Mapping design interventions in digital public services

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ABSTRACT

As public administrations recognize that conventional policy instruments are limited in their efficacy in addressing transitions with high degrees of uncertainty, human-centered approaches are advocated worldwide. Likewise, digitalization has steered public services to adopt co-creation practices with the diverse ecosystem of value co-creators. As a result, there has been an increasing demand for design competencies within public administration. This is evident in the proliferation of public sector innovation labs worldwide, and other formats helping civil servants' apply design in their everyday work practices (e.g. Kimbell 2016, McGrann et al., 2018). In this context, the strategic design role is claimed upstream in policy and public service provisioning (e.g., Junginger, 2015; Bason, 2017; Julier, 2017, Hyysalo et al., 2023). Implementing design tools and methods as early as defining challenges and goals creates opportunities for rethinking and envisioning more sustainable and efficient societal outcomes. Human-centered and future-orientated approaches support governments in building a more collaborative and networked future.

In this paper, we review 56 digital-related projects from the last ten years of collaboration between Aalto University and public services and analyze the design interventions that shape cities and governments with design. These collaborations happened as study projects through two master-level courses with the City of Espoo and the Finnish Ministries as main partners.

KEYWORDS:

Opportunities and Challenges, Service Design, Designing the City, Digital Transformations

DESIGNING FOR SERVICES

Designing for Services (DfS) is a course in the Collaborative and Industrial Design major of the Master's Programme in Design at Aalto University since 2013. Students in the course work on a real-world challenge, usually addressing social, cultural, or technological transformations in public organizations by employing a service design mindset, process, and methods and tools. The focus is on holistic, human-centered, and co-design approaches, as well as sense-making of complexity and organizational and networked relationships.

The collaboration with public organizations and Design Department was initiated 2009. The early days included student projects and small research interventions that were characterized as adventures (e.g., Hakio and Mattelmäki, 2011), as the landscape between design education and research and the public sector was still uncharted territory.

Today, on the one hand, many public servants are knowledgeable and trained in service design practices, and on the other hand, service design research and education have progressed. However, we still have a landscape to explore, in particular when addressing digital solutions and their entanglements.

From the university's side, working with the municipalities has been significant. Over the years, what started as a small step has become a steady pathway representing dozens of design interventions with diverse partners and a variety of briefs. In DfS, we worked with 50 design briefs and 250 students addressing topical and societally relevant challenges, ranging from citizen participation (Hatami and Mattelmäki, 2016) and fostering care (Hakio et al., 2019) to internationalization and diversity and inclusion (Svanda et al., 2021), among others.

DESIGN FOR GOVERNMENT

Design for Government (DfG) is a course in the Creative Sustainability multidisciplinary Master's programme at Aalto University. Every year, students work with commissioned projects by the Finnish ministries and public sector agencies to address contemporary national-level policy challenges.

The approach leveraged in the Design for Government course is based on combining three core tenets i) human-centered design is used at the beginning, in the research phase by engaging people with different perspectives, ii) systems thinking is applied in the analysis phase to identify what needs to change in the system, and iii) behavioral insights, supports the solution phase to inform effective change.

DfG was founded in the 2014–2015 academic year with the objective to develop and demonstrate what design can offer to public governance. The course emerged in an international wave of interest in creative and innovative approaches, which is evident, for example, in the proliferation of design and innovation labs in government – notable examples include the Strategic Design Unit at the Finnish Innovation Fund, Sitra (also known as Helsinki Design Lab), Inland Design at the Finnish Immigration Service, the Policy Design Lab and Behavioural Insight Team in the UK, the MindLab in Denmark, and the Public Policy Lab in New York City.

This paper employs a systematic review of course projects following the adaptation of steps from systematic literature reviews (e.g., Kitchenham, 2004; Snyder, 2019). Rather than focusing on the published academic work, this review collects and analyzes projects dealing with designing digital public services from the DfS and DfG courses. It aims to map the opportunities and challenges of designing the city, in

particular, designing for digital transformations through close collaborations between the university and the public sector. In total, we identify 56 digital-related projects from the joint database of DfS and DfG final project reports. These projects reflect contemporary public service challenges, such as just energy transitions, trust in AI governance or inclusive digital public services. To perform the analysis, we developed a data extraction sheet which we populated according to the following dimensions: (1) challenge themes, (2) challenge frames, (3) student reframes, (4) employed design methods (5) stakeholder engagement, (6) student proposals (i.e., types of interventions), (7) identified opportunities, (8) identified challenges, and (9) weak signals (what happens after the course?). Currently, we are utilizing thematic and content analysis (Braun and Clarke, 2006) to uncover emerging themes in the data.

The expected contributions of this systematic review of digital-related projects in course collaborations with public administrations are threefold. First, by clustering the types of proposed interventions, we aim at developing a typology of digital design interventions. Second, by mapping the projects according to our nine dimensions, we aim at getting a finer-grained overview of the evolution of opportunities and challenges when designing for digital transformations. Third, through the analysis of weak signals, we aim to identify ways forward and outline a future research agenda.

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