the user comes into direct contact with the organization's value propositions (by using the service offered by the organization). This leads to users detecting problems and suggesting improvements to the value propositions [7]. In government organisations, these value propositions are not necessarily defined by the organisation who delivers a service, but rather by a service ecosystem including several public organisations as well as politicians and policymakers.

The use of digital services and self-service solutions opens opportunities to collect data on users which can be used as resource for service innovation. One example is the chat-bot Frida, used to answer inquiries by citizens to the Norwegian Labour and Welfare Administration. Frida is continuously being improved through the re-integration of user-data and feedback, which could be considered as a process of service innovation. When citizens interact with Frida their feedback is commonly in the form of measurable data points or standardized feedback forms at the end of the interaction (e.g. "Are you satisfied with the answer?").

This feedback can help to improve the service at hand, here Frida, but may not reach higher levels and therefore support the co-production of value propositions. This leads to limited and separated feedback within the service ecosystem. According to Skålén et al. [4] it is the creation of new or development of existing value propositions that defines service innovation.
Thus, I would like to argue that self-services such as the chatbot Frida limit service innovation since the feedback loop is reduced to the interaction and improvement of the digital self-service technology. Karlsson and Skålén [8], Engen and Magnusson [9], and Skålén et al [4] point out that front-line employees bring important knowledge to the service innovation process. This knowledge cannot be captured and communicated by an IT-system. While citizens can provide feedback to the other instances of the ecosystem through elections and user surveys it is unclear as to what extent this feedback can contribute to service innovation.

During the seminar I would like to discuss how feedback and knowledge is produced and integrated as part of the service innovation process. What is the role of different actors, human and non-human, of the eco-system for service innovation?

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