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Co-VAL [770356] "Understanding value co-creation in public services for transforming European public administrations"

D4.2 Report on in-depth case studies

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Executive Summary

This report is the second report (deliverable) of WP4 on service design in the COVAL project. The overall aim of WP4 is to advance understandings of the conditions, constraints and potential of applying service design in public service settings. Service design is one of four co-creation areas examined in the COVAL project. Alongside studies of digital transformation, living labs and public-private innovation networks for social innovation, the studies of service design aim to bring empirical insights into conditions for the development of more bottom-up approaches to public administration transformations.

The report presents findings from a multiple-case study of service design projects set in public service settings in five European countries: the UK, Norway, France, Spain and Hungary. Two case studies have been carried out in each of the countries, so the multiple-case study covers, in sum, 10 cases. The study is based on a multiple holistic case study design, in which each case makes up a unit of analysis. However, the findings across cases have been analysed and summarized through a cross-case analysis.

The aim of the case studies was to gain insight on 1) how the various actors involved understood service design; 2) how they perceived the service design processes; and 3) how they perceived any changes that the projects led to, in those cases that showed clear results. The data collection was carried out as qualitative research, and was based on semi-structured interviews, observation and document studies.

We present first the summarized and descriptive findings from each of the case studies, positioned within an outline of the national contexts for service design mapped through reviews of the 'grey' literature on service design in each of the countries. The case studies cover studies from different service sectors, such as welfare, employment and social services, library, transport, waste, housing, dementia care, higher education and public health.

In the cross-case analysis (chapter 8), we draw together the findings from across the multiple cases and across national contexts. The strategies for the cross-case analysis follow primarily the rationale and suggested procedures for cross-case analysis as outlined by Stake (2013). This form of analysis requires an analytical process of moving back and forth between the readings of the individual data reports, and the delineation and refinement of themes to focus on in the overall analysis of the phenomenon of the study. The analysis centred finally on a presentation of findings across three themes, and a fourth emerging theme, 'digitalization and servicescapes' was identified as relevant for further in-depth analysis in future research. Thus, the following themes structure the presentation of findings from the cross-case analysis:

1) Understandings of service design
2) Outputs of service design
3) Constraints and challenges of service design in public services
4) Digitalization and servicescapes

Findings within the first theme category, 'understandings of service design' show that 'service design' was understood as follows across cases:

- A user-centred approach

- A collaborative approach
- About creating something new
- Iterations and testing
- Approaches intersecting with agile methodologies
- Design beyond materiality
- A profession/professional expertise

Within the theme category 'outputs', the analysis shows that the case studies dealt with the following kinds of outputs:

- Smoother administrative user journeys
- New digital application forms
- New online communication platforms
- New position
- New physical spaces/servicescapes
- New service concepts
- New platform for citizens' participation/participatory policy making

In the third theme category, it was found that the 'challenges and constraints of public service design' related to the following:

- Complexity of the service context and issues of scale
- Time and resource constraints
- Practical and ethical problems of involvement
- Inherent contradictions of service design
- Messiness and confusion
- Demonstrating impact/problems of metrics

The fourth, emerging theme category, on digitalization and servicescapes, was identified as an additional relevant theme during the analysis, but this was not pursued in depth because it was considered beyond the space and capacity of the study. The way in which this came forward as a highly relevant theme to explore further, points to fruitful linkages between this WP and the COVAL WP3 on digital transformations.

The analysis of service design across these theme categories give finally a foundation for discussing how service design links to the broader issues dealt with in COVAL, regarding co-creation, value (co-) creation, innovation and public service transformation. The study underlines the need for differing between co-creation, as a general term referring to 'creating collectively' versus value (co-creation). In the service design literature, co-creation is largely used as a general term referring to collective creations and collective creativity. Our case studies show various examples of such collective creation and creativity in public service contexts.

Furthermore, we find that the sources for creativity and renewal in service design projects are based on efforts to *understand value (co-) creation*, especially from the perspective of the service user. Thus,

aiming to get insight on *what the user finds valuable*, or understanding how value may be co-created or co-destroyed in service interactions (for instance through user-journey mapping, identifications of pain-points) tends to constitute the starting point for innovation through service design. Thus, working with service design, entail efforts to come up with new value propositions (innovation) by taking the user's perspective on value, or involving the users and other stakeholder in co-creation. We show and discuss how our cases serve as illustrations of this (see sub-chapter 9.1.1).

Finally, we point to the needs for discussions of the broader implications of these ways of working with public service innovation and transformations. Hence, we raise discussions on the potential and contributions of service design when it comes to public services' capacity to innovate and (co-)create value. Our studies show that persons involved in or affected by service design projects largely reported positive experiences from these ways of working. The cases also show examples of projects with clear innovative results or outputs, in which service design play a central role in shaping these outputs. Based on our empirical material, we find that the potential and contribution of service design can be found in the way it offers creative and innovative means for bringing in the voice and perspective of users in efforts to improve public services. We also find indications that introduction of service design in public service organizations may contribute to transformations in organizational culture and mindsets which brings more attention to the users' need. On these accounts, our research gives reasons for arguing that service design has potential to enable more user-centred innovation in public services.

However, our research points at the same time to various constraints and challenges of applying service design in public service contexts. This evokes discussions of how the user-centrism associated with service design may also be problematic. Problems may concern controversies regarding representation; when aiming to include the perspectives and voices of users in service design – which voices are heard, and which voices may be neglected or side-lined? Moreover, new solutions may be regarded as improvements from the perspective of certain users, but as a deterioration from the point of view of other users. To make matters more complicated, public services are not only expected to create (individual) value for end users, but also to generate value for a collective citizenry (often referred to as public value).

The COVAL project aims to find suitable ways of differentiating between 'individual' and 'collective' value, and to shed light on how to understand potential tensions and conflicts between these different forms of value. A multi-dimensional framework for analysing value creation has been introduced, which differs between value for service users, value for the public service organization and value for society (the public service logic, PSL). If we are to understand and discuss the potential and contribution of *service design* in relation to these value dimensions, we find that service design is largely centred on the creation of *individual value* for service users. At the same time, we discuss how individual value can be entangled with organizational and societal value. Thus, we suggest that the focus on individual value in service design may provide an entrance to explore and articulate value along different value dimensions. Thus, the contributions and potential of service design can be found in how it opens up to new and different ways of perceiving and understanding value.

We discuss finally how service design is set in a new landscape of design, which is likely to be influential in future developments and innovation processes in public services. This brings design into new roles, which intersect with the roles of social science researchers, policy makers, and public managers and

employees from various professional backgrounds. We see the need for further research which study the various implications of this integration of service design in the development and transformations of public services. This become particularly important with the increased digitalization of public services, which bring forward needs for various forms of new design expertise.

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List of Terms and Abbreviations

Abbreviation	Definition
SD	Service design
PSL	Public Service Logic
SL	Service logic
SDL	Service-dominant logic
PSO	Public service organization

1 Introduction

1.1 Purpose and scope

This report presents findings from empirical case studies of service design initiatives in five European countries: Norway, the UK, France, Spain and Hungary. The case studies have been carried out as the second task of WP4 on service design in the COVAL project, titled 'Service Design for Public Sector Transformation'. The overall objective of this work package (WP) was to investigate and assess how service design may enable co-creation of value. Thus, according to the COVAL project proposal, case studies of service design approaches were undertaken '*to gain insights on the contingencies, potential and limitation of service design approaches in efforts to co-create value in public service delivery'*, and the case report is intended to convey findings on the '*potential impacts and limitations of various service design approaches in different European settings'.*

The purpose of this report is in line with the plan set forth in the initial proposal. However, as the COVAL work progressed, we saw the need for further specifying and nuancing of the concepts and phenomena being studied. To begin with, exploring the linkages between 'service design', 'co-creation' and 'value' required clarification regarding what we meant by these terms. We began this endeavour in the first task of the WP, in which we conducted a literature review to gain insights on how service design is understood and defined in the relevant academic literature. Furthermore, we assessed the scope and findings of studies that deal with service design in public service contexts to identify knowledge status and gaps. Findings from this literature review are presented in a separate report (Røhnebæk & Strokosch, 2018), and constitute a central foundation for the empirical case studies presented in this report. The literature review proved important for the choice of case study design and for the development of the case protocol, and it informed the analytical approach for the cross-case analysis (see further details on this in the next chapter).

The literature review revealed that the service design 'toolbox' contains various methods and approaches for co-creating with users (Røhnebæk & Strokosch, 2018). The service design 'toolbox' is thus associated with bottom-up approaches to the design of services, which emphasize co-creation as opposed to more conventional top-down approaches (Schneider, Stickdorn, Bisset, Andrews, & Lawrence, 2010). Service design may involve participatory design/co-design that enables the direct involvement of users, allowing users to voice perceptions, needs, ideas and suggestions for improvements. Moreover, service design may also involve user-centred design with more indirect forms of involvement, in which the voices of users can be included through user research, for instance research based on ethnographic methods. Together, these approaches entail efforts to include and interpret the voices of users, to gain insights on *what the users value*, and to use this as a starting point for renewal and innovation.

However, it remains to be explored as to what the contributions of these forms of co-creation might be in a broader landscape of public service transformations and reforms. This is what we aim to address in the current report, through the analysis of findings from 10 case studies of service design projects. We do not start from the premise that there are clear-cut answers to these questions, and we have not pre-selected indicators that can be used to evaluate impacts of service design. On the contrary, we want to show how evaluations and assessments of the contributions of service design in public services

rely on discussions of the different forms of value at play in public service contexts. Thus, we have slightly reformulated our initial objective, which in the project proposal was stated as exploring *how service design may enable co-creation of public value.* Instead, we explore first how service design may enable co-creation, and we analyse next how these forms of co-creation may generate *different forms of value*. Hence, our studies of service design are interlinked with the development of Public Service Logic (PSL) as a framework for analysing value-creation as multi-dimensional (see deliverables D1.1 and D1.2 of WP1).

1.1.1 Aim

Based on the premises outlined above, the aim of this report is to present findings from 10 case studies of service design projects across Europe. The case studies were carried out in five European countries, two in each country. The data collection in the case studies was guided by the overarching research question: *What constitutes the contingencies, potential and constraints of applying service design in public service contexts?* We present the findings from the case studies in two ways:

1) First, we present the descriptive findings of each case in a brief case narrative, framed within an outline of the national context for service design in each of the case countries. The outline of the national context for service design is based on reviews of the national grey literature on service design (Chapters 3–7).
2) Next, we present the more analytical findings of the case studies based on a cross-case analysis. In the cross-case analysis, the findings are analysed based on a structure of themes (Chapter 8). Findings from the cross-case analysis will be used as a basis for discussing the linkages between service design and value co-creation in public services (chapter 9).

1.2 Theory and concepts

As explained above, this report a) examines how service design may enable various forms of co-creation with citizens and users in public service contexts, and b) explores the contributions of these forms of co-creation for public service reform and transformation. As a necessary starting point for the case analysis, however, we turn first to a brief introduction of the key concepts and our theoretical positioning.

1.2.1 Service design and co-creation

By reviewing a range of literature on service design, we have found that service design can be seen as an area of practice, a field of research and an emerging profession (Røhnebæk & Strokosch, 2018). While 'design of services' can be seen as a generic and encompassing term, 'service design' refers to the application of a particular set of creative methods, tools and approaches, and places specific emphasis on taking the perspective of service users as a point of departure for design processes.

More specifically, service design has been defined as *'[a] creative, human-centred, and iterative approach to service innovation'* (Wetter-Edman et al., 2014). Moreover, service design 'assumes the customer/user as the starting point or lens into a specific service and through the use of creative, human-centred and user-participatory methods models how the service can be performed' (Holmlid & Evenson, 2008, p. 342).

Thus, service design, in the above usage of the term, accentuates co-creation as a key element, and highlights the importance of co-creation with customers, users and citizens (Bason, 2010; Patrício, Gustafsson, & Fisk, 2018; Sanders & Stappers, 2008; Schneider et al., 2010). 'Co-creative' is identified

as one of five defining principles of service design (Stickdorn, 2010, p. 34), and this alludes to processes that are both collective and creative. Moreover, co-creation in the context of design is broadly defined as *'any act of collective creativity, i.e. creativity that is shared by two people or more'* (Sanders & Stappers, 2008, p. 8). Hence, co-creation is used as a broad term in the service design literature, and refers to the involvement of a potentially broad range of stakeholders (Stickdorn, 2010). Thus, co-creation in service design is used as a broad term, referring to collective creative processes. This is different from PSL's focus on understanding value co-creation as potentially taking place during the 'moment of truth' in service interactions (Strokosch, 2018). Whether collective creative processes lead to the development of public service organizations that are capable of *co-creating value* in service interactions needs to be treated as an empirical question.

However, even though co-creation is ideally a central element of service design, the degree of user involvement may differ. In line with Sanders and Stappers (2008), we suggest that it can be useful to differ between service design projects that are *user-centred* and service design projects that emphasize *participatory design or co-design*. In user-centred design, the aim is to take a user perspective on a given service, which can be based on various kinds of user research, often from a qualitative, ethnographic approach. In projects based on co-design or participatory design, the users are more directly involved in different stages of the design processes. Service design projects may also combine elements from co-design and user-centred design.

1.2.2 Service design and innovation

Service design is closely interlinked with service innovation, as it is commonly defined as the means or tools for service innovation. For instance, in Wetter-Edman et al.'s (2014) definition (referred to above), it is stated that service design is *'[a] creative, human-centred, and iterative approach to service innovation'*. As service innovation is defined and understood in different ways (Snyder, Witell, Gustafsson, Fombelle, & Kristensson, 2016), we will clarify how we use and understand the term in our research. Following Arundel, Bloch, and Ferguson (2019), we understand innovation as something novel to the organization that may be based on incremental change (Fuglsang, 2010) or may involve more disruptive, transformative change (Osborne & Brown, 2011). Thus, we use a broad understanding of public service innovation as the introduction of new creations (incremental or radical) in public service contexts. As innovation may refer to outputs or processes (Fuglsang & Rønning, 2014), public service innovation may refer to the processes of renewal in public services, or to the introduction of new solutions perceived as novel in that context.

In the literature on PSL, a more specific understanding of service innovation is used, linking innovation to the introduction or renewal of value propositions (Skålén, Gummerus, von Koskull, & Magnusson, 2015; Skålén, Karlsson, Engen, & Magnusson, 2018). Following Skålén et al. (2015, p. 154), service innovation can be understood as *'creating new or developing existing value propositions by creating new or developing existing practices and/or resources, or by integrating existing practices and resources in new ways'*. In our analysis, we also show how this definition of service innovation links to service design (see chapter 9).

1.2.3 Service Design and Public Service Logic (PSL)

As one of the objectives of this WP is to understand linkages between service design and value creation in public service contexts, the work is interlinked with the theoretical development of the PSL in WP1.

PSL is developed as a conceptual framework that addresses the need for a multi-dimensional approach to value in public service contexts. The framework was developed based on inspiration from the service marketing literature on service-dominant logic (SDL) (Vargo & Lusch, 2004, 2008, 2016), and, more importantly, on the literature on the logic of service (Service Logic: SL) (Grönroos, 2008, 2011, 2019; Grönroos & Voima, 2013). These theoretical streams explore alternative ways of analysing and theorizing value and value creation in service relations, and stress the need for acknowledging service users as central actors in the creation and co-creation of value. The literature has inspired public management scholars to develop a public service logic (Osborne, 2018), which draws on previous writings on the public service-dominant logic (Alford, 2016; Osborne, Radnor, & Nasi, 2013) and the SERVICE framework (Osborne, Radnor, Kinder, & Martínez, 2015). This work challenges the dominance of New Public Management (NPM) in public service reforms, which have been criticized as being too reliant on models originally developed for the manufacturing and distribution of goods rather than services. Thus, it is reasoned that new reform models are needed, ones based on better understandings of public services as *services*, which in turn rely on new understandings and conceptualizations of value and value creation in service contexts.

Service design takes as its starting point the idea that insights and knowledge about the service user—their life worlds, experiences, behaviours and perceptions—are a vital source of inspiration and creativity in efforts to redesign or innovate services (see for instance Teixeira, 2012; Teixeira et al., 2017). This corresponds to the basic reasoning of PSL: that it is essentially the users who create value, and that the vital task of service organizations is to find the best ways of supporting this value creation (Grönroos, 2019; Osborne, 2018). This reasoning diverges from the more conventional understanding of value as something that is created by the service organization and then provided to the user/consumer. Studies of service design offer insights regarding the practical implications of these shifts of perspectives on value and value creation proposed through PSL.

Moreover, PSL brings attention to the complexity of value creation in public service contexts and highlights the need for understanding value creation along different dimensions. Our research highlights the interdependence between service design and PSL; PSL provides theoretical resources to the analysis of service design, and studies of service design elaborate on the relevance of PSL.

1.3 Structure of the deliverable

The report is structured in nine chapters. Chapter 2 outlines the research approach, case study design and the methods and analytical strategies used. Chapter 3-7 present the descriptive findings from the ten case studies, framed in the national context of each case country. Chapter 8 presents the findings from the cross-case analysis. The final chapter discusses the main findings and discusses limits and implications of the study.

2 Research approach

2.1 Case study design

Case studies are suitable as a methodological approach for studies that seek to understand phenomena holistically, within real-life contexts and from the perspectives of those involved (Stake, 1995; R. Yin, 2009). However, as case studies refer to a broad range of research strategies and may follow different designs, further clarification of the strategies chosen in our study is needed here. To begin with, our study followed a multiple holistic case study design (Yin, 2009, p. 46), which means that the selected service design projects each make up a unit of analysis. Next, as the empirical research on service design in public services is relatively scarce, we chose to use an explorative approach. Our aim with this approach was to bring forward various aspects of applying service design by studying different examples (i.e. cases) of projects or initiatives framed as service design.

In the cross-case analysis, we sought to elicit findings across cases that together contribute to advancing knowledge about the contingencies, potential and constraints of public service design. Thus, the aim here is not necessarily to compare cases, but to look at how the cases may allow access to different, overlapping or congruent insights on the phenomena. Knowledge about the phenomena can come from the identification of certain aspects that are similar across cases, but also from paying attention to the uniqueness, irregularities or surprising observations in certain cases. Handling the relations between the phenomena being studied and the analysis of singular cases is an underlying dilemma of multiple case analysis. Stake (2013) refers to this as the 'case-quintain dilemma', in which the quintain refers to the broader phenomena under study. This dilemma highlights the way in which the researcher can become torn between attending to the pieces (i.e. single cases and specific issues) and attending to the whole (i.e. the sum of the cases and the phenomena on which the cases are meant to shed light). This dilemma can be addressed in different ways, with associated pros and cons. Case studies that are primarily carried out to generate knowledge about a phenomenon (i.e. quintains) can be termed 'instrumental', while cases that are seen as having interest in their own right are referred to as 'intrinsic' (Stake, 2013).

As the overall aim of our study was to generate knowledge on the role of service design as a form of co-creation in public services, the cases can be described as 'instrumental'. This does not mean that we disregard the value of findings from each case, but rather that it is the knowledge extracted from the sum of the cases that is our main concern. Nevertheless, we present first the 'intrinsic' and condensed narrative of each case, which subsequently form the basis for the cross-case analysis.

2.2 Case selection

The case selection followed a strategic and intensity sampling strategy (Patton, 2002), in which we sought information-rich cases. More specifically, our case selection resonated with a 'diverse case selection strategy' (Gerring, 2007), with its aim of including cases that would provide variance along different dimensions of the phenomena being studied. Since the objective was to conduct in-depth case studies combining different kinds of methods (e.g. qualitative interviews, observations and document studies), the case selection also had to be guided by considerations as to where we could obtain access

within the time-frame allocated for the case studies in the project plan. Hence, as with most qualitative case studies, the case selection also adhered to a convenience sampling logic (Patton, 2002).

The case selection was conducted stepwise. First, a set of case selection criteria was defined based on the literature review, which gave direction as to what kinds of cases would be particularly fruitful to study to gain insights on the nature of *public* service design. This provided the foundation for a search for eligible cases, and each partner country provided a list of approximately five potentially relevant cases. Through shared deliberations, two cases were selected from the lists provided, and the partners began requesting access to conduct the studies. In some countries, finding eligible cases was challenging, while in other countries it was difficult to gain access. Finally, two criteria were established for included cases: the cases had to 1) explicitly involve service design tools in some way, and 2) clearly involve public services that primarily provided services to citizens. These basic criteria were selected because of accessibility constraints and because it was revealed through the process of identifying relevant cases that service design projects in public services were not widespread in all partner countries.

An overview of the ten cases included in the analysis is presented in table 1 below.

Table 1: Case overview

	Scot1	Scot2	Nor1	Nor2	Fra1	Fra2	Spa1	Spa2	Hun1	Hun2
Service sector	Social Security	County council	Labour and welfare	Dementia Care	Library	Traffic	Library	Citizens jury	Higher education	Public health
Design approaches	Mainly user-centred design	Mainly user-centred design	Mainly user-centred design	User-centred and codesign	Mainly codesign	Mainly codesign	Mainly codesign	Codesign	User-centred and codesign	Mainly user-centred design

2.3 Methods and description of data

The aim of the case studies was to gain insight on 1) how the various actors involved understood service design; 2) how they perceived the service design processes; and 3) how they perceived any changes that the projects led to, in those cases that showed clear results. The case study design, and the purpose of and procedures for data collection were formulated in a shared case protocol (see annex 1). The protocol stipulated that the case studies were to be conducted as qualitative research and that data collection was to be based on individual and/or group interviews, observations and document studies. The protocol listed the kinds and numbers of interviews that each case was expected to include. At the same time, some flexibility was allowed, and the guidelines were expected to be adapted to the specific nature of the case. The partners responsible for the data collection were encouraged to consider the most suitable sources for data collection depending on the case. Shared templates for data collection

were also provided, and included an observation sheet, document analysis template and interview guides (see annex 2). We used three kinds of interview guides: one adapted for managers, one adapted for frontline employees, and one adapted for users/citizens.

The interview guides consisted of questions based on a set of 'issues' that were considered important to obtain reflections on, in order to respond to the overarching overall research question that guided the case studies: *What constitutes the contingencies, potential and constraints of applying service design in public service contexts?* Issues were formulated as questions that were meant to spur reflections among respondents, and thus differed from the information questions necessary for gaining knowledge about the facts of a case (Stake, 2013). Some issues spurred deep reflections in certain cases and proved less relevant in other cases where other issues were addressed in greater depth.

The issues that informed the interview guides were then used as a framework for a shared data report template. It is the summarized findings from the case studies in these 10 reports that provided the foundation for the cross-case analysis presented in this report.

2.3.1 Data collection

Data collection was conducted based on shared guidelines, as explained above. Still, the type and amount of data collected in each case varied somewhat, depending on the nature of the case and access. An overview of the data collected for each case is provided in Table 1 below.

The data collection process for this study was detailed in the individual data reports, and though it differed somewhat from case to case, the basic elements were generally the same: all of the case studies included semi-structured interviews with informants in different roles; all of the case studies included document studies; and some of the case studies included observations. The details of the data collection for each case are further specified below.

Table 2: Methods used across cases

Country/case	Service designers/ consultants	Analysts	Strategic managers	Middle managers	Frontline staff		Users		Obs.	Doc.
					Ind.	Gr.	Ind. / Gr.			
Scot/case1	3	6	4	2						3
Scot/case2	5			4	2	1			2	3
Nor/case1	1		1	5	9		3			14
Nor/case2	1		2	5	1		2		6	5
France/case1	1		3	2			3		3	3
France/case2	2	1	2	1	1		3			5
Spain/case1	1		4	2					4	6
Spain/case2	3		3	2			1		2	4
Hun/case1	2		1	2						8
Hun/case2	1			2	1			1		9
Total	20	7	20	27	14	1	12	1	17	60

2.3.2 Ethics and confidentiality

The work package leader developed an informed consent form containing information about COVAL and the purpose of the case studies, as well as the measures taken to ensure informants' confidentiality. This was shared with the other WP researchers, who were then asked to translate the form and adapt it according to national requirements for privacy and data protection in research, and to the different case study contexts. All researchers were instructed to use translated versions of the informed consent form in their data collection. Ethics approvals were applied for and granted for those research activities in the case studies that required approvals (in Norway and the UK, specifically). All researchers were informed about the ethical guidelines for data protection, and the researchers were instructed to ensure that no personal information was processed and stored without informed consent from the informants.

Moreover, instructions were given regarding security for data storage; researchers were informed that the data had to be saved in secured, password-protected areas. The researchers were also asked to not share personal data from the case studies, but to summarize findings from the studies in a data report following the template provided by the WP leader. While quotes from interviews are used to illustrate and convey findings from the case studies in this report, we have ensured the anonymity of the informants who provided the quotes. The involved researchers were also briefed on the necessity of being respectful and sensitive throughout the data collection and interviews, especially in interviews with users in potentially vulnerable situations.

2.4 Strategies for cross-case analysis

The strategies taken for the cross-case analysis primarily followed the rationale and suggested procedures for cross-case analysis outlined by Stake (2013, pp. 39-77). In this analytical approach, the researcher moves back and forth between the reading and analysis of the individual data reports and the delineation and refinement of themes, in order to focus on the overall analysis of the phenomenon under study.

The process began with a list of six themes that, at the outset, were expected to be central for the analysis: 1) Understandings of service design, 2) Inputs/methods and tools, 3) Outputs, 4) Contributions/benefits, 5) Constraints/challenges, and 6) Potential.

These themes were based on findings from the literature review, which formed the issues guiding the data collection and data reporting in each case study. The selected themes condensed the more detailed issues guiding the data collection.

The themes then structured the reading of the data reports and the preliminary analysis of the individual cases. At the same time, the relevance of the predefined themes was assessed during the reading of the reports, and other potentially relevant theme categories were searched for. The latter was important for allowing themes to emerge from the data material, to avoid missing valuable and important insights on the dynamics of service design processes. We presented finally the findings across three themes that was found most relevant through the analysis, and we included a fourth emerging theme category.

A worksheet displaying a case-theme matrix was then used to categorize the cases in terms of their relevance for the different themes. Finally, a worksheet matrix was used to describe the main findings of the cases for the different themes, and this was used as a foundation for the presentation of findings in Chapter 8.

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3 UK and Scotland: Context and cases

3.1 National context and findings from the national literature review

Our review of the national grey literature on public service design in the UK and Scotland is based on our review of government reports and documents. This provided insights into the policy context for service design in the UK and Scotland, which constitute an important contextual backdrop for the case studies of specific projects that have adopted service design approaches to the renewal of public services. Following the process of identifying, screening and selecting eligible literature, a total of 35 documents were selected for review. We present a synopsis of the findings from the review below.

3.1.1 Service design in the Scottish government

In June 2019, the Scottish government published an overarching policy guideline on public service design, entitled 'The Scottish Approach to Service Design (SAtSD)'. The SAtSD, with its systematic and institutional guidance, marks an important step by the Scottish government towards the development of a participatory and inclusive service design model. It resonates with the latest literature in the field of public service and administration in at least three aspects. First, it underlines the pivotal role of service users in service design and development. As it argues, *'the shared set of principles and some basic tools will help us design around the needs of people, not around how the public sector is structured'* (p. 15). Further, it adopts a comprehensive way of defining the notion of 'user', which is '*any person involved at every stage of the design, not just at the start or the end* (p. 15)'.

Second, in line with the unified theory of design (Hatchuel, Le Masson, Reich, & Subrahmanian, 2018, see also D4.1), the SAtSD regards service design as a continuous process of problem identification and solving. As it stresses, '*[d]esigning service is not just about satisfying user needs: it is about solving people's problems, including a range of underneath problems* (p. 7)'. Third, the SAtSD highlights that the *'basis of this Approach is designing with, not for* (p. 17)' the service users. It proposes a set of specific methods to enable the broad involvement of citizens, service staff and public service organizations. In addition, the SAtSD contains some innovative ideas. For example, it identifies a series of major 'life events', such as birth, education, unemployment, marriage, separation, retirement, serious illness and death. These events involve multiple interactions with government services and may be used as landmarks for user-centred service design and co-design. As highlighted in the text (p. 10):

> '*They (life events) require multiple interactions with government services. We need to design responsible user-centred services by looking at the whole spectrum of needs created by life events, with the thinking of not only the quality and efficiency but how to improve outcomes for people during the major 'life events'.*

Another example of one of the SAtSD's innovative ideas is its criteria framework, which public organizations can use to assess their capacity to deliver the user-centred service design model. It argues that different organizations have different abilities to deliver the SAtSD, depending on organizational size, specific service responsibilities and diversified service conditions.

The Scottish Approach to Service Design was published based on a series of previous public policies, guidelines and regulations. Among these, the (2011) 'Commission on the Future Delivery of Public Services' is regarded as an important cornerstone. As the SAtSD states, '*the publication of the*

*'Commission on the Future Delivery of Public Services' was considered as the beginning of a radical roadmap to better public services (*p. 4)'. This was an independent report produced by a commission chaired by Dr. Campbell Christie, at the request of the First Minister. In this report, current challenges faced by Scottish public service organizations, objectives and possible approaches for service reform are illustrated. In particular, the report highlights that, in an environment of constrained public spending, public service reform should not only focus on service users but also empower individuals and communities in the design and delivery of the services they use.

Facing the rapid development of digital technology, the Scottish government has sought out opportunities to work with citizens to re-design and deliver digital public services. In 2011, the Scottish government published its first-ever 'Digital Strategy' and refreshed it in 2017 as 'A Digital Strategy for Scotland'. In the refreshed strategy, the necessity of the user-centred service design is highlighted (p. 6):

> *'In order that Scotland fulfils its full potential in the digital world, we will design key public service in areas such as health and social care, justice and social security around the needs of their users*'.

Furthermore, this new Strategy proposes 13 specific actions in the digital public service re-design area. Actions listed in the Strategy indicate the developing direction of future digital public service. Comparatively, the 'Digital First Service Standard' specifies a minimum standard, to ensure that digital public services provided by the Scottish government are designed in the right way. It consists of 22 specific criteria and 'designing user-centred public service' is highlighted at the beginning as the most important guiding principle.

Moreover, the Scottish government has been seeking opportunities to collaborate with professional consulting organizations, such as Snook (a Scottish service design agency based in Glasgow and London) and larger consultancy agencies such as Deloitte and Sopra Steria. For example, in 2014, Snook began coordinating the 'Service Design in Government' conference, together with the Scottish government, local authorities and universities. The aim of the conference is to bring together practitioners from inside and outside the public sector to discuss the application of user-centred service design tools and thinking, to improve the quality of public service delivery and the capability of complex social problem-solving.

In general, a growing number of policy guidelines demonstrate that the Scottish government is paying increasing attention to user-centred service design as a collaborative approach with the potential to stimulate creativity in public service innovation, reform and development. Numerous policy arrangements have been implemented in practice to facilitate the involvement of local communities and individuals in the co-design of public services. At the same time, the trend of digital transformation is also being taken into consideration—this is laying the technical foundation for public service development whilst also calling for new skills, resources and considerations in public service design and reform. Notably, when searching the grey literature of service design in the Scottish government, we found several recent policy documents that provided guidelines for the service design of specific service departments, such as the (2016) guidelines for employability support, 'Creating a Fairer Scotland'. They refer to the traditional approach to seeing service design as the planning and organizing of service components within the organization. Although excluded from this review, they suggest that the service

design approach used by the Scottish government is subject to ongoing change and development. Thus, despite the fact that more conventional approaches to designing services remain prevalent, there seems to be some movement towards user-centred service design.

3.1.2 Service design in the UK government

The UK government has published a set of policy guidelines on the improvement of public service design since 2017. These documents are collectively presented in a portfolio entitled 'Design', as part of the 'Service Manual', which provides official guidelines for government service organizations to create and deliver better public services. In this policy portfolio, the conception of 'user-centred' is strongly emphasized. As the introductory document, 'Designing Good Government Service: An Introduction', argues, '*[g]ood services reflect what a user wants to do and don't need a working knowledge of the inside of government'*. According to this introduction, good public service should be designed to enable service users to complete their targets as seamlessly, easily and straightforwardly as possible. To achieve these targets, the portfolio refers to specific documents: these can be used to help public service organizations better map and understand a user's 'whole problem'; work across organizational boundaries with service communities; adopt digital technologies and artificial intelligence; and utilize service design patterns and tools.

In addition to its provision of policy guidelines for user-centred service design to improve the practical capability of all its public servants, the UK government now provides a one-day training course (as of March 2019) on the importance of user-centred design and research in government. It aims to provide an introduction to 1) user-centred service design; 2) how the government can carry out user-centred design research; and 3) how it can use design tools to create inclusive and easy-to-use public services. The course is organized by the GDS (Government Digital Service) Academy, a specialized training agency funded by the government in 2014 that offers a range of training sessions about digital public services.

In the UK government's service design policies, the importance of service designers is especially emphasized. Since 2017, the UK government has published a range of policy guidelines concerning the recruitment, management and evaluation of specialist public service designers. These guidelines are categorized into a collective theme, 'user-centred design: service designer', as a part of the policy portfolio, 'Digital, Data and Technology Profession Capability Framework'. The introductory document under the theme, entitled 'Service Designer: Role Description', offers cross-government standardized guidance regarding the role of service designers in public organizations. According to its definition: '*A service designer is a confident and competent designer who is able to develop designs based on evidence of user needs and organizational outcomes. They can be trusted to make good decisions…contribute to the development of design concepts…interpret evidence-based research and incorporate this into their work'*. Following the role description, two documents — 'Service Designer Roles: Skill Levels' and 'Service Designer: Skills They Need'—provide a set of essential skills (including communication skills, digital skills, service design skills and strategic thinking skills) and desirable skills (including agile working skills and community collaboration skills) required for public service designers. Moreover, the two documents classified service designers into five levels: from the head of service design to the lead, senior, junior and associate service designer. The UK government has published the specific skill requirements for service designers at each level.

In general, plenty of policy guidelines demonstrate that the UK government has taken the service design issue into consideration, and has begun to pay attention to the user-centred service design model. In particular, two features of the UK government's commitment to service design stand out. First, the UK government views service design not only as a government function but also as an **emerging profession**. The essential role of professional service designers and the corresponding management of designers are underlined. Second, rather than merely publishing the guidelines, the UK government also delivers training sessions to public servants through collaboration with a training agency.

Like the Scottish government, the UK government also published numerous policy documents for the service design of specific government departments or organizations, such as the design of pathology services (a policy named 'Planning and Designing Facilities for Pathology Services'). These documents were excluded from this review, as we focused mainly on the general services.

3.1.3 Summarized findings

This review shows that government documents concerning service design in Scotland and the UK have primarily been published within the last five years. Although the review might contain blind spots, it still indicates the newness of the service design approach in the context of UK public services, and that it has drawn the increasing attention of the UK and Scottish governments. The concept of 'user-centred service design' is emphasized across the literature, but it is also clear that there is some divergence between the developing priorities of the UK and Scottish governments in public service design. The Scottish government has a clear overarching strategy for user-centred service design that has emerged relatively recently. There is also a focus on combining a user-centred service design approach with the recent digital transformation of public service. In comparison, while the UK government has published various documents on service design, there is less of a focus on user-centred design and more emphasis on practical service design training and the role of professional service designers.

3.2 Case Scot1: Social Security

3.2.1 Description

This case study focuses on the role of service design in the social security setting in Scotland. Following the Scottish independence referendum in 2014, it was recommended by the Smith Commission that the governance of various social security rights and services should be devolved from the UK government to the Scottish government. The Scotland Act (2016) devolved powers to the Scottish Parliament, permitting Scottish Ministers to develop new policies of social security entitlement. Subsequently, the Social Security (Scotland) Act (2018) established the framework for the new system being developed in Scotland. It was with this Act that the 'Social Security Scotland' agency was founded.

The case study focuses on the service design processes related to the development of this new agency. It is based on interviews with service designers (3), senior managers (4), middle managers, and analysts (6) and analysis of government documents concerning design/service design (3).

3.2.2 Main findings

This case is comprehensive since it involves the development and design of various social security services at the national level, which affect service users throughout the country. The nature of the services is complex, as social security involves the provision of services to citizens who tend to be in vulnerable situations and who are largely dependent on the services. Moreover, it is a service area that is politically contentious, with the responsibility for certain social security service areas being retained by the UK government (e.g. Universal Credit). The case is useful for understanding the role of service design and professional service designers in large service organizations and comprehensive projects, in which service design is one kind of expertise that intersects and overlaps with other forms of expertise and professional roles. Since service design in this case was an entangled element in a broad and comprehensive collaborative process of designing a new service, it is not possible to identify concrete outputs and impacts of the service design. It is nevertheless relevant to explore how the involved actors understood and experienced the role of service design.

Understandings of service design

The respondents in this case mainly expressed a shared understanding of what service design is, and what it contributes.

First, the analysis suggests that the service design approach has three core components: a user-centred approach to design that is based on user research; collaborative working within multidisciplinary teams; and an iterative approach to design that relies on testing ideas with service users. Many respondents linked these dimensions of service design to the agile methodology that was embedded within the social security setting, where multidisciplinary teams worked on discrete elements or 'chunks' of work in quick iterative cycles of development, testing and re-design.

Perceptions of service design among informants were also linked to understandings stated in the document, 'The Scottish Approach to Service Design', referred to in the literature review section above. This document gives directions for developing solutions that meet the needs of people and suggests that to do so requires empathic design and an understanding of how services make people feel and how they impact their lives: *'creating a culture that puts users at the heart of the design process by listening, considering and respecting the experience of others'*. Respondents noted that this broader narrative of service design was a different way of working for the Scottish government:

> *…there's a sort of fundamental mindset shift in that which is, the people who use the service are the whole point of there being a service in the first place. So, starting from what they're going to do in order to get the support that they're entitled to'.* (senior manager)

Second, while service designers (internal and external), transformation managers and user-centred professionals recognized this broader definition of service design, they also expressed an idea of service design as a specific profession, focusing on their role in supporting creativity, the potential for innovation and an end-to-end view of services that focuses on the client experience as a whole. Respondents reflected on the importance of the service designer's role and their capacity to draw important links across the services and to identify 'pain points' in services from the customer's perspective. In these processes, the service designer worked closely with other professionals:

> *There'll be service designers and user researchers embedded in delivery teams together and they'll work quite closely together with content designers as well, to provide a kind of user-centred design expertise.*

The fact that service design methods were just one piece of the puzzle when collaboratively and comprehensively designing a new service was stressed:

> *…[Y]ou need multidisciplinary teams—what I know is that people who have a design training bring a certain way of thinking about things that's really helpful and what I know is that people who've trained in user research bring a certain way of thinking… Designing a service is much bigger than service design…*

User research and usability testing were key dimensions of the service design approach in this case. Some respondents also mentioned the applicability of user experience panels but said dedicated user research and testing offered greater depth and detail around the usability and accessibility of services for particularly hard-to-reach groups.

Experiences

The service design process was generally experienced in a positive way by the involved actors. This was typically associated with the skill of the service designers and middle management in facilitating collaborative working and supporting a holistic view of services from a service-user perspective. Indeed, respondents working directly with internal service designers were at pains to express the integral nature of their role in taking a strategic, end-to-end view of the service from the customer perspective. It was even noted by one of the senior managers interviewed that parts of the processes suffered because the number of service designers involved was not enough: '*[B]asically, there aren't enough service designers'* (senior manager).

Service design was closely associated with agile methods, and together this was seen to represent a positive shift in the design of systems and services:

> *I did what they call 'waterfall' project management, whereas you get all your requirements upfront and you just deliver something, whereas this is very, very different and it's more communicative, this. It's just tipping everything on its head, and it works so much better.* (senior manager)

The users/citizens were seen as the main beneficiaries when applying service design approaches, but the staff were also seen as important beneficiaries. The senior managers also said that the approach being used was delivering societal value. However, it is difficult to establish whether this societal value was the result of the policy direction or the service design approach, or a combination of the two. In addition, one of the senior managers suggested that the service design narrative was supporting a cultural change within the Scottish government, which shifts to a user-centred perspective.

Constraints and challenges

Despite the largely positive experiences of working with service design among respondents in this case, certain challenges and constraints were identified through the analysis. These challenges did not

concern the application of service design methods but were linked to the contextual conditions of the case. The analysis highlighted challenges and constraints around six themes: time constraints; the scale and complexity of the services being designed; resourcing issues; legacy/legal requirements; the concurrent development of policy alongside service design; and the availability of appropriate creative space for service design.

'Extremely aggressive' *time constraints* were a major challenge for all respondents in this case. The lack of time was linked to the policy agenda for change and the timescales associated with transferring the responsibility and management of social security from the UK government to Social Security Scotland. This meant that there was insufficient time for comprehensive testing of design solutions.

The scale and complexity of public services was a considerable challenge identified by respondents across the case, particularly with regards to developing a holistic service design approach. Due to the scale of service design, it was necessary to divide up elements of work to improve manageability, but respondents emphasized the challenge of fitting the jigsaw puzzle back together again to facilitate a holistic service experience: *'I think one of the main challenges has definitely been breaking down what is a really big task into small chunks without losing sight of how it all hangs together, if that makes sense?'* (middle manager).

In this case, various research participants also noted that service design was *under-resourced* across the professions, including business analysts, service designers and user researchers. For instance, only one service designer was working on disability benefits, which entailed a considerable programme of work and, by consequence, meant that some parts of the service design process were operating without the input of a professional service designer: *'[T]he challenges are always resources and, you know, Social Security's scaled quickly and I guess, on occasion we've not had, you know, every professional in place that we would need...*' (user-centred professional). Linked to the issue of resourcing, some respondents also suggested there was a lack of involvement among frontline service staff during the service design process, which was attributed to the fact that such employees were not yet in post.

Some respondents also reflected on the *legacy* of social security from the former system designed and managed by the UK government. They suggested that the potential for change was often constrained by legislation and that change in one service may have negative implications for service users' eligibility for another social security service, which could restrict the creative potential of service design: *'So this "like-for-like'' term was being thrown about quite a bit and it was a real blocker for us in making any sort of innovation because we had to try and stick'* (service designer).

A few respondents also emphasized that service design was made particularly challenging by the fact that *policy was being developed at the same time* as the services. This meant that there was sometimes a lack of strategic direction necessary for the design of details pertinent to the services: '*[Y]ou can't create successful content unless you know you have the information you need to understand the service and, quite often, that isn't always available'* (user-centred professional).

The final challenge identified less often by respondents, but particularly by those in professional service design roles, was that service design required staff *'to step into the unknown'* or enter '*obscurity*', particularly during creative idea generation. They said that this was culturally challenging for some

public service employees. They reflected on the need 'to protect the space for service design to be scrappy and developmental' through collaboration and quick iterations, which they did not think was always present in a public sector setting.

3.3 Case Scot2: UK County Council

3.3.1 Description

This case study focuses on the re-design of services of a Borough Council located in the southeast of England. A consultancy organization was contracted to undertake the service design work, a core element of which was digitalization. The programme extended to all Council services, but for the purposes of this case study three areas were investigated (housing, planning and waste), because at the time of data collection, these had been subject to the service design process.

The case study was carried out based on interviews with the consultants in various roles (5), middle managers (4), and frontline employees (4). The study also involved observations of service design workshops and observations of service interactions in the redesigned service setting. The service design documents produced (3) were also part of the data material—these consisted of a service blueprint, an 'as-is journey map' and a 'to-be journey map'.

3.3.2 Main findings

In this case, service re-design was being conducted collaboratively by a consultancy firm and Council staff. A professional service designer was part of the consultancy team; their role was to employ a range of service design methods to understand the 'as is' from a customer and staff perspective, in order to identify the pain points of the current services for Housing, Waste and Planning. Although service redesign was in process for all services with an experience dimension for residents, at the time of data collection, service design had been conducted only in the three areas that formed the focus of this case study.

Service design in this case was conducted within a broader programme of transformation and service modernization, of which digital transformation formed a core dimension. Although service design was positioned as a user-centred approach, service users were not actively involved at any stage. Limited user research had been undertaken during discovery and light-touch testing had been conducted with regards to the development of the website. Consultancy respondents linked this to a lack of 'appetite' among senior management within the Council to engage with residents of the Borough. To inform the discovery phases, the Consultancy had instead purchased Experian data to develop various personas of fictional residents, some of which were then selected to guide the journey mapping sessions with Council staff.

Understandings of service design

The service design approach conducted in this case was new to both Council staff and the majority of the consultancy staff. Despite being a new approach, respondents generally had a shared understanding of the aims of the service design approach. They stressed the focus on the users as the central starting point for service re-design.

> *This was a different approach, again, into sort of having a very customer-focused starting point. So very, very sort of, 'Let's look at it from the outside–in as a customer approaching your service', you know, 'What do they see, what do they hear, what do they experience, what are they told, how do they feel?', and really putting yourself in their position, which was really enlightening. (Middle Manager)*

In addition, respondents from the consultancy said that the aim of service re-design was underpinned by improving the customer experience. This was also reflected in the document analysis. As a consequence, the approach to service design implemented by the consultancy took the service users' perspective, whereas staff reflected on their own experience and were also used as a proxy for customer experience. Underpinning this broader aim of improving the service experience, the consultants with a service design background agreed that service design was a problem-solving approach, with service design methods (e.g. journey maps) being used to uncover problems or pain points, which were subsequently used to develop solutions. For Council staff, the aim of the service design approach was also two-fold: to re-design services with a focus on improving customer and staff experience; and to support a digital transformation, in particular the re-design of the website.

Experiences and outputs

The respondents were generally positive about the service design processes. The design processes also produced some concrete results. The website was changed and redesigned, as was the reception area, in which a new triage system for organizing queries was introduced. The redesign of the reception area was seen as an improvement aesthetically, and the different interconnected changes in the services were perceived as enhancing internal efficiency for the benefit of staff and customers—although respondents mentioned that evidence of such improvements had not yet been collected.

The general view expressed by all research participants was that service design was worthwhile and valuable. Various Council staff referred to previously employed approaches, which were described as focusing on internal business processes, and which resulted in limited or no change. In comparison, the focus of the consultancy on service experience and digital improvement (particularly with regards to the re-design of the website) was viewed positively. Respondents from the Council spoke about the service design approach, and the journey mapping sessions in particular, as helpful for taking a step back and gaining perspective on the aims of the service and the implications for staff and customer experience. Both customers and staff were thus perceived as the main beneficiaries of the service design project. For example, the provision of clear information and improved communication was described as making the experience easier for both sets of actors, by managing the expectations of customers and easing staff workload.

Constraints and challenges

The analysis uncovered seven challenges for service design in this case: the holistic approach to service design; timescales and resources; lack of customer involvement; change fatigue; loss of insight/detail within final design solutions; continuous improvement; and digitalization.

One central challenge was related to how the redesign of services in certain areas unintentionally affected other interconnected services. This shows how a holistic approach to redesigning aspects of the services can be problematic, as it undermines a holistic approach to the totality of interconnected

service areas in the organization. Thus, while redesigning service processes may lead to improvement for users and certain groups of employees, it may have negative implications for other employees and create new pain points. In this case, it was evident that the redesign processes led to new tasks for and new kinds of pressure on the frontline staff in the reception area, and they did not receive sufficient training in how to handle the new tasks.

Another key challenge identified was related to resources and time constraints. Following the service design principles in an ideal manner was deemed time- and resource-intensive, and it was found that when a considerable amount of time was spent on developing certain solutions thoroughly, other aspects were given lower priority. Thus, in practice, the consultants acknowledged that it was necessary to adopt a '*pragmatic and proportionate*' approach to service design. Time and resource constraints also affected who could be involved. For instance, some frontline staff were at pains to point out that, while they were invited to various service design workshops, they did not have time to participate due to the demands of their day job. Others suggested that more employees placed at different levels in the organization should have been involved.

End users were not directly involved in this case and this was highlighted as a weakness of the service design approach. Various respondents felt that customers should have been involved more in the service design and website development/testing and that they should be approached to find out their perceptions of new services. However, others felt that it was not possible to involve customers, given their lack of knowledge about back-end systems, and that their inclusion would have been too costly.

Another problem was related to the general pressure on the staff, and that the service design processes were introduced in an organizational context in which staff struggled with 'change fatigue'—as such, a central part of the process involved managing expectations regarding the potential to make changes.

Council respondents noted that sometimes service design solutions failed to capture all the necessary insights evidenced during journey mapping sessions. Although the journey mapping sessions were viewed as an effective tool to uncover the pain points of the services, a few respondents expressed concern that important details were missed and thus not translated for the purposes of implementing new services. One respondent related this to the fact that the professional service designer was not an expert in the service area.

A challenge in relation to continuous improvement was also mentioned by a few respondents. This related specifically to the Agile methodology and going live with a 'minimum viable product', with some questioning whether there had been sufficient testing and also whether there would be resources and momentum for continuous service improvement.

A final problem raised by Council respondents concerned the implications of increased digitalization of the services, which was central to the project, and the capacity of Borough residents to engage with online services. A key concern for Council staff was the misalignment of technological systems that impacted internal efficiency; respondents spoke of having to perform manual workarounds, which were time-consuming.

4 Norway: Context and Cases

4.1 The national context of service design in Norway

The review of the national grey literature on public service design in Norway is based on our review of various documents: master's theses, reports and government documents. The review provides a contextual backdrop for the empirical case studies of service design projects in public service contexts in Norway, presented below. For the review, we searched for 'service design' (*tjenestedesign*) in government green and white papers, on governmental web pages (regjeringen.no) and in the Norwegian Association of Local and Regional Authorities (ks.no). We also searched for grey literature using the search term 'public sector service design' (*tjenestedesign i offentlig sektor*) on Google Scholar and Oria.no. Moreover, we searched the web pages of service design agencies for examples and reports on projects in public service contexts. Following the identification, screening and selection of eligible literature, 32 documents were ultimately selected, consisting of: 5 government documents, 3 documents with practical tools and guidelines, 6 short articles in a public management magazine, 3 reports from service design agencies, 13 master's theses, 1 journal article and 1 research report.

4.1.1 Service design in government documents

Service design is either mentioned several times or given a central position in a number of policy documents and in national budget documents. The term 'service design' appears increasingly over the last five years. The main focus of service design in these documents is on what service design methods can provide to the municipalities and governmental institutions that seek to improve their services and ways of working. In the national budget for 2019–2020 (Meld St. 1. (2019–2020)), under Chapter 5's 'Measures for Increased Productivity and a More Efficient Economy', one paragraph states:

> *Service design has, through several projects, proven to be a good method for developing a better and more effective public sector. This includes putting the user at the centre, experimenting and testing out prototypes of small-scale solutions, before the policy is rolled out at full scale. Putting users at the centre increases the opportunity to design more relevant and effective measures. User-oriented design has also proved to be a valuable tool for improved coordination in the public sector.*

Service design has gained particular attention within health care. One project is frequently highlighted in Norway as a good illustration of how service design has the potential to transform public services. The project was initiated to improve the service processes for patients examined for breast cancer. Oslo University Hospital engaged the firm Designit to reduce the time from referral to diagnosis, and to improve the overall patient experience. The project was carried out with support from a design-driven innovation programme (DIP). The design team took a holistic approach to the 'patient journey', looking at the stages from the patient's first concerns through their professional examinations, treatment and follow-up. Initially, the aim was to reduce waiting time by 75%, but the results culminated in a 90% reduction. On average, it took 7 days from the time the general practitioner referred the patient for specialist examination—prior to the project, this took up to 12 weeks. A new breast cancer centre was set up in which the services were to be increasingly reorganized around the patient, also paying more attention to the psychological aspects of being examined for cancer.

The project has won several awards, and its impact has stretched beyond breast cancer care: while insights from the project laid the foundation for the implementation of national standardized procedures to ensure quality in relation to breast cancer health care, it has also inspired the introduction of standardized procedures to ensure quality through 'patient pathways' in mental health care (*Pakkeforløp*). However, the transfer of these ideas and models to mental health care has spurred public debates among general practitioners, psychologists and psychiatrists. An editorial in the *Journal of the Norwegian Medical Association* refers to these debates and expresses some concerns. On one hand, the idea behind introducing standardized patient pathways is to reduce unpredictability and waiting time for vulnerable patient groups. However, while the introduction of certain standards is seen to enhance service quality for patients, professionals see this as a first step towards increased standardization and rigidity, which is unsuited to the complexity involved in mental health care. This is an interesting example of the challenges involved in transferring solutions developed in one service design project to new service contexts.

Despite the controversies regarding the transfer of solutions from the breast cancer project to other kinds of care services, the design-driven project has played an important role in bringing attention to service design approaches as a means for public sector innovation. It has helped pave the way for a stimulus scheme for innovation and service design in the public sector called StimuLab. The Directorate for Administration and ICT (Difi) is collaborating with Design and Architecture Norway (DOGA) on this scheme. Twenty-one projects have been granted financial and professional design support since the arrangement was initiated in 2016. Eight of these have been completed, while another six projects were initiated in 2018 and are still ongoing. Seven new projects gained support in 2019 and these have just started.

Through the scheme, Difi and public sector organizations will gain experience with new ways of working, linking service design, change management and profit realization. The financial support is to be used to procure services from consultancies with service design specialization, and the scheme is also meant to enhance the service design competence of public services in consultancy market. The 'Triple Diamond' model is being used as an underlying process model for all projects, which is meant to ensure an open and holistic exploration of the problem, and subsequent development of solutions, testing and implementation. Overall, the aim of the scheme is to stimulate public sector innovation and create more user-friendly, holistic and efficient services. One example of the projects supported through Stimulab was the project '*tidstyv*', with its aim to reduce the amount of time wasted on unnecessary cumbersome tasks and routines in public administration. This work was ultimately integrated into the government's prioritization of continuous improvements and innovation in the public sector (Prop. 1 S (2018–2019)). There are several service design projects in health care, as well—for instance, a redesign of the emergency ward in Oslo, and redesign of the care system for Oslo's nursing homes. Both involved professional designers and the use of design methodology, taking the views of the users as a starting point when exploring the potential for improvements of the service processes.

Thus, the Norwegian government is using a number of incentive schemes to stimulate public sector innovation based on design methods through Stimulab, through a design-driven innovation programme (DIP), and through a network called InnoMed, which focuses on design and innovation in health care. A number of government agencies are involved in these schemes: Design and Architecture Norway

(DOGA), the Directorate for Administration and ICT (DIFI), the Norwegian Association of Local and Regional Authorities (KS), Innovation Norway and the Norwegian Research Council are all important actors. The various programmes and collaborations have also led to the development of different kinds of materials that provide ideas and guidance on how public sector organizations can work with service design. KS has published an online 'roadmap for service innovation', which embeds service design models and tools and was based on an idea booklet for service design and innovation in municipalities. Various design agencies and the Oslo School of Architecture and Design collaborated in developing these resources. A range of resources have also been developed by Design and Architecture Norway (DOGA).

In line with other countries (see, for instance, the context for service design in Scotland and the UK), service design is closely interlinked with the digitalization of public services (Meld.St. 27 (2015–2016). In one of the white papers on digitalization ('Digital Agenda Norway'), it is stated that the government aims to stimulate more efforts at using service design to develop better, and more user-focused, (digital) services. Service design is also being linked to more innovative public procurement processes. A recent white paper (Meld.St. 22 (2018–2019)) states that user surveys, interviews with employees and use of service design can create better understandings of needs in procurement processes, which in turn may lead to tenders that stimulate the market to develop new and more innovative solutions.

In sum, we see that the concept of service design has become influential in the public policy discourse in Norway, especially over the last five years. It is being linked to efforts of innovation and improvements in a range of service areas. The Ministry of Local Government and Modernisation is currently working on the first government white paper to specifically address public sector innovation, and design thinking and methods are being used to develop the white paper. This means that the development of the white paper is underpinned by involvement processes with a range of actors. The kick-off for the work was hosted at DOGA, and the Ministry has procured support for the facilitations of involvement processes from designers.

As part of its work with the white paper, the Ministry has developed a 'future scenario' analysis, in which four hypothetical future scenarios for the public sector in 2040 are described and discussed. The scenarios are not predictions of future trends but are meant to be used as a foundation for strategic analysis and discussions. They are referred to as 'memories of the future' and they may help visualize various possible future scenarios for the public sector. The four scenarios were developed along two dimensions: societal trust and change in the public sector; interestingly, the Ministry also collaborated with a team of students and researchers working with interaction and service design at the Oslo School of Architecture and Design to bring these four scenarios 'to life'. This resulted in an exhibition called 'The Future Laboratory' at DOGA: the exhibition displayed the four scenarios as four physical rooms, in which visitors could get a sense of the embodied feelings of these hypothetic futures. (It will eventually be possible to visit these four rooms online, through photographs and films of the exhibition.)

By integrating design elements and design approaches in the development of the new white paper, the Ministry is signalling that they are prepared to 'walk the talk': i.e. they are not only promoting service design as providing approaches and methods for innovation and renewal in public service organizations, but they are also making efforts to embed these ideas and approaches in their own ways of working.

This may have broader symbolic effects, as it indicates a shifts towards broader and new forms of involvement and participatory processes at different government levels.

4.1.2 Service design in articles, reports and theses

The upsurge of attention devoted to service design in Norway's public policy documents is also reflected in other kinds of literature. First, a series of articles in a public management magazine (6) have drawn attention to the increased popularity of service design in public service reforms. Two of the pieces were written by designers: one explains service design, with an emphasis on its user-centrism, while the other discusses the potential of introducing service design for renewal of public bureaucracies. The texts by journalists and commentators (4) take more explorative approaches and discuss various implications of the fact that increased responsibility for public sector renewal is being placed in the hands of designers.

We also found published studies of service design in public service settings—of these, most are master's theses (13), and several focus on projects that are part of the Stimulab programme. Among these, we may differentiate between two kinds of studies concerning service design. On one hand, there are studies that applied service design methods (within informatics and design/industrial design). These typically assessed service processes and explored opportunities for service improvements based on qualitative user studies that formed the basis for better practical solutions. One published peer-reviewed study also took a service design perspective on welfare technology, based on qualitative studies of users' perspectives.

The other body of studies explored and assessed service design as providing (new) approaches to innovation and renewal of public services. These studies were set in sociology, organization and management studies and innovation studies, and were mainly carried out as case studies. The studies show the ways in which service design can enable change in public services through concrete examples; a few of them assessed how organizational factors affect the introduction of service design; and some examined whether service design in fact enhances user-centrism and user involvement in public services. Interestingly, one study explored whether the introduction of service design may lead to change in governance models, or whether governance regimes need to change if public service organizations are to be sufficiently open to service design mindsets and methods. One research report evaluated whether service design methods applied in mental health care lead to actual user involvement, based on the data from the perceptions of those participating. The findings from the study are largely positive, and the service design methods were seen as innovative, inspiring and involving from the participants' perspective.

4.1.3 Summarized findings

In the review of the national grey literature on service design in Norway, we have focused on how service design is portrayed in government documents, i.e. how the term is part of the public policy discourse. We have found that service design has been increasingly referred to and highlighted in policy documents over the last five years, and it is perceived as providing promising tools for public sector innovation. The value and contributions of service design is being linked to the user-centrism that underpins service design mindsets and methods. Service design is also highlighted as particularly valuable for ensuring that the digitalization of public services ultimately produces user-friendly

solutions. The weight placed on service design in the policy documents is reflected in various incentive schemes that are intended to stimulate the use of design approaches for public sector innovation. The incentive schemes also lead to the development and dissemination of tools and guidelines that public service organizations can use, and examples of experiences and results from projects are then disseminated through websites and practical reports. We are also seeing a growing interest in service design in academic studies, but thus far these are primarily undertaken as master's studies.

4.2 Case Nor1: Labour and Welfare Services

4.2.1 Description

This case study examines efforts to improve counselling and follow-up services within the Norwegian Labour and Welfare Services (NAV). NAV is the result of a comprehensive welfare reform implemented in 2006, based on a merger between the national employment agency and the national insurance agency. The municipal social services were integrated through a partnership model.

Over the years since the implementation of the reform, various evaluations and reports have found that the reform failed to meet its initial objectives on key aspects, and different shortcomings have been highlighted. One of the most serious concerns has been that the new organization failed to meet its promises to strengthen the individually tailored counselling and follow-up of users with reduced capacity to work. This was the background for the initiation of the 'simplified follow-up' project in 2015, which aimed to develop a new concept that would improve follow-up for users and employees. The project was explicitly based on a 'service design methodology' to ensure a holistic and user-centred approach to the development of a new concept, and this project is the focus of this case study.

The aims of the 'simplified follow-up' project was to simplify, enhance quality and make the work-related follow-up of users more effective. The project was carried out between 2015 and 2019, and entailed the development of various digital solutions launched at different points throughout the project period. A preliminary project was carried out in 2015, based on a service design approach. This preliminary project followed a four-staged process model used for service design projects (the Double Diamond model; see Figure 1); the four stages are 1) explore, 2) define, 3) develop, and 4) deliver. The first two stages (set in the first diamond) covered the 'insight work' carried out to understand the problems addressed, and the workings of the existing services. The next two stages (set in the second diamond) covered further analysis and the development of a new concept for improving the follow-up services. Findings from the insight work were further analysed and used as a basis for developing a new concept for follow-up work, presented in Report 2. The concept was developed and presented as a 'service journey' based on the perspective of users and frontline employees. Needs for innovation and development in the (digital) support systems were identified, and 30 ideas for new tools that could support the new directions for follow-up were presented. In the final stage of the preliminary project, a set of these ideas were prototyped, tested and assessed based on a cost–benefit analysis.

One of the central solutions that emerged from the simplified follow-up project was the development and implementation of a digital activity plan with an integrated chat for direct communication between users and councillors. Since the activity plan was a central output of the service design process, the case study had a particular focus on this new element of the follow-up services.

This case study was conducted in 2019, when the simplified follow-up project was near its completion. Studies of the project documents developed at the outset offer insights into how the processes were planned and envisioned, and how service design thinking guided the efforts of renewal. Two kinds of interviews were carried out to gain further insights on the processes: interviews with people that were or had previously been involved in the development processes (7), and interviews with people that had been affected by changes resulting from the simplified follow-up project—users (3) and frontline employees (9). Document studies were also highly important in this case, while observation was less relevant. Still, some observation proved fruitful for assessing how the new application worked, as seen through the interface of the users and employees (4).

4.2.2 Main findings

Understandings of service design

A service design approach was explicitly adopted for the preliminary part of the project. In the project document, it was stated that the project '*uses service design as a method to ensure a holistic approach in the development of new concepts. Service design is used throughout all phases of the preliminary project, with a continuous focus on the user'.* Hence, a '*holistic approach'* and '*continuous focus on the user*' seem to be the defining aspects underpinning the service design approach. Moreover, the Double Diamond process model, commonly associated with service design, was used to guide and structure the progress in the development processes. The informants generally expressed a shared understanding of service design as a kind of approach that brought in a new and more fundamental way of understanding the user perspective. This was largely acknowledged as a significant advantage of using service design methods, and of bringing in service designers. The strength of service design was linked to its emphasis on '*creating things together'* and '*involving those that are going to use it'*. As one individual employed in a development team at the directorate level explained:

> *A lot of what I have learned, I have learned from designers. And when I talk about the need for finding the users' problems, it's because the designers bring with them processes and ways of doing things that are really positive.*

One designer we interviewed reflected on service design in relation to other forms of design, perceiving it as a kind of mediation, and as a coordinating and strategic role:

> *If I was hired as a service designer, I would not think that I should design the interface for an app, for instance (…) [A]s a service designer, I would explore whether it would be an app that was suitable for meeting that problem in the first place (…) [A] service designer would gain an overview of the 'touchpoints', and then implement them and test them in the context they are used. There is more of a strategy and coordination role in that.*

When service design is understood in this way, designers are entering new and more blurred roles in the organization, which may challenge or displace other professional roles and forms of expertise. In this case, it was evident that this involved frictions and negotiations:

> *There are lots of wars between people with specialization and background from NAV and designers. Because at the outset we were like, why are we even here? We know the users. And they felt the same way. So, there is also a sort of friction, if I can say so without…, like, who is doing what? Who actually understands the user?*

It was also reasoned that while service design's user-centred approach was positive, it may need to be balanced in a public service context:

> *It's the right way to go, but we have gone so far in the other direction, so I question our understanding of the concept [of service design]. Have we perhaps abandoned from our administrative role in our eagerness to meet the users' needs?*

These reflective processes that addressed the need to better understand what service design is all about, and what kind of expertise service designers represent, was also linked to statements about service design as 'fashionable' and 'trendy'—statements that had a sceptical ring to them. Service design was also understood as a problem-solving approach that started by raising fundamental questions like: '*What is this service, actually?*' Some informants explained that this was a new way of approaching things that took time to understand and relate to, but that they eventually came to appreciate.

Experiences and outputs

The section above shows that the experiences of working with service design in NAV were entangled with efforts to understand and make sense of it. To look more concretely at the experiences with the service design processes, we focus specifically on the simplified follow-up project.

The simplified follow-up project led to numerous outputs and the development of new digital solutions and organizational changes to enhance quality and support a more effective follow-up of users. One of the most central outputs was the development of a digital activity plan with an integrated chat function for direct communication between councillors and users. These interactive aspects of the digital activity plan were what most fundamentally brought about change compared to the activity plan that was used in the past. Previously, the councillor could access the plan electronically, but the user had to fill in a manual form that was then scanned. This undermined the organization's ability to use the document flexibly, with continuous updates depending on the users' situation. The interactive functionality was enabled by broader system changes in the organization related to the introduction of the administrative system Modia, which was developed to support two-way interaction between users and councillors. The digital activity plan was developed as a new module in Modia and was thus no longer an administrative document placed mainly in the hands of the councillor and NAV, but a plan that could be accessed by the councillors and the users. Perhaps more importantly, the plan could be edited and updated from both sides. With these changes, the user and councillor were given the ability to see the same things, which enabled more of a shared ownership of the plan. The aim here was for the plan to be used as a more active tool for the users to plan and structure their lives in relation to the support provided by NAV; adding the chat function enabled more flexible access for communication between the users and their councillors. Moreover, these new solutions enhanced transparency in the case processing, and it challenged the asymmetrical relations between users and councillors because users could edit documents and have a more direct say in the administrative process.

The interviews with frontline employees (9) showed that they found the introduction of the digital activity plan and the new chat function as a considerable improvement in the follow-up work. The following quotes are illustrative: *'I think this is a major progress and it is so time saving'; '[T]he new activity plan has really lived up to my expectations'.* Even though some employees were concerned that the chat function might lead to a situation in which they were overwhelmed by requests from users, they generally found it manageable. They also found that access to smaller updates and steady contact with users improved communication, and they felt more on top of the management of the total number of case portfolios.

The interviews with the users (3) also showed that their experiences with the digital activity plan and the chat function were generally positive, even though all users commented on challenges in the transition period when the new solution was introduced. Moreover, their experiences were linked to their situation and to their needs for follow-up services from NAV. One of the users, who was temporarily out of work due to physical health problems, found the new solution to be a clear and significant improvement. She felt 'closer' to her councillor even though they rarely met in person, and she felt more secure that all practical and administrative tasks were in place. This had been a concern in the past, which placed extra stress on an already difficult health situation. The second user, who only relied on NAV services for a limited period due to temporary unemployment, was also content with the digital activity plan. However, he did not feel strongly about it, as the solution (and the services in general) made little difference in his life—he saw it merely as an administrative solution that he *'had to relate to'*, and the functionality was seen as satisfactory. ¨

The third user had been receiving services from NAV for many years due to a combination of mental and physical health issues, and problems with alcohol. This interview revealed a more nuanced and complex experience with the digital activity plan. First, the digital communication was experienced as stressful and intimidating because he felt that he had to write articulately, and this was not always easy. He also worried that having things in writing in the system could later be '*used against*' him, in the handling of the case. For this user, face-to-face meetings with his councillors were important, both for interpersonal reasons and questions of trust, which may link to the more complex and vulnerable aspects of his case. However, although these drawbacks of increased digital communication were pointed out, the user also acknowledged that the chat function made it easier to get in touch and make direct appointments with his councillors.

Thus, for the most part, the outputs or solutions that emerged from the follow-up project (anchored in service design methods), were regarded as an improvement to the follow-up work in NAV. The use of the service design approach was also regarded as positive, especially among the frontline employees (2) involved:

> *I actually found it really positive, that we could sort of tell them very concretely about the challenges (…) I really felt involved (…) and it's about the step-by-step process. We were involved in the project, and then the others would do it later. So, we followed it step by step into the simplified follow-up. It could be frustrating at times, but also rewarding to be part of the whole process.*

Challenges and constraints

While the service design processes and its outputs were largely experienced as positive in this case, the case also offers insights into challenges and constraints related to the use of a service design approach.

First, one problem raised by managers in the development team was that those working with the preliminary project based on the service design approach had *'gone too far'* in proposing a solution and concept. This limited the creativity and openness in the development phases and was seen as somewhat constraining for the whole process. This indicates that a clear 'closing' of a service design process with the presentations of solutions or concepts can be unfortunate and somewhat contradictory to the idea of basing design processes on continuous iterations.

Second, for some, the process of digging deep into the problems they were addressing felt at times frustrating and confusing because it felt like they were '*not moving forward'.* The value of working this way became clearer later in the process. This indicates that working with service design approaches can be time-consuming and may require organizational maturity that emerges gradually.

Thus, the ability to fully understand what service design was all about links to how it is being utilized to enable innovation and transformations. One informant in the development team explained:

> *When I look back on it, then I realize that I think she [the service designer] was pointing to something very important that we only partly were able to take in. Time limits, and lots of demands from others than the users, all bureaucratic things really, constrained us from revolutionizing it [the service].*

Third, while most informants saw the increased involvement of designers as valuable, it was also highlighted that they sometimes lacked the necessary contextual knowledge of public services—and the welfare services in particular—such as insights on legislation guiding the services and the fact that the users were not customers but citizens with rights *and* obligations. This lack of contextual knowledge could lead to propositions of solutions that were somewhat naïve and too anchored in the customer logic of the private sector. Thus, an interlinked concern was that certain ways of pursuing service design could lead to an excessive focus on users' needs that required nuancing.

Fourth, this project was taking place in parallel to a broader organizational shift towards more agile methods for system development and organizational learning. Thus, similarly to the Scottish case studies, some of the constraints and challenges related to service design were entangled with the shift towards agile methods. Some of the challenges in the processes were linked to the fact that the project started in an organization that was more based on 'waterfall' development methods than on agility. Hence, in the development process, there was distance between the system developers and the project owners on the business side. This changed during the process and a new model with smaller interdisciplinary teams was established. This was largely seen as positive, but the informants also brought attention to problems with these ways of working. Most importantly, while the new ways of working may enable iterations and continuous improvement within one limited aspect of the services, new fragmentations may emerge. In a comprehensive and complex organization like NAV, there is a risk that the iteration principle of agility (and service design) will undermine the ability to maintain a

holistic approach, which is also seen as the defining trait of service design. One informant who had been involved in the development team from the business side explained:

> *To me, service design is about holism, that there is a broader holistic picture underlying what we are doing, so then it's a bit, well, continuous improvement, small autonomous teams… how much will they then be able to capture that holistic user journey? Contrary to that specific 'pain point' that suddenly appears and that you would like to solve. I think we are entering a whole new range of dilemmas related to that.*

Fifth, it was highlighted that there is a risk that service design processes and service designers work with insight work and user research, which is somewhat detached from existing knowledge and research:

> *There are others conducting studies and analysis (…) [W]e have an incredibly good department for analysis in NAV, but it is like we are not using it when developing solutions. We are not able to convert it (…) [W]e need to start thinking that this is something that can actually be used for something.*

The detachment between service design processes and the existing knowledge from external and/or internal research was also linked to the need for increased collaborative relations between service designers and researchers. Bringing in researchers with expertise in qualitative methods to work collaboratively with designers who visualize and use the research in service developments was pointed to as a promising combination. In sum, we find that this case point to some important and interesting insights on constraints and dilemmas related to the adoption of service design in public service contexts. The case shows how adoption of design, and service design thinking and approaches particularly, require organizational learning and maturity. The project focused on in this case was one of the first projects where the organization explicitly started out with a service design approach. Some of the initial tensions and challenges involved, have become less apparent as the organization have increasingly integrated design expertise and methods across various projects and development processes.

4.3 Case Nor2: Dementia care

4.3.1 Description

This case centres around dementia care and concerns the development of a 'dementia village' in one of Norway's largest municipalities.[1] The project is based on inspiration from the Dutch dementia village, the Hogweyk,[2] and was initiated by politicians in the municipality after a visit to the Hogweyk in 2013. The construction of the building and surroundings are ongoing, and the new dementia care facilities are scheduled to open by the summer of 2020. The village will have room for 158 residents suffering from dementia, with 8 residents living together in 17 smaller buildings with surrounding gardens. Inside the village there will be access to different facilities, such as a small shop, café, hairdresser and gym,

[1] The research for this case study connects with a broader innovation and research project entitled 'Demsam', funded by the Norwegian Research Council https://prosjektbanken.forskningsradet.no/#/project/NFR/282044. Marit Engen and Ane Bast (HINN) are participating researchers with the Demsam project.

[2] https://hogeweyk.dementiavillage.com/en/

and indoor and outdoor spaces for social gatherings and activities. The idea behind the dementia village is to create an environment where residents can be free to move around in a safe environment, with more access to activities and recreation. This is contrasted with the more traditional nursing homes, which are often criticized for being too focused on the somatic aspects of care, which limits room for socializing and meaningful activities. By creating a more 'homely' atmosphere both inside and out, the municipality is seeking to provide dementia care services that enable seniors to continue living their life as before, as much as possible. The new surroundings are also coupled with a new care philosophy that is focused on creating a new *home* for the residents and meeting their individual needs. The municipality is striving to create structures in which this new care philosophy underpins leadership, management and organizational structures, as well as the mindsets and practices of the carers employed.

While the idea for the village largely draws on inspiration from the Hogweyk in Holland, the municipality has underlined the need for adapting and 'translating' the original concept to the local context in Norway. They have placed emphasis on co-creating the new services with potential residents, their next of kin, and other local stakeholders. To co-create the new services, the municipality is drawing on inspiration from service design and co-design. The design processes are mainly being carried out 'in-house' and facilitated by a development team with experience and training in facilitating innovation processes. A professional service design consultancy has been involved, but they have mainly been used for guidance and dialoguing with the development team, and not directly involved in the design or facilitation.

The design processes in this case focused on the development and design of new services set in new surroundings, not the design of the facilities nor the grounds. The data collection consisted of interviews with actors involved with or affected by the design processes, such as different kinds of managers (7), frontline staff (1) and users (2); it also included direct observation of design processes, such as a design sprint (5 days), workshops (2) and meetings. The data for this case study also consist of a broad range of project documents, such as planning documents, minutes and presentations.

4.3.2 Main findings

Understandings of service design
Service design in this project was mainly carried out 'in house', facilitated by a development team that had taken service design courses and had considerable experience with facilitating creative processes. The leader of the development team explained that they are not service designers, but that they use service design methods:

> *I am very humble regarding the fact that I see this as a profession. But, as I put it, we use methods from service design. By this I mean that we use a framework (…) based on this needs-solutions-tests. You do that over and over again, and you use different methods to gain insight on needs, and to find possible solutions and then test them in the services out there. Then you gather experiences, and then start over again.*

It was also underlined that drawing on service design methods does not mean the use of one clear-cut and stable toolkit, but it is instead about continuously combining and experimenting with different kinds of methods:

> *We borrow some, but we are continuously developing and curious. Because that's just the way we are, and because it is boring to just do the same things over and over, and we need to keep up (…) I have kind of been doing these things for many years, so we have been using that, but now we have sort of found a third way, borrowing from here and there. Because new employees start, and they may come with new approaches and then we add and subtract and keep on. So, it's all very exciting.*

Service design in this specific project was seen largely as having a role in planning for the everyday social life in the village:

> *I think the approach creates the foundation for the solutions that surround the life in the village, that's what I think. The relations, the glue, the activities, the everyday life. Something like that. The building is there, and the technology, it is kind of the human-related, the activities, the everyday life of the residents, their next of kin and those working there.*

It was also found that designing this new service was demanding and complex, and required an experimental approach:

> *The phase we are in now, there are a broad range of relevant approaches. If you read up, you find that they are just very indicative. They deal with simple things, often one-dimensional things, but now we are creating a whole system, and it is very approximate. But I guess it's like with other things, you just need take one step at a time.*

The professional designer who was somewhat involved in the project as a consultant was also interviewed about his understandings of service design, and he offered the following reflections:

> *It is that course that customer or user is going through in a given service. That's the traditional understanding, but that's not how it is (…) [N]ow we are working with complex problems, which is more than one service really (…) there are so many actors and unclear gains.*
>
> *Service design actually comes from commercial firms. It's like car rentals, for instance, right? How can we make the customer journey simple for those renting a car? How can we manage to improve ourselves based on their feedback? All these things. How can we increase the number of loyal customers so that we know they will come back later? That's where it's coming from (…) and then we have sort of taken this into the public services as well. Then it's not about making more profit, but to get more value for the money we have, for instance, for health and care.*

Experiences and outputs

The outputs in this case are the new dementia care services that will be provided within new physical architecture, both in terms of new buildings and outdoor surroundings. Since the new dementia village will open in the summer of 2020, the case study has merely followed the use of design approaches in

the planning processes; as such, the case study does not allow access to insights on how the new services will actually work. Still, the case material does provide examples of how suggestions for solutions emerged from the co-design processes, and how these have been incorporated into the more detailed planning processes of the village. Moreover, the case allows us to see how efforts to start from the point of view of the service users can shape the broader design process; this in turn allows us to convey some insights on how some of the involved actors experienced the design processes.

The design methods and tools used in this innovation process consist of different elements. The members of the development team started with 'service safaris' and visited the local nursing homes to gain insights on daily life in the existing dementia care services. One of the members of the development team did not have a health care background, and thus represented and outside–in perspective. As she explained:

> *These service safaris, oh my! Just to go out there and have a look, it's incredible what you actually see (…) [Y]ou take a lot of photos and then afterwards you see, and you think… it was a really useful experience.*

She also explained further what she observed, and how this gave inspiration and motivation for doing things differently in the dementia village:

> *It's very institutional, that cramped, warm feeling. Locked doors and personnel that… well that way of organizing the work. Brilliant people, they do as best they can, but there are other ways of doing things. Especially this locked-up thing. But people are ill, I must remind myself of that, they are ill. But with new places, we should be able to make it nicer (…) [S]o that was some of the things I was thinking, but all those impressions and the smell, that's also unnecessary, a lot those smells—we can do something about that.*

The quote shows the importance of physically visiting the service settings, and how observations are important because they activate a range of senses. There were also two group interviews with 13 health care employees. Following these visits and employee interviews, interviews were conducted with next of kin (11) and individuals with early symptoms of dementia who were still capable of communicating and reflecting on their situation and wishes for the future (24). The interviews were conducted by two health care professionals with geriatric specializations, and were framed as conversations around questions such as, 'What do you like to do?' 'What is a good day to you?' 'How do you like your mornings?' The interviewers found that this worked surprisingly well, and that the respondents were capable of reflecting on and communicating their needs:

> *I found that they were quite good at responding. I think they managed to tell me how they would prefer to live surprising well. What was important to them, these kinds of things.*

The interviewers also mentioned the difficulties of conducting such interviews—for instance, problems with using abstract concepts in the dialogue—and that various topic could evoke distress among respondents. They also found that asking respondents about the care or help they were receiving or would like to receive was difficult because they were often not aware that they were being given care or help, or they did not perceive various forms of support as 'help' or 'care'. Thus, conducting the

interviews required sensitivity and the ability to be adaptive and flexible. They also found that although what emerged from the interviews was not surprising, the combination of insights from the individuals with dementia diagnoses and their next of kin nevertheless provided a valuable foundation. One of interviewing nurses explained:

> *There is nothing new or revolutionary, it is not rocket science but instead rather basic things, things we probably knew already (…) I think these are rather shared, basic concerns, but now that we are trying to do things better and differently, I hope this will be a part of the work ahead.*

The interviews were analysed and then summarized in seven bullet points that were meant to convey certain key points from the interviews; these bullet points guided the next phase of the design process, which focused on idea generation. This phase began with an ideation workshop to which a broad range of stakeholders were invited, such as politicians, next of kin, employees from various parts of the municipality, volunteers and local businesses. Thirty-six individuals participated in the workshop, and they worked together in groups that produced a total of 255 ideas for potential new services to be provided by the dementia village. Quotes from interviews and the bullet points summarizing the insights from the interviews were displayed as posters to guide and frame the ideation work.

The ideas from the workshop were subsequently analysed and grouped into four thematic categories, and four teams worked on further concretization of ideas within the themes. This was carried out as four parallel 'design sprints'. Such sprints are often carried out over a short and intense period of time (i.e. five days), but the project team adjusted the five-day sprint format so that it stretched over three weeks. This adjustment made it more feasible to recruit participants who held positions in the municipality that made it difficult to be away for five consecutive days. During the design sprint, the list of insights extracted from the first phase was used as a continuous reminder, communicated through posters and printed on handouts. The design sprint followed a detailed structure, in which the first day was devoted to understanding the problem area; the second day was allocated to working on ideas for solutions; the third day was allocated to selecting a specific solution on which to focus; the fourth day was used for prototyping the chosen solution; and the final day was used for testing the prototypes in meetings with users. The organizers of the sprint, as well as the participants, found the process exciting and inspiring, but also stressful and intense. As one participant explained:

> *I was a bit frustrated after the first two days. I was thinking, 'What on earth? How will we get anywhere with this?' I thought first of all that it was really exhausting and unfamiliar, but we had a nice group. We were two nurses, and I guess we were the most rigid. And there was a man with background in hotels. We were so different, but I think we were a very good group. So, I found that some of my preconceived assumptions were challenged by someone that came from the outside and saw things completely differently, and that was really good. That's probably why it felt so exhausting as well, because you had to think in a completely different way.*

Each group produced prototyped versions of selected solutions, by making visualizations with simplified drawings, using various props to make a staged scenery of the service setting, and by enacting service interactions through role playing. Four invited users (one actual user with a dementia diagnosis and the others consisting of next of kin or representatives from user associations) gave constructive feedback, and this part of the design sprint was found especially important among participants. For one, it

generated pressure to come up with solutions and to find ways of communicating them in comprehensible, concrete ways through prototypes. The feedback from users and user representatives also contained constructive comments that were both critical and supportive of the solutions being proposed. Importantly, it was also found that the final stage of testing with users—especially the dialogue with the individual suffering from dementia—was valuable because it generated awareness and respect towards the service setting and its users.

In the end, the ideas and solutions that emerged from the sprint were then further processed and analysed by the project team, and they extracted solutions that they wanted to pursue and develop further by combining elements from the different sprint groups. Among these was the idea to create a 'cultural minister' position in the village, who would ensure that the aim of creating more room for socializing, culture and activities was upheld. While a different title for this position was used in the end, the recruitment process for this position was near its completion at the time of this study. The person hired will be primarily responsible for ensuring that residents have an active and meaningful life in the village, and for developing structures that make this possible. All four sprint groups also worked on digital solutions and applications that they saw as important for administrating, communicating and organizing a good life in the village. The different needs and proposed solutions from the sprint groups were brought together and used as guidance when searching for integrated software to be developed or procured for the village. Thus, while the village has not yet opened, we see that the outputs generated through co-design processes, such as the sprint, are starting to materialize into concrete solutions that will shape the new services.

Despite the fact that the end users in this service setting have cognitive impairments, we found that the project team nevertheless managed to find ways to include their voices and use their inputs as the central point of departure throughout the design process. While this was obviously challenging, on multiple levels, we found that the involved participants experienced the design approaches used as rewarding. The person primarily in charge of the methods used explained her views on the use of service design:

> *I am very fond of it—I think it is an exciting approach, and I see that it gives us some other answers than if we had not taken that extra round with taking the users' needs as point of departure. And even if we end up with the same kind of solutions, at least we have a different basis for justification. That is, we know the anchoring is solid, and we can say, 'Yes, this is what they wanted'. At least that's what we tried to accomplish—what they wanted.*

Challenges and constraints

The main challenges and constraints of adopting a service design approach in this case have already been touched upon in the section above. When the end users have cognitive impairment, and may even lack the ability to communicate verbally, co-creation and co-design is difficult. While we did find some examples of direct involvement of end users in this case, most end users were primarily involved through what we refer to as user-centred design. That means that their inputs and voices were present through insight work carried out as in-depth, contextual interviews and to some extent observations of current service settings based on service safaris. The co-design processes engaged various stakeholders, but the end users were not directly involved. However, next of kin participated in the co-design sessions, and these individuals may be seen as service users, as well, and they may represent the

interests of those suffering from dementia. Even so, several informants underlined that this latter may not always be true, and that perspectives may be conflicting. Moreover, even though the use of interviews and conversations can be a good way to include users' voices, we also identified challenges involved in carrying out such interviews. It can be emotional distressing for respondents, and it can be difficult for the interviewer to find a suitable vocabulary. Comparing one's situation in the present with a hypothetical future can be particularly hard when one has a disease that may develop unpredictably—moreover, it may prove uncomfortable to think or talk about. As such, including the voices of those with advanced disease progression is perhaps too demanding.

Thus, the challenges and constraints of service design in this context largely concern the complexity of the project and in providing high-quality services in dementia care. Dealing with dementia is inherently challenging, and can also involve heightened emotions, such as profound sorrow and loss, both for those suffering from dementia and their family and friends. We nevertheless found in this case that service design approaches may provide productive ways to transform and improve dementia care, despite the challenges involved.

5 France: Context and cases

5.1 National context and findings from the national literature review

In 2010, a joint publication of l'Agence pour la Promotion de la Création Industrielle, de la Cité du Design et de l'Institut Français de la Mode[3] was dedicated entirely to design agencies—described in the publication as young structures aiming to implement new activities, such as providing guidance in both general and service design. The publication also noted that design in general has increased in all areas of the French economy, especially in public administration. They record 12,000 design agencies registered in the professional directory 'yellow pages'. However, this study underlines that this activity is incorrectly referenced by INSEE.[4] The total number of structures is actually estimated at around 14,000, with 300 to 400 structures containing at least 3 employees. The number of designers (internal or external) is estimated at around 20,000 in total.

Moreover, the creation of La 27ème Région, an association of designers and social science researchers, has increased service design based on 'human-centred approaches', 'design thinking' and 'participatory design'. This association is considered a major tool for implementing service design in public local authorities in France.

Since 2016, the Direction Interministérielle de la Transformation Publique,[5] driven by the government, has maintained a website dedicated to the transformation of public actions. They publish studies and booklets about concrete actions taken by administrations and local authorities. Staff and citizens are at the centre of this new approach to change in administration and public services.

Examples:

- Public innovation laboratory (named Labs)—12 labs implementing new methods, tools and actions across the national territory. Service design is one of these new actions/methods. https://www.modernisation.gouv.fr/sites/default/files/fichiers-attaches/eval_labs_-_bilan_et_referentiel_0.pdf
- Citizens as actors of public services: how to involve them and increase their participation. https://www.modernisation.gouv.fr/etudes-et-referentiels/une-etude-pour-explorer-la-participation-citoyenne-au-service-public

The French state is increasingly developing new directions for implementing innovations in public services, including service design. A consortium was created involving La 27ème Région, a research centre ('Futurs public'), some Régions, local public institutions and a large city (Paris).

[3] https://www.citedudesign.com/doc_root/2012/designers/501bd9045616f_SyntheseFinaleEtudeEconomieDesignVF2logo.pdf

[4] INSEE: Institut National de la Statistique et des Etudes Economiques (the French National Institute for Statistics and Economic Research).

[5] https://www.modernisation.gouv.fr/documentations?field_documentation_thematiques

In 2018, a report from BPI France[6] (Mérindol et al., 2018) shows that the use of innovative platforms, such as living labs, and service design is spreading throughout the country. Business models of these platforms remain widely diversified. However, the report underlines the following elements:

- Platforms look for diversification of their activities and their revenues (e.g. service design, public policies design)
- Platforms tend to be less dependent on public subsidies and emphasize public contracts, especially those from local communities
- Platforms develop partnerships with private companies in order to complete their skills and tools for innovation and change management
- Platforms need resources such as employees, locations, competencies and materials for prototypes

The 2017 report did not mention the several local public actions following the platforms. In 2018, we see platforms as having a catalytic role in innovation management and playing a key part in local public actions. They are based on several models, including 'business oriented', 'social business oriented', 'not-for-profit oriented', 'co-production' and 'delegation'. They are also followed by the emergence of territorial entrepreneurs, as they significantly increase the attractiveness of the territory. Platforms created by local authorities are considered a new form of innovation public policy; however, the involvement of local authorities can vary significantly from one platform to another. This survey shows that those platforms are increasingly providing more services, especially service design, to companies as well as to public services—they also receive both private and public funds. As such, public platforms can take advantage of those funding and may be considered competitors for private actors already acting as service design agencies. However, this review shows that new innovative platforms tend to find their own financing sources and limit their reliance on public subsidies.

5.2 Case Fra1: Car Sharing

5.2.1 Description

This case is set in Sailly-Lez-Lannoy, a small village of 1900 inhabitants located in a suburb of Lille. Lille is a metropolis of 1.2 million inhabitants. The inhabitants of Sailly, represented by the citizen organization La Fabrique Saillysienne, sought to set up a car-sharing service, as public transportation linking their village to Lille was limited and unreliable. Moreover, every morning, Sailly is crossed by a stream of cars, creating a problematic traffic jam (resulting in an approximately 25-minute wait to join the main road). In order to offer a solution to Sailly's citizens, La Fabrique Saillysienne and some citizens of the village decided to work on a car-sharing service. They saw an opportunity in the fact that Lille will be the World Design Capital in 2020; for this event, some projects were selected and received financial support to be followed-up with by a designer or design agency. Sailly's car-sharing project was selected as a proof of concept and received 2000 euros.

The initial idea of the project was to develop and launch an application to enable the car-sharing service. However, after consultation with an association specializing in car-sharing concepts, it was determined that these services are often inefficient and unsustainable, and it was decided that an application would

[6] http://www.newpic.fr/newpicopendoc/rapport-plateformes-innovation-2018_web-double-page.pdf

not solve the underlying problems. Involvement processes with the targeted population were recommended. To move these processes forward, the Sailly team decided to work with a designer.

The case study is mainly based on interviews with involved actors—Municipality Councillors (2), project team members (2), designers/consultants (2), citizens (3)—and observations of meetings/workshops (3).

5.2.2 Main findings

Understandings of service design
In this case, the term 'design' (in the context of 'service design') was unfamiliar to the involved actors. In this context, design was mainly understood as the design of objects or buildings, and as associated with artistry: *'Design sounds like a very strange word. It is associated with the artistic world but not with services'.* It was seen as a '*vague'* and '*obscure*' term that was problematic to use in the context of the project*: 'The term "design" discredits the project. We don't understand what it means'.* However, the term eventually gained acceptance, and it was seen as referring to a *'very structured method'.* Others also described it as *'a method'*, and it was also pointed out that '*we do design without knowing it'*.

It was furthermore recognized that the term 'construction' was better accepted and understood, and that the unfamiliarity with the term 'design' could perhaps be linked to linguistic conventions and translation issues, or possibly to cultural differences. This was indicated by the involved designer who explained: '*The culture of design is weak in France'*. He explained the design approaches that their agency uses as follows:

> *Our agency sets up events driven by design methods. We are aggregators who create value through design. We have competencies for questioning people and enable them to break out of their usual habits. Our knowledge relies on the ability to link things that have a priori no link.*

Experiences and outputs
The design approaches used in this case were mainly centred on the organization of three workshops with groups of citizens. The aim of these workshops was to gain an understanding of the potential of the car-sharing initiative and the 'nature' of the problem, rather than starting the development of an application that could turn out to be useless. The workshops served their intended purpose, generating insights on the challenges involved in realizing the car-sharing initiative. The organizers were pleased with the way these workshops contributed both to the structure and direction of the project:

> *Design meetings helped us to structure our car-sharing project. It was going in so many directions and we were not able to move forward anymore. It was a new starting point and a way to involve citizens. Coming for three hours on a Saturday morning to talk about a project, it's wonderful!*

The insights generated by the workshops centred around the challenges and risks of moving forward with the car-sharing service and the development of the application. For this kind of service to work, a 'critical mass' of users is needed, and certain 'cultural problems' were identified that would prevent the accumulation of users at this level. While several citizens were interested and supported the initiative,

many others were not ready to be separated from their own car to go to work. Indeed, later tests and interviews showed that people were prepared to drive others but not to leave their own car. To engage a broader population, the project leaders tried to scale up and mobilize citizens in neighbouring villages, which they hoped would make it possible to reach a critical mass of users. However, there was no response to these requests. The project leaders also asked for support from the public transport services but received no response.

Since this was a citizens-initiated project, it also lacked funding and sufficient support from the municipality, and consequently there was no organizational or governance structure that could help move the project forward. These various hindrances made it difficult to move forward with the project. This does not mean that the co-creation processes failed. On the contrary, the design approach and co-creation processes with citizens shed light on the underlying problems that would hinder the implementation and sustainability of this kind of service. Thus, the co-creation process alerted the initiator and project leaders that they should not jump too quickly into investing in and developing an app that was not yet viable. The project is still in process, and has received funding and design mentoring to proceed with exploring the potential for a car-sharing system.

Constraints and Challenges
As described above, various constraints and challenges were encountered in this project, but these were challenges and constraints linked to the nature of the problem and to the lack of governance and organizational structures that could support the initiative, rather than constraints and challenges related to the use of service design.

5.3 Case Fra2: Media library in a rural setting

5.3.1 Description

This case study concerns the creation of a media library in a rural area in France. The case is set in a territory composed of 14 small rural *communes*, which constitute the community of *communes* 'between Dore and Allier'. This community has 18,000 people in total. Lezoux, at its centre, has 6000 inhabitants and is located about 30 kilometres from Clermont-Ferrand (141,000 inhabitants), and 18 km from Thiers (11,000 inhabitants), two cities located in the low-density region of Auvergne.

The project was initiated by the president of the community of *communes* (also the mayor of Lezoux), the culture deputy in Lezoux, and the community of *communes*. The project received support at the regional level, and the initiators were advised to engage an association called 'The 27th Region'. The association was born in 2008, and brings together professionals of social innovation, design, public policy design, sociology, and anthropology. A project leader was appointed to move the project forward with support from two librarians. A consultant specializing in 'third places' was also engaged in the process of designing the new services.

The design processes were carried out in two main phases:

- Phase 1 (from the end of 2010 to 2013): A participatory design process led by a multidisciplinary team (The 27th Region) consisting of 1) research, 2) prototyping and testing, and 3) development

of a plan of uses (‘*a plan that describes the life inside the media library, what is done there’*, to be used as a tool for dialoguing with the architect.
- Phase 2 (2014–2019): A participatory design process refined the project.

The project was initiated as a ‘cultural equipment project’ and took the form of a media library project. Set in a rural area with considerable geographical distance from cultural services, the community of *communes* saw the need to provide access to local cultural activities. The motivation and aims for the project were stated as follows:

- *People feel good here, but (...) they must also find cultural food here.*
- *People move all week; in the weekend they do not want to leave.*
- *We had to respond to changes in culture—there are new needs, new technologies, we are in a digital era now.*

The case study is mainly based on interviews with actors involved in the project. Interviews were conducted with the designers and consultants involved (3), managers in the community of *communes* (3), frontline employee (1) and citizens (2). A range of material produced during the design process was also studied and analysed and constitutes a part of the data in this case.

5.3.2 Main findings

Understandings of service design

The designer involved in the project explained that his service design approach was inspired by the global design company IDEO and the company’s chair, Tim Brown. He linked the agencies’ understanding of design/service design to forms of participation and involvement, but also underlined that the design approach encompasses more than participation:

> *Some people can sometimes reduce a little the service design, the design thinking and all that, to participation. (...) For us, it is important to take into account people, to do something that is more suitable for their life, their future life, but in fact, to do a good service co-construction, co-design workshops, participatory workshops, et cetera, is not always the best solution.*

This quote indicates that including the voices and inputs from users and citizens is central to service design, but that the design processes move beyond merely participation and involvement. What this means is further elaborated upon in the following quote from the designer:

> *The ideas of people are very interesting, the way they perceive things, too, it’s very interesting, it’s very inspiring, but at some point you have to turn that into a desirable projection, that’s our job (…) Once we have this projection, it is interesting to submit it to people, it is also part of our job, that is to say, to get people to project themselves, to help them to project themselves into the world, so that they can react, and that’s very important, too, to make them react, to provoke them, we still learn a lot of things, and it allows us to adjust even more the proposals, and even more finely, much more radically, too, and not content just to do a little better than before, to do it differently.*

One of the designers involved also placed emphasis on the importance of visualizing and prototyping: *'It makes it possible to ask the questions in a more concrete way, a little more engaging'.* The designers also explained their design approach to the library setting in this way:

> *What interests us is not the quantity, it is not to make statistics, it's rather to go to see the different uses and practices, to see the extremes, in some way. What interested us was to go and see people who do not read at all, and people who are passionate. It's in this 'great gap' that there are interesting things.*

As with the previous French case, the initiators and project team were unfamiliar with this way of talking about the design of services. The following quotes are illustrative:

> *'This is a new term for me (…) We do it every day, (but) we didn't know that we were doing service design' and 'I don't know what we can put behind "services design", perhaps it's the use of a place, of spaces, and services that are rendered, more than the building itself'.*

In the context of the project, service design was understood as linked to the plan of its uses: '*About what was realized in Lezoux, I know that this famous "plan of uses" is really what spoke to the elected officials and the people'* A top-level manager also explained her gradual understanding of service design: *'The service design is to meet the needs of a population of all ages'.*

Experiences and outputs

The overall aim of this initiative was to provide better access to cultural services locally—which resulted in the construction of a 'third-place' media library. This construction was realized, and the plan for its uses and the details of the services were successfully developed through design approaches and co-creation processes. The design processes were carried out in collaboration with La 27e Région, who conduct action-research programmes to test innovation methods for designing public policy involving various public stakeholders. To this end, the association mobilizes the capabilities of multidisciplinary teams composed of designers, idea generators, and social scientists from many fields (such as ethnography and sociology) and engages in ground-level actions. These approaches prioritize the concrete experience of users, civil servants and citizens to serve as the starting point for re-examining public policy.

In the process of working with the media library, a multidisciplinary team from The 27th Region had a three-week residency spread over six months (one week every two months), with two designers, the director of an association of artists and architects, a sociologist, and a librarian specializing in questions of third digital places. The aim of the fieldwork was first to understand the territory, context and needs, and second to mobilize the engagement of citizens through different channels.

The initial fieldwork and design processes resulted in a 'residence notebook' and 'usage plan', a prototype of 'travelling trunks', and an outline of the building plans. In the next stage of the project, this foundation of ideas and visions for the use of the library was taken further by the local media library project team. In these processes, the team worked further on reinterpreting the elements from the first phase and on further detailing the services. The design processes resulted in a number of innovative elements in the development of the media library: 1) a 'mini fab lab' with access to a 3D printer; 2) a

mix of services—reception of a nursery nurse and a doctor of social medicine, and staff from the local mission for employment, in the building of the media library. 3) a room dedicated to video games (which was an innovation at the time, because the issue was to bring a form of 'sub-culture' into a place of 'legitimate culture'); 4) a versatile auditorium; and 5) new ways of working—more participation and opening up the library to a range of cultural activities: '*There are workshops, we do gardening, we have a stained glass workshop, a cosmetics creation workshop. (...) Speakers are invited (...), the facilitators go to the old people's homes'.*

In all, the media library developed into a more versatile 'third place' than what was foreseen. A project team member described it as developing into a real *'place of life'*, the *'displacement of downtown Lezoux'*. The role of the library as a social meeting place was accentuated; the media library had become a *'meeting place'*. During informal exchanges, some librarians even talked about the 'dating' that was now taking place at the media library, and it was found to be a place where people came just to talk and get psychological support. In this way, the library was also seen as providing a kind of social services to the local community.

In this case, the co-creation of the new services (the media library) were integrated with the more continuous co-creation activities that were incorporated as part of the new services (the use of the media library). The differences between these two forms of co-creation cannot be neatly separated, as the co-creation arrangement is what contributes to the continuous shaping and defining of the content of the new library. In all, these involvement and co-creation processes were largely perceived as positive and rewarding: '*Some participatory projects have allowed people who were totally excluded from the world of culture to become the best ambassadors of a cultural place*'. One of the project team members explained that he appreciated the processes of '*testing, experimenting with things, starting on a small scale, with the means at hand, getting to people'.* The co-creation approach underpinning the project was perceived as positive:

> *If we continue in the experimentation of the participative, the co-construction, we can arrive at new modes of governance, where we reinvent the spaces of decision-making, where we are no longer in a vertical mode (...) but where the inhabitants, the elected officials, the librarian, decide together. (middle manager)*
>
> *This project was a very good experience, because it was an opportunity to meet many people and it was an extraordinary collective project, which created links and, when we talk about it, we are always very moved. (involved citizen)*
>
> *We did not have the impression that they were there for us, but that we were there for them. They ensured that our thoughts, our desires, prevailed. They really wanted to offer us a blank page. (involved citizen)*

Challenges and constraints

In particular, three challenges of the design processes were identified in this case. First, working innovatively with co-creation and continuously developing new services by opening up for a range of input can be rewarding, but it is also resource-intensive and stressful. This is expressed in the following quote:

> *We leave a lot of space for everybody's propositions, it's also necessary sometimes to stop, and to say, "Be careful, maybe we go too far", it takes a lot of energy, a lot of time, if you're already exhausted... You have to be cautious about that.* (frontline employee)

It was also found that not all of the employees were open to participating in these new ways of working: *'Everyone didn't join. Some people said "no", they were afraid—"It's too big, it's new, we stop"'* (manager).

Second, as it has been pointed out in other case studies, the design processes can at first be confusing and difficult to understand for people who are not used to working in these ways. It takes a gradual maturation process among participants. One manager explained her initial frustrations:

> *It is very disorienting (...). Their proposals, the ideas they put forward, it was very disturbing. We said, 'Where are we going?' (...) Then we understood that the tools they used were tests, that they intended to see how the population reacted, how the elected officials reacted, how young people reacted...*

Third, in this case, shifting political climate and priorities were also seen to hamper and create problems for the progress of the project, due to shifting commitment and support.

The data also bring attention to the challenges of getting different groups of citizens involved. For example, the youth of Lezoux was a group that was found to have been somewhat neglected. Reaching a diverse group of representatives from the citizenry was also found to be somewhat challenging:

> *It was easy to work with elected officials, but it was a little more complicated to interest the population. It was necessary to make the project readable, so that the population is interested (…) The people who participated in the workshops of The 27th Region (...), it was ... a little bit scholars, anyway. (Manager)*

The project team and designers nevertheless seemed to have found ways to work around these challenges, by inviting citizens to participate in different forms of co-creation. Events that were highlighted as being particularly successful were gatherings focused on using knitting for street art: yarn bombing and 'knit the city'. '*There were workshops that allowed Mr. or Mrs. Everybody to come—knit the city and yarn bombing'.* (manager)

6 Spain: Context and cases

6.1 National context and findings from the national literature review

The review of the grey literature on service design in public services in Spain is based on a review of documents produced by government departments and agencies (national and local), and academic and professional institutions. These included journals for practitioners, conference proceedings, white papers, manuals, reports, agendas for training and doctoral theses on service design in the Spanish public sector. The literature searches led to the identification of 40 documents, of which 22 were included in the final review.

A number of examples were found of projects and initiatives in Spain indicating that design-based approaches are being adopted by public service agencies, in an effort to enable innovation in and transformation of public services.

As in other countries, we found evidence of service design in Spain being predominantly linked to digitization and e-government projects, and a shift towards agile methods for software development and organizational change. For example, agile methodologies have been used by the Spanish Tax Agency (AEAT) in the development of online income tax declarations. In addition to the e-government initiatives, Spain has also taken measures to strengthen citizens' participation more generally, and has developed an 'action plan' for Spain, for the Alliance of Open Government. The development of this plan springs from Spain's involvement in the 'Open Government Partnership', which is an international initiative launched in 2011 to enhance transparency, improve responses to the citizenry, and better government and service quality.[7] Spain is one of 79 countries that are members of this partnership.

To promote the main objectives of the Open Government Partnership, Spain's Ministry of Territory Policy and Public Action has highlighted the importance of involving citizens in the design and evaluation of public services. As an example, Commitment 1.3 affects local (municipal) authorities and their compromise with transparency and participation: citizens must be sought out to become involved and participate *'in decision-making and in the design and evaluation of public services'* (General Objective 3, of the Commitment 1.3) agreed on by the Plenum of the Network of Local Entities (FEMP) representing all the local entities in Spain.

There are also various concrete examples of projects in Spain where design thinking and its methods are used for renewal and innovation of public services. First, there are initiatives aimed at public service officials, in which training programmes in design methods and the development of 'toolboxes' stimulate creativity and innovation:

Madrid training plan for public servants (2019): Madrid municipality is committed to the development of service design thinking across all levels of its organization. It feels like an intent to overcome the current culture of isolated units that is so harmful, and to adapt to a services society and the current demands of the citizenry. Examples of this effort can be found among the courses the municipality employees will receive, according to their level and ascription to a specific plan.

[7] https://www.opengovpartnership.org/about/

Course examples:

- Impulse of innovation through design thinking—for senior and mid managers, to learn how to promote innovative and service thinking
- ALFIN training in libraries—for librarians, to learn how to design a learning itinerary with users, focusing on digital environments
- Analysis and prevention of bullying in youth residences—for public servants of these services, to learn how to design services to prevent aggression, from problem identification to mapping, prototyping and testing with their users
- Welcoming of refugee under-aged children in families—for public servants, to learn how to design and develop individualized services for this group at extreme risk of exclusion

Innoguía: Innoguía is a toolbox for innovation project development in the public sector. It was created and is updated through a joint and collective reflection process in which hundreds of officials of the Andalusian Government participate. This summarizes a self-developed practice, inspired by design thinking, with a focus on experimental learning, entrepreneurial attitude and placing the individual at the centre of the public value creation process. It includes materials, forms and tools that will help anyone develop an innovative public service. Example projects and designs using Innoguía:

- #Innolab—a lab to collectively create and experiment with the design, acceleration and prototyping of innovative public services
- Design thinking workshops
- Ethnographic research workshops

Innovating Together: The Madrid municipality launched a proposal to encourage public service employees to work on technological innovation projects and improved public services. Any public servant could participate, and over 300 initiatives were proposed. Following a public poll among 3000 officials, 5 projects were selected that were then developed over the next year, with the help of the Municipal Office for Social Innovation. To achieve each project's goal, the participants were trained in design thinking, storytelling and UX design. The winner from among the finalists was a project that developed a 'unified card' to access all municipal services, merging the 12 cards citizens normally carry.

We also found examples of efforts to promote design approaches to public service innovation through creation of **spaces for collaboration**:

Urban Campus Bilbao: The Camarabilbao University Business School (CUBS; a centre of the municipal Chamber of Commerce) has designed and launched a working space called 'Urban Campus' that mixes CUBS students and faculty with the public and private institutions of Bilbao municipality. Using design thinking, they are promoting the participation of all stakeholders in an ecosystem, integrating both public and private resources. Each of the projects they develop enable multi-dimensional collaborations of individuals and organizations to co-create policy, new products, services and solutions for the citizenry.

GovJam, Barcelona: As part of its Public Services Innovation Week, Barcelona municipality organized this event (together with other 48 countries), which gathered together civil servants, designers and citizens with the aim of co-designing services with citizens at the centre in 48 hours. Using design thinking, field interviews, and team dynamics, they first looked for problems and trends in the public

administrations. They uncovered a resistance to change on the part of public officials, due to a narrow and programmed mindset, as the real obstacles to change. However, the teams identified a greater challenge: the distrust that governments produce in the citizenry, apparently rooted in a lack of transparency and a too-narrow connection with politics. As such, the new designs from the 2018 GovJam, under the motto 'Less bureaucracy, less administration, more joint participation', 1) addressed the confidence of the citizenry with proposals for action to make public services more efficient, empathic and sustainable, 2) empowered citizens to be the changing engine of society, and 3) allocated a secondary role to governments as facilitators and channels to aim for the greater good. The new designs of this edition were:

- Barcerista—a service that creates connections between tourists and citizens, allowing them to share experiences, knowledge and good moments
- Horitzó—a design for a happy citizen's information spot
- Koniec—a one desk to foster the dialogue between users and the administration (with both ethics and transparency)
- Easy Makers—a platform to serve as a meeting point for the primary care providers of individuals with dementia, where they can find all the resources and help that they need with regards to the illness
- ComParty—a digital platform to facilitate access to and obtain support for strategic projects between citizens, civil organizations, companies and the public sector
- The Master Key—one 'key' that is a substitute for all the cards citizens normally carry in their wallet

Finally, we found examples of projects that draw on **design thinking approaches in efforts to improve services within specific service sectors**, by taking the users' perspectives and inputs as a point of departure:

Hospital Sant Joan De Déu: One example is the use of design thinking in innovation processes at the Hospital Sant Joan De Déu. This University Hospital is publicly owned and provides paediatric and obstetric services. Its senior managers have made a commitment to promote an internal entrepreneurship culture and create a platform that benefits from those innovative ideas to improve patients and society. They are using practices that allow users to participate in the decision process, and to collaborate on developing solutions to challenges. They have found that collaborative design eases the burden on families and professionals. Examples of projects developed with the service design thinking approach in the hospital include:

- To improve the brand positioning: Unidad de Ensayos Clínicos–Proyecto KIDS Barcelona
- To solve the functional, social and emotional needs of users: child-life specialist services for pre-surgery preparation, Project Hospital Sin Dolor, and Funny Friends (a system for home-based lung rehabilitation)
- To improve services: treatment for obesity through diet, exercise and FitBit; new labour and delivery rooms; and a re-design of value-added services

Universitario de León: Another example, also set within health care, is a project at the Universitario de León. Based on a survey conducted among young patients, the management learned that dissatisfaction with food was at the top of the list of the patients' complaints. They redesigned their menus for children, in collaboration with paediatricians, nutritionists, and children to create new meals

that met the children's expectations and entertained them. This initiative was awarded at the 4º Congreso de Humanización de Hospitales, in 2011, and has been replicated at the Hospital Sant Joan de Déu, in Cataluña, and the Hospital Virgen del Puerto de Plascencia, in Extremadura.

Transport and Communication

Transport is another service area in which we found examples of efforts to bring about change through service design and increased focus on user experiences. This is expressed in an innovation plan for transport and infrastructures (for the 2017–2020 period). In the Congress diary of sessions of 8/10/2017, the Minister of Transport and Infrastructures claimed that innovation was a necessity in the sector to increase competitiveness and progress in Spain. To achieve that goal, his department developed a three-year plan resting on four pillars, with the first being user experience. The Minister and the rest of the MPs in the Commission advocated for better user experiences, centring services around user needs, and discussed how design thinking techniques could be used to improve them.

Relatedly, a workshop of design thinking for the designing and planning of transportation services was arranged. This workshop, catering to RENFE and ADIF (the Spanish public rail duopoly) designers, was launched to facilitate the creation of new customer experiences that are intangible, unique and valuable. The logic behind this was that practices like design thinking allow designers to make services more attractive and tailored to the real needs of the customers. Services are required to fulfil needs, and practices like design thinking help with that aim—and indeed have been tested by competitors and other companies. In the workshop, public rail and transport designers learned how to apply a design thinking approach and improve the customer experience in railroad transportation.

6.1.1 Summarized findings

In sum, we have found a range of various examples of design thinking and methods being integrated in the government's efforts to innovate and improve public services in Spain. As in other countries, design approaches overlap and interact with digital transformations and shifts towards agile methodologies for systems and organizational developments. The integration of service design ideas also intersects with broader processes that aim at enhancing citizens' participation and create more open government structures. Regarding more specific service design initiatives, we have found processes and projects on different levels and in different regions. First, we have found examples of training programmes for public service managers and employees, and development and dissemination of 'toolboxes' for design processes, that can support the use of design methods for renewal and innovation in various public service organizations. Next, we have identified the creation of 'spaces' for collaboration and dialogue that spur different kinds of innovations for public service organizations. Finally, we have identified service design initiatives within specific service sectors and organizations, specifically referring to examples from health care and transport.

6.2 Case Spa1: Neighbourhood library

6.2.1 Description

This case concerns the development of a library (the LSF) in Madrid's San Fermín neighbourhood. San Fermín is a modest neighbourhood located in the southwest outskirts of the city of Madrid[8] and the LSF is one of the most (if not *the* most) relevant examples of collaboration between public institutions, private facilitating entities, civil organizations and individual citizens in the municipality of Madrid between 2015 and 2019. We found that the Madrid City Council began construction on this library in response to local demand that, under the slogan 'Library in San Fermín NOW' had been active for more than 25 years.[9] This neighbourhood with its desire for culture and books (promoted by the initiatives of the Neighbourhood Association of San Fermín) is the backbone of the new proposed services for different population groups, including the marginalized and excluded: children from families with limited resources, seniors willing to bridge the age gap, and young people at risk.

The Area of Culture and Sports of the City Council (through its General Directorate of Intervention in the Urban Landscape and the Cultural Heritage and the General Directorate of Libraries, Archives and Museums) and the Municipal Company of Housing and Land (EMV), pressed by the neighbourhood's longstanding demand, decided to start a process of participation with different agents to design the new library and its uses. The content of the participation process included three related elements:

- The library model—What library do you want for the neighbourhood? What services, activities and functions should the facility fulfil and how should they be produced? How will the future library be related to the other facilities, entities and projects of San Fermín?
- The library building—What spaces should the library have? How should the distribution of spaces be, considering their future uses and users, and also including the public employees and management and volunteers?
- The surrounding public spaces—How should the library relate to its surroundings? How to get the best out of the public space surrounding the library?

Currently, the project is in the phase of constructing the facilities, following the organization of a multidisciplinary team composed of the technicians of the Directorates, the Neighbourhood Association, other neighbourhood entities and individual neighbours. The objective of this group was, and still is, to use the participation process to provide the answers to the questions listed above. The group was originally energized by Gea21 design specialists, together with social architects of the Basurama collective.

The layout of the geometry of the building, the distribution of uses and activities within the library, as well as the design of its façades and the definition of cultural uses in the space have been the result of a participatory process involving municipal technical services and the citizenry.

[8] The neighbourhood covers an area of 1.47 km2 and 23,794 inhabitants, 23.5% of whom are immigrants (Padron municipal, http://www-2.munimadrid.es/TSE6/control/seleccionDatosBarrio. Accessed 4-6-2019).
[9] Confirmed by all our interviewees as one of the main characteristics of this project.

The data collection in this case study was mainly based on interviews with public managers at and different levels (5), an external consultant/designer (1) and a representative from the neighbourhood association (1), as well as a review of documents from the design process.

6.2.2 Main findings

Understandings of service design

Service design in this case was understood as co-design, particularly the involvement of citizens in the development of the new library. Co-design was understood as *'making the neighbours have a voice and vote. First you will be involved in the design and development of the facility, then you will be designing and managing the services'* (manager). It was further specified that the co-design of services '*emerges from the ideas and collaboration of all the actors, not only the neighbours, but also the City Council, the District Council, and anyone willing to participate'.*

As such, the case focuses on co-design as a way of allowing a broader range of actors to have a say in the development of the library:

> *Traditionally, cities and their facilities have been designed and built by working adult men, and women, youth, elderly, have never participated. And there are new designs, new cities done from feminist policies. This means libraries do not need to be designed only by architects. Potential users must be involved to share their design.*

Experiences and outputs

A broad set of methods and approaches were used to enable co-design in this case. An 'engine group' was established to drive the processes. Next, a 'social map' was used to identify the various stakeholders and potential user groups for the new services; a 'future workshop' was organized with 40 participants; a survey was sent to 300 respondents; citizens were invited to contribute input and ideas in a 'blank book'; and children were invited to draw their 'dream library'.

The library itself was seen as a facility that was *'key to diffuse culture in the neighbourhood. To engage people in studying, in developing cultural interests—it can be the change engine in the district'.*

The output of the design processes was obviously the development of the new library services, and the open and involving ways of working with the new services were perceived as very positive, as expressed for instance in the following quote:

> *It has never before happened to me. The collaborative process was so engaging, so wonderful, and the people were so nice. We were a great team. There was not a single problem. Four months was enough time to accomplish many things.* (citizen representative)

The co-design process shaping the development of the new library was also taken up as a broader strategy for similar library projects in Madrid. The head of the design agency involved in the project explained:

> *What it is that we have learnt about this process? The learning about silence, noise, or the collaboration with neighbours are in the requirements of the new bids [tenders] for the six new libraries in Madrid. In these new projects, the Architects' Association of Madrid were first worried about the new public tender requirements based on the learnings from LSF, but then they were especially happy with them.*

Experiences collaborating with designers were also perceived of as largely positive. The designers were seen as doing important 'backstage' work: '*You felt that all opinions were collected, that decisions were made on consensus, but to achieve that smooth work, there must be a lot of backstage work'.* Still, it was the central role of the citizens as co-designers that was characteristic of this project: it was citizen-initiated in the first place and driven by demands for access to cultural activities in the local neighbourhood. The leader of the neighbourhood association explained:

> *The main trigger of our demand is the isolation of this neighbourhood, due to physical barriers [the beltways and river], from the rest of the city that limits the access to other facilities. The neighbourhood is unfinished, and some needed facilities are non-existent here. Together with the library, we wanted a revival of culture; our current little room became a place to meet, to study (at night), to read, to network. So, in our case the library claims it's connected to culture in the neighbourhood. The library must be a space for meeting-up and dynamism.*

Findings from the case study indicate that the process was truly experienced as participatory, in that it was open to a range of ideas from the citizens. For instance, expanding the facilities of the library to include a garden came from one of the involved neighbours: *'We didn't expect to have a garden. Until one neighbour reflected on it. She wondered why they cannot read lying in a hammock or under a tree'.*

The high level of involvement was linked to the fact that the project was based on a citizens' initiative:

> *In this case, we used the existing initiative of the neighbours to co-create a new model that, instead of asking them for their opinion on, say, four designs and then doing what the public employees want, or 'Give me your designs, you that know nothing of facilities, and then we will do as we please…' This new model transcended the mere facility.*

The positive experiences from these co-design processes were hoped to be used as a model for similar projects: '*This process was thought to be the prototype of a new way of government with the idea of always working like this [co-creating with citizens and other administrations]*. But the level of engagement was not the same:

> *Such involvement of the neighbours as we had in LSF has not yet been replicated in the following libraries—in these cases, it was the districts who initiated the projects, and it has worked differently, with much less commitment.*

Challenges and constraints

The challenges of co-design were linked to how the participatory processes consumed more time than conventional planning and design.

Another issue raised concerned the level of openness and range of collaboration that the citizens could expect. In this case, the public service organization had contracted an agency to facilitate the co-design. The agency was hired to *'help the neighbours express what they wanted but didn't know how to tell'.* However, the citizens felt that the selection of the agency should also have been a matter of collaborative decision-making. Hence, it was problematized how *'decisions are made before it starts and you don't even notice them'*, indicating that it can be challenging to clearly define when the co-design processes begins and ends.

A related (potential) concern that was raised was that the co-design process would end when the planning and design process was completed, instead of extending into the continuous development of the library services:

> *There is a potential risk of lack of commitment with the cultural dynamics that inspired the collaboration, when the library starts its services. We would like to see a shared sense of accountability, where each actual (not formal) group is allowed to propose and land their initiatives in a co-creation effort with the management and employees of the library.* (Leader of the neighbourhood association)

It was also found that the co-design process was experienced as challenging and stressful for the architect, who was used to this kind of involvement.

Finally, it was found to be a weakness that the positive experiences from the co-design process of the project were hard to capture and convey, which could hinder the use of this process as a model for running projects in a similar manner in other contexts. The lack of metrics and indicators was found problematic in situations where someone was to '*to explain the process in other contexts and make others understand and show that it was worth it'.*

6.3 Case Spa2: Citizens' Jury

6.3.1 Description

This case is set in the municipality of Madrid and presents an example of a radically new form of citizens' participation: the citizens' jury, or assembly, called 'The Observatory of the City'.

The initiative dates back to 2015, when the government of Madrid mandated the thinking and testing of new participatory alternatives for public policy and the enhanced involvement of the citizenry in the design and development of city services. Individuals at ParticipaLab (part of Medialab-Prado) took on the challenge and started a lengthy co-design process involving several stages that ended with the innovative Observatory of Madrid. The Observatory of the City was already an existing institution in the city of Madrid, formed by city councillors and honorary members who analysed the policies of the city government based on official reports. With the new government of 2015, the Area of Citizen Participation, Transparency and Open Government (Area of Participation) decided to completely transform the Observatory into an institution for citizen participation, connected to the newly created 'Decide Madrid' platform (decide.madrid.es).[10]

[10] This is Madrid's platform for collecting citizens' opinions and proposals.

The case differs from the other selected cases because it does not deal with specific service contexts and the redesign or development of new public services using design approaches and methods. Instead, the case deals with the development of innovative platforms that enable citizen participation in the design and auditing of various public services and policies. Since the case does not adhere to the case selection criteria, the case protocol and shared templates for data collection and reporting might be somewhat unsuitable. This makes it difficult to elicit the main findings of the case and to explore connections to the other cases. The case nevertheless offers interesting insights on the development of new platforms of citizen participation, which was shaped through co-design processes and in turn resulted in platforms for co-designing policies with citizens. Hence, we just briefly describe the basics of this case and how it links to co-design.

6.3.2 About the 'Observatory of the City'

The Observatory springs from ParticipaLab and the overarching framework of Medialab-Prado. ParticipaLab is of Medialab-Prado's Laboratory of Collective Intelligence for Democratic Participation. Its activities use 'democratic' innovation to solve the growing dissatisfaction with current parliamentary electoral systems and modes of governance; citizens demand alternatives that improve the relationship between the citizenry's will and government actions for the common good. To strengthen this relationship and advocate for transparency and participation, some governments formed the Alliance for Open Government (opengovpartnership.org), which Madrid joined in 2015 due to its experience in major participatory processes in the city.

ParticipaLab started as a series of workshops that explored the intersection of in-person and digital events. Its central tenet, even today, is human interaction through inclusion and collective intelligence for decision-making and the common good. Thus, when the government of Madrid started exploration programmes for new public policies ('border programmes'), ParticipaLab became the place for designing, testing, reformulating and developing prototypes for these programmes. Its design recipe involved slow thinking and continuous exploration to redesign that which fails and create new parts. Between 2015 and 2018, 300+ people, 100+ researchers and 40+ collaborators participated in these workshops and on initiatives related to direct participation and inclusiveness.

ParticipaLab is one of Medialab-Prado's living labs (or 'citizens' labs', as they call them), which are a key element in the city's participation model. This cultural centre is owned by Madrid Destino, the municipality-owned company that manages all the public cultural venues in Madrid. It is a space in which anyone (even those who do not live in Madrid) can collaborate with others, produce knowledge in an experimental way and create models others can reuse later for the common good. The lab has launched dozens of services and products based in co-design processes related to the city and its public policies. In Medialab, they have developed what they call their 'practices'. These are two alternative ways of initiating co-design processes: 1) spontaneous working groups and 2) Medialab open calls.[11] Medialab no longer occupies one physical location: it has expanded from its central location to create ephemeral laboratories in the districts of Madrid, and also in other countries (Brazil, Mexico, Sweden and the US).

[11] Some examples might be popular topics in this period: data and transparency, the environment, urban planning, participation and democracy.

The Observatory grew out of these processes and became the first stable citizens' jury in a European government: 49[12] members form the Observatory of Madrid, and were elected in two different draws. In the first, they sent approximately 30,000 physical mailings to randomly selected citizens within the municipal area.[13] These included an invitation and instructions to participate and a survey asking about gender and age (online sign-up was also available). The Area of Participation then made a second draw of all the registered volunteers, from which 49 members were selected—with a very similar distribution to the population of the city, but only by chance. Originally, the Participation Area sought a representative sample of the population; but with only 49 members this idea was rejected almost immediately. This second draw was based on the proportions of the population of the city, corrected by age, gender and area of residence. Forty-nine deputy members were also identified using the same procedure.

Operationally, for each session, each member earns 65 euros, similar to the fee received by participants in a polling station on a general election day. At the beginning of each session, members are divided into seven worktables consisting of seven individuals, with a facilitating team that accompanies the members and proposes specific work routines that can be revised and modified by the members. The first task of the members is to evaluate the service proposal that received the most votes in the Decide Madrid platform and agree if it should be sent to a public vote. If not, the members may propose a change in the proposal. Each proposal is processed in two consecutive sessions. First, they listen to the proposer and then discuss and understand the proposal. Members list their questions or information requirements they deem necessary for making a decision and decide who must answer them. In the second session, the selected experts present their answers—their reports must provide specific details or contribute with practical data in their answers; a diversity of experts ensures different ways of answering the questions. The experts make their presentations to each worktable. Each table then writes down the most relevant findings or key information. Finally, all tables reach a decision. If tables do not reach a clear majority (80% +), then members vote and decide by simple majority whether they will send the proposal to a public vote. If they need more time or more information, they can postpone their decision until a third session. If they decide to send a proposal to a public vote, they must also agree on a final report, gathering the most relevant findings that helped them make the decision. The co-design processes of the Observatory were described as two-sided:

> *In this case, we understood co-design as a process to improve the Decide Madrid platform to increase participation. Our design involves two separate things: one is the design of the Observatory, involving Medialab and New Democracy, which requires its implementation with [consultants] and the government and facilitators; and the other is the Observatory itself, where the participants collaboratively tailor [design] the recommendations.*

This case represents an interesting example of innovative ways of developing platforms for co-creation with citizens. Here, we have presented some descriptive facts about the platform, and more information may be found online: https://decide.madrid.es/?locale=en.

[12] Originally, the number was 57, to match the number of members of the Madrid plenary, but one political party recommended a different number and 49 was then agreed upon.

[13] The only selection criterion was that they should be registered as citizens of Madrid. Other criteria, such as age, were not relevant.

7 Hungary: Context and cases

7.1 National context and findings from the national literature review

The review of the grey literature on service design in Hungary is based on a) a search in article databases (Google Scholar, MATARKA); b) a general Google search in the '.hu' (Hungarian) domain; c) a search on the pages of the central government (Google search limited to 'kormany.hu' and 'gov.hu' domains) and those of the largest local government ('budapest.hu'); and d) a review of web pages of service design consulting companies, searching for cases, projects or listed references. During the searches, the terms 'service design' (*szolgáltatástervezés*) and 'public sector'/'public service' (*közszektor*/*közszolgáltatás*) were used to identify potential documents. It must be noted that although the terms 'service development' and 'service planning' appear relatively frequently in texts, they mostly refer to a wide scale of activities that aim to change how services are provided—not necessarily through the use of service design methodologies. Altogether, 10 sources were identified as partly or fully relevant (partly relevant sources primarily use the term 'participative planning'), including doctoral dissertations, a conference paper, government and other guidelines, teaching manuals, a local government conceptual paper and reports.

7.1.1 Service design in government documents

First, it must be noted that the term 'service design' does not appear in the public administration development documents of the Hungarian central government ('Magyary Program' from 2011 and the 'Public Administration and Public Service Development Strategy 2014–2020'), so there are neither objectives to strengthen its role in redesigning public services, nor methodological guidance for public sector organizations. The strategic documents about public administration development mention the role of service users in providing feedback about services: one of the principles in the Development Strategy 2014–2020 is to request opinions from citizens and enterprises before regulation and during implementation. However, the same paragraph (which should be about citizens' involvement, based on the title) also includes the need to channel the experience of lower-level governmental bodies. Moreover, no specific methodologies or tools are recommended by the strategy. Part of the text concerns the organizational development of PSOs: a general recommendation is provided to set up performance management/quality assurance systems. Other key elements include regular measurement of user satisfaction, reducing administrative burden, and strengthening digital platforms.

The only document containing service design tools constitutes 169 pages of general guidance about the digitalization of public services (BM, n.d.). The document itself does not mention 'service design' (except for the title of a referenced document) but does underline the importance of user-centric design and lists a few tools from service design: personas, user stories, user journey mapping, scenario and user flow. All these techniques come with short descriptions and examples, so that a good understanding of what the specific tools are used for can be reached by reading the document. The objective of the document is to provide methodological support—there is no formal requirement to adopt any of the recommendations by PSOs.

As for the case of local governments, the situation does not differ from the national level. As the only mention, the 'smart city concept' of the 13th district of Budapest makes a direct reference to the requirement of using 'design thinking' and 'service design' (Budapest XIII. Kerület, 2019). The concept was adopted by the local government in 2019; however, no further results or communications are available on the district's website.

7.1.2 Other sources of grey literature, consultancies and events

Two articles (Koreny, 2018; Lantos, 2018) have already been included in D4.1 ('Report on Cross-Country Comparison on Service Design'): one included a brief international overview of service design in public libraries, while the other conceptualized how co-creation with patients can enhance type-2 diabetes care. Additional grey literature about the application of service design in the public sector in Hungary is scarce. There are a few sectors to which the identified sources refer:

Transportation: A recent doctoral dissertation about the sustainability of public transportation referred to the concept of SDL and the inclusion of users in planning but did not directly address the application of service design tools (Erdős, 2014). A recent conference paper prepared by three researchers at the Institute for Transport Sciences provides an overview of how service design tools could be used for (re)designing Hungarian Railways' ticket sales and passenger information services (Laskay et al., 2019): these included a storyboard, an opportunity mapping workshop, and a LEGO Serious Play workshop. The authors concluded that principles of service design should be applied in designing the passenger information system. A short list of applicable principles for system design was also compiled.

Urban planning, smart city concept: Community-based planning (or participatory planning) of public spaces has been recommended by several sources. A doctoral dissertation applied participatory techniques in a reconstruction project and generated a checklist to support participatory planning (Dömötör, 2009). Methodological guidelines for participatory planning were issued in 2010 by the state-owned regional development and urban planning agency (VÁTI); the guidelines listed several methods for enhancing participation, including brainstorming, mind mapping, focus groups and a world café (Sain, 2010). These guidelines were later updated, with one- to two-page descriptions of each recommended tool (Sain-Rab, 2018). A complete guideline about the digitalization of local public services, creating 'smart cities', and the role design thinking plays during the process was compiled in 2018 as part of an EU-funded project (Fehér, 2018). Experience from cities in the US and UK is shared and methodological recommendations for using various methods (e.g. personas, problem mapping, user journeys, prototypes and storyboards) in future projects are given.

Education: Qualitas consulting company used a 'service design thinking' approach in a project in Békéscsaba (a medium-sized Hungarian city), with regards to planning the future role of local higher education (Qualitas, 2015). The report emphasized the significance of user-centric service planning in higher education, also in connection to the concept of smart cities (see 'urban planning' topic above). An EU-funded project created an e-learning methodology to propagate design thinking: A detailed methodology of four sessions was prepared in order to make children familiar with the design-thinking concept via smart home, smart city, or smart car application areas (Jövő Új Útjai, 2019). Beneficiaries of the project include the Moholy-Nagy University of Art and Design as well as the Budapest University of Technology and Economics.

Service design education: The Moholy-Nagy University of Art and Design offers two short programmes on service design, a basic and an expert programme, taught by educators from Hungarian service design consultancies. The expert programme ends with a 5-day design sprint, in which participants are required to work on a real-life problem for a client. In 2019, the client was a medical university that intends to introduce telemedicine services in some of its operating areas. We visited this event in order to conduct observations about using service design in public services. Course participants were

generally positive about working on a public sector problem. Their results were presented in front of the representatives of the university, and there are plans to use these results in upcoming developments.

Consulting companies have been active in providing service design for businesses, but reference to public service projects is rare. A few companies listed public utility companies as clients, but without reference to any service design projects. Two cases were covered by the case study analysis in WP4 (health education in public schools by an individual consultant (Boros Judit) and higher education learning experience development by Qualitas). Additionally, one consultancy, Cellux, lists projects in which design thinking was applied in public services. They define service design on their web page as 'human-centred design of process so that they are efficiently operated and represent good experience for stakeholders' (this definition is only available in the Hungarian language version of the site). Their projects include: a co-creation workshop with schoolchildren to redesign lunch in the school canteen, a teachers' manual for propagating design thinking in education, a communication plan for the Single Parent Centre, and a 6-session design thinking course at a high school.

The annual service design day: The most important annual event for the Hungarian service design community is the 'Service Design Day', which is an event included in the annual 'Design Week Budapest'. Being part of the design week signals that individuals with a background in design and arts are the most active players in service design. In 2019, there were more than 100 presenters and between 200 to 300 participants at the conference. Most presentations covered the business sector, but there was one section, entitled 'Education and Social', that covered public services as well. The section included four presentations: 1) design thinking in schools by Cellux (see above); 2) service design-based research on career selection services for students in public schools (2019, spring and summer); 3) an introduction to the business model of a private further education programme for of programmers (Green Fox Academy); and 4) a presentation about COVAL. Altogether, it seems that the public sector and public services still only represent a small fraction of interest in service design in Hungary.

7.1.3 Summarized findings

Service design is a concept that is neither well-known or nor widely acknowledged in the Hungarian public sector. There are only sporadic examples in which a public sector organization knowingly and purposefully intended to apply service design in planning or developing a public service.

Service design tools are mentioned in only a few documents, and there is no real guidance or recommendation for the public administration and PSOs on how to apply Service Design. Where the need for service development appears in government documents, it reflects a top-down service planning approach (utilizing databases, experts and local government officials for service planning), in which users are considered as a source of feedback, and not as active participants in shaping the provision of public services. A set of guidelines, issued by a central governmental body, offers recommendations about digitalizing public services: while the document does not explicitly mention 'service design', it emphasizes the importance of user-centric design and lists a few tools used by service design (BM, n.d.).

It seems that it is the consultancies that are seeking opportunities to start service design projects in the public sector; as yet, however, this can be characterized as a very limited activity (there are far more

opportunities in the for-profit sector, e.g. telecommunication). There are a few service design consultants who are propagating the use of service design in education, and there are initiatives that aim to popularize design thinking among children: for example, a teachers' manual about the use of various teaching methodologies regarding propagating design thinking in education,[14] or the compilation of a four-session demonstration to popularize design thinking via smart car, smart home, or smart city applications (Jövő Új Útjai, 2019). Applications in higher education have been recommended by Qualitas (2015), and a medical university has recently decided to apply service design in creating their telemedicine services; this challenge was used as a real-life problem during a 5-day design sprint that was part of a service design course held at the Moholy-Nagy University of Art and Design. Several researchers have recommended the application of service design in public transportation (Laskay et al., 2019), the digitalization of local public services (Fehér, 2018), and using participatory planning in urban spaces (Sain-Rab, 2018). In general, the 'supply side' of service design is increasingly available in Hungary, since service design consultancies have several projects in for-profit companies, but the 'demand side' from PSOs has largely been lacking.

7.2 Case Hun1: Higher Education

7.2.1 Description

This case concerns a development project aimed at improving students' learning experience at Kodolányi János University, which was requested by the university itself in 2017. The university intended to carry out this development programme with an external partner as an independent observer. The contracted partner was Qualitas T&G Tanácsadó és Szolgáltató Kft., a consultancy company mainly specializing in public, higher and further education. A dedicated consultancy service of Qualitas called LxLab was intended for clients seeking learning experience development (this is a new competency area for the company, with ongoing research product development). One of the owners of the consultancy has recently been offered a part-time position of 0.25 FTE at the university.

This cooperation began after an SD workshop in which the university had participated; the rector and the high-level management of the university decided to launch a development programme based on the SD framework. Since Kodolányi is a private university that is fully funded from tuition fees, there is considerable pressure from students for Kodolányi to be responsive towards 'customer expectations'. The university has three campuses in Hungary, which are located in Budapest, Orosháza and Székesfehérvár. (Qualitas is based in Szeged, not far from the Orosháza campus.) The university has full-time, part-time and distance education programmes, primarily at the BSC level, however some MSC programmes and further education short programmes are also offered. Areas of instruction primarily include the humanities and management, and several programmes and courses are also offered in English for foreign students.

[14] https://designakozoktatasban.mome.hu/design-modszerek/

The main goals of the project were to uncover how students perceived their learning processes at the university, what their impressions were about its operation, the extent to which they were satisfied with the services provided, and to identify areas for changes and improvements.

The case study was mainly based on interviews with service designers/consultants (2) and the management at the university (5), but documents and materials produced and used in the design process were also part of the data analysed in this case.

7.2.2 Main findings

Understandings of service design

The consultants involved in the project use the following understanding and definition of service design:

> *Service Design, now an independent discipline, aims at designing new services and developing existing ones based on the needs of the users and on the abilities of the service provider. To achieve this goal, Service Design provides a structured process and toolkit, application of which facilitates the involvement of users and other stakeholders in the development process, thereby ensuring that the improvement is relevant.*

In reports from the case, service design is also described with reference to the work of Stickdorn and Schneider (2012) on service design. Moreover, the design team used a 'Triple Diamond' approach, which is built on the Double Diamond framework created by the Design Council in England in 2015. The model itself is not mentioned in the project materials, but is part of the firm's general proposal.

The meaning of service design for one of the consultants interviewed was, in her own words, based on a comparison: she mentioned 'partnership-focus' as a former buzz-word of higher education, whereas *'[s]ervice design engages stakeholders in the whole process. In this process, stakeholders or their representatives participate as active actors'.*

The informants representing the management at the university presented the following understandings of service design:

- The vice-rector of education saw service design as *'a tool for the holistic interpretation of processes, which enables the incorporation of service users' needs'.*
- For a middle management leader in the university's Welfare Cabinet, service design was *'an inquiry/research tool for the improvement of services'.*

Output and experiences

The student survey was the central element of the service design processes in this case. First of all, the written reports about the survey results are considered as outputs, as they provided feedback for teachers at the university. Educational material about SD, the questionnaires and the survey reports are accessible via the Moodle system for all the teachers and university staff. The reports had been discussed in several departments' meetings, as well. The vice-rector for education surmised, based on Moodle usage data, that more than half of the teachers had met with the survey results. Preparation

for their recent accreditation process was also carried out via Moodle, and this thus had a positive impact on how many people read the SD report as well.

A few changes were also implemented after the 2017 survey—these are also considered as outputs. The changes included:

- Changes in how the academic semester is organized by adjusting 'thematic weeks'—While the introduction of the new thematic week system (e.g. international week, project week) was considered as very innovative and responsive towards stakeholders' needs by university management, it was not at all well received by students. Thematic weeks were perceived as meaningless and forced, and as not taking into consideration students' working life outside of the university. The concept of the weeks was completely redesigned after 2017.
- Distance learning programme—Many students choose the university because of its distance learning programme. The survey results showed, however, that students are becoming increasingly dissatisfied with several features of the programme, especially with the availability of the online materials and the technical skills of the instructors whose lectures are being broadcast online. This emerged as a key issue (and is one on which the university has already taken, and will continue to take, action).
- Various administrative services—Based on the results, both the Study Office and the Welfare Cabinet revised some of their processes.

The general experience with the SD process was positive. The main success factor of the project was the successful survey data collection, as it led to insights not anticipated by the university. For actors at the university, it was mainly the wide-scale survey and the report based on the survey results that represented the SD project and the SD methodology. As such, the results were perceived much more intensively than the process itself.

Based on the descriptions of the vice-rector for education and leader of the Welfare Cabinet, the support of the faculty was not unanimous, as many of them expected extra workload connected to the project. Those who were reluctant to fully support the project argued that it was already clear to them what the students' problems were: there was thus no need to put extra effort into the inquiry.

However, the stance of the leadership was quite clear: as a middle manager said, it was a leadership decision, and colleagues could either proactively participate in the initiative according to their own needs, or they would have to undertake the tasks as commanded, as this project held strategic importance for the university.

From the students' side, their experience with SD is still a question. As the leader of the Welfare Cabinet phrased it, students are the first to be involved but the last to know about the results (regarding the survey). The leadership that still active in the project is considering how to provide feedback about the results and impacts of the students' contributions in order to strengthen engagement with this ongoing development programme.

The survey uses Net Promoter Score (NPS) as a general metric for user satisfaction. The 2019 report contains a comparison to the 2017 results, but also notes that the composition of the respondents changed significantly (in terms of programmes and attendance forms)—thus, the improvement in the

measured outcomes should be handled with caution. Nevertheless, the overall, institutional-level NPS changed from -9 to +18 (which is a result the university might use in external communication as well). The application of SD for collecting students' feedback and quality improvement was also appreciated by the Hungarian accreditation committee during its recent visit.

Challenges and constraints
The challenges of service design processes highlighted in this case were linked to time constraints, level of participation and the representativeness of included voices.

The main problematic aspect mentioned was the scarcity of free time for workshops and further investigation that may explain the results. Working systematically with the results requires considerable effort. According to one of the consultants, the biggest obstacle might be the inclusion of educators in the problem-solving process, since they do not necessarily want to spend time on organizational development (instead of on, for example, research). Nevertheless, everyone must be involved in the process (*'the essence of the method is lost if you cannot involve everybody'*). While clients often prefer an external consultant who simply '*comes and solves a problem'*, in certain situations, this is not applicable—such as in improving learning experiences in higher education.

Another potential drawback of service design, as mentioned by a middle manager, is that deeper involvement of students might start a trend towards complaining: he felt some students tended to complain about things they should not (e.g. complaining to management about a problem with an instructor rather than working to solve the problem on their own), while others cannot express their opinions well (e.g. '*everything is bad'*). As such, if the opinions of smaller groups receive more attention, this might lead to an unfortunate bias.

7.3 Case Hun2: Public health

7.3.1 Description

This case describes the activities of a pilot project about health education activities carried out in primary schools in 2015. The pilot was financed from EU structural funds, and was part of a much bigger and more complex national health care development project (including other activities like building controlling systems for hospitals, creating methodological guidance for local health capacity planning, and developing a national accreditation system for quality development). The beneficiary of this project part was the University of Szeged, with local schools recruited as pilot sites.

The pilot project was aimed at creating a curriculum for an 8-session health club that could be used by schoolteachers and school nurses to provide health development activities in a classroom setting. The sessions covered the following topics: 1) an introduction and health; 2) dietary habits; 3) physical activities; 4) sleep; 5) relationships; 6) television, computers and phones; 7) health care; and 8) a closing summary.

The main (and novel) idea of the project was the direct inclusion of parents in the activities of the health club. This idea was supported by the fact that family background (knowledge, attitudes and the actual

health behaviour of parents) is a significant influencing factor on the health behaviour of children. The health clubs would thus be extra-curricular activities at the schools, held in afternoon time slots, when one parent per child could be present. While the presence of a parent was a requirement for enrolment, in practice, there were some cases where there was a deviation from this protocol (e.g. a grandparent accompanied the child, or the parent stopped visiting the clubs after a few times—of course, the children were allowed to remain in the club). This setup was unfamiliar for all participants (students, parents, teachers and school nurses), but it also created unique opportunities to enhance family–school cooperation.

The project was carried out in 2015, so direct observation of the design processes and service interaction was not relevant in this case. However, the activities of the project were well-documented and participants (both users and frontline employees) evaluated the process as well as the results at the end of the project period; we analysed these documents according to the objectives of this research. We also interviewed frontline employees and children who participated in the original project activities in 2015 at one of the participating schools (we had access to the practicing school of the university), and we asked them about the longer-term impacts of the project.

7.3.2 Main findings

Understandings of service design

Project members were largely unaware of how and whether service design methodology was used during the project. When the project objectives were set, and the project team from the university side began working on the curriculum, they realized that a professional designer was needed to ensure the visual appearance of the project activities fit with and was attractive to the target group of young children. Thus, the project initially searched for a *'*visual designer*'* (as described by a project manager). However, the designer contracted by the project was a service design consultant having shown interest in applying service design principles in public services (earlier, she had created a journey map for diabetic patients in Hungary).

Therefore, project participants did not refer to this project as a 'service design project'; however, all of them noted that the participation of the designer was highly necessary, and was a significant contributor to the success of the project. The service design consultant herself characterized the project as '*not fully or really a service design project'*, but she emphasized that it was a *'very user-centred design process'*. A teacher emphasized that *'we are also service providers'* at the school (*'[e]ven if service means different things at a multi and in public education'*), and that the involvement of a service designer was a novel approach but very useful.

Output and experiences

The project consisted of the following steps:

- University researchers began the development of the curriculum by reviewing literature and available evidence. It was decided that a workbook would be the central 'organizing force' of the activities. It was clear that the workbook had to be designed to fit students' and parents' needs (both content and outlook) so that a designer was contracted (November 2014–January 2015).

- Schoolteachers and school nurses as well as students from the medical and district nursing programmes were involved in further development activities during six workshops (the final workshop focused only on the administrative tasks required for project documentation). Those experts who participated in the development process—teachers and school nurses, medical students and school nurse students—conducted a 'test-run': all the assignments had been tried by the experts and educators themselves (for example, children had 'fruit names' during the health club, so 'fruit names' were used during the trial as well).
- The health club was piloted at four schools. All the sessions were visited by an observer (the above-mentioned students from the medical and health sciences faculties), who took notes. Assignments and sessions were evaluated by teachers and school nurses as well as the children. The health-related knowledge of participants was measured before and after the intervention so that the pilot project could be evaluated.

As an additional (and not previously planned) event, a 'health summer camp' was also organized at one of the schools. Health was promoted as the leading topic of the school's traditional two-week summer camp in 2015 to utilize the material from the pilot project in another format (with some new assignments created specifically for the summer camp).

The pilot project completed two main outputs: the workbook and an accompanying teachers' manual (with some additional materials, like evaluation sheet, leaflets, 'key messages to parents' sheets, and a further education short programme for school nurses). Here, the intention was for any school to be able to reproduce the programme based on these materials.

The design process was described above. The process included workshops and the entire project was essentially meant as a pilot project. Altogether, the pilot was found to be successful by all the participants—still, suggested modifications were not carried out at the very end of the pilot project (motivation or available time of participants might have been missing). In theory, the outputs of the project (the workbook and teaching manual) should be publicly available for use by any other schools; however, as of yet, these have not been shared online, nor do we have knowledge of any schools continuing or reproducing the programme. One of the participating experts noted that the programme was carried out after normal working hours, as an extra load for participating educators, and later the enthusiasm vanished, adding that '*each project is like this, ends up in the drawer'.*

Hence, while participants experienced the co-design processes and the development of the programme positively, the initiative did not lead to substantial change or impact beyond the pilot project and those directly involved. The produced material was not disseminated, and the programme was neither implemented nor scaled.

However, the design approach of the project was overall positively evaluated, and the role of the designer in the project was highly appreciated by everybody we spoke to. Her role was referred to as 'visual designer' by the project manager. The service designer expert evaluated her role as follows:

> *I helped a lot in preparing the graphics for the project, but I was not only there in the capacity of a graphic designer. I also tried to represent the point of view of clients. Nevertheless, it was less needed than expected before: they [the other experts] were already thinking in a very child- and parent-centric way.*

It was her first project working with experts from the health care sector and, overall, she found the whole process *'very user-centred'*. In a comparison to the private sector (where she had completed several projects), the financial limitations were similar: the budget limited what could be done. There was, however, a surprising difference: the lack of legal problems or drawbacks (she mentioned the difficulty and length of time required to deal with the legal departments of private companies regarding what and how to communicate to clients, rewrite legal texts, and update web content).

Challenges and constraints

The main challenges of this case can be linked to challenges of sustainability and scaling, and the recruitment of participants.

The project manager noted that participation in the pilot project was on a voluntary basis. As such, there was a selection bias: those children (and parents) who wanted to participate in the pilot were interested in living a healthy lifestyle and already had deeper knowledge about health. High-risk groups (e.g. children struggling with obesity) did not participate. Even the participating children noticed this problem, as one of them noted*: '[T]here are a few other children who should have been participating in the programme'*. A school nurse also noted in her evaluation, regarding the possibility for scaling-up the pilot: '*Only those parents will be willing to participate who take the health of their children seriously already'.*

The sustainability of the programme seemed mostly endangered by the fact that it was resource-intensive; the programme was quite time-intensive from the perspective of both parents and the school staff. It required preliminary trainings and week-by-week preparation from school nurses and teachers. Although the timeframe of the club meetings was intended to be one hour, they usually lasted for approximately an hour and a half, further increasing the participants' workload. Managing this amount of after-school activity for eight consecutive weeks was challenging for the parents as well. Although the students enjoyed the activities and did not regard the club as an obligation, it represented a serious commitment from all the other actors.

8 Cross-case analysis

This chapter draws together findings across 10 national case studies of service design. The cases are set in diverse service sectors and represent a range of different ways in which service design can be applied in efforts to improve, transform and innovate public services. Conveying this diversity of case examples was one of the aims of this work package. Thus, in Chapters 3–7 of this report, we sought to present some of the central findings from each of the case studies, framed within the national contexts for service design in each of the partner countries.

In this final chapter, we aim to see how the different case studies together shed light on the overall research questions that we set out to address. As stated in the introductory chapter, this research has sought to answer the question of what *constitute the potential and constraints of applying service design in public service contexts.* By responding to this question, we aim to contribute to the overall objectives of the COVAL project, which is to advance knowledge on the linkages between value, co-creation and public service transformations. Service design was in the COVAL project proposal identified as one of four 'co-creation areas' to be empirically examined through case study research. The case studies within the co-creation areas was meant to focus on '*experimental and innovative ways of interacting with users, and innovative ways of including various types of users in the development of public services.'* (COVAL grant agreement, page 18). In this WP we have studied such forms of co-creation, with service design as the overarching framework.

8.1 Findings sorted by themes

There are various strategies that can be used for cross-case analysis of multiple case studies. Stake (2013) differs between three different tracks: 1) emphasizing case findings; 2) merging case findings and 3) providing factors for analysis. The first track emphasizes the preservation of particular findings of individual cases, while the second track is more focused on merging similar findings across cases, with less focus on the particularities of individual cases. The third track moves more towards generalizations and is more quantitatively oriented. Our analytical strategy aligned mainly with track 2—we sought to merge findings across cases, but also to pay attention to unique findings in singular cases.

As described in chapter 2 on the research approach, the cross-case analysis is centred on themes. A set of six themes guided initially the analysis and readings of each case report:

1) Understandings of service design
2) Inputs/methods and tools
3) Outputs
4) Contributions/benefits
5) Constraints/challenges
6) Potential

These themes were selected based on findings in the literature review, conducted as a task prior to the case studies (Røhnebæk & Strokosch, 2018). The selected themes condensed the more detailed issues guiding the data collection in case studies, put down in templates for interview guides.

During the analysis of the cases, we were open to the possibility that new themes could emerge from the data. Being open to the fact that the data may contain other important insights than what was initially focused on, is a central part of qualitative research. However, there is a fine balance between under-anticipating and over-anticipating in qualitative research (Stake, 2013, p.12-13). By over-anticipating, important observations might get lost, and by under-anticipating, the research may become too unfocused. We selected in the end, three theme categories as the most relevant for the analysis and presentation of findings: 1) Understandings of service designs 2) outputs of service design and 3) challenges and constraints of service design. We also point to digitalization and servicecapes, as an additional emerging theme that we find deserve more specific attention in future research (see 8.1.5).

8.1.1 Understandings of service design

We found that the way respondents described their understanding of service design through the case studies largely corresponded to the definitions and understandings of service design that we found when reviewing the literature on service design in D4.1 (Røhnebæk & Strokosch, 2018). However, different aspects of service design were emphasized depending on the nature of the case project. From the respondents' perspectives emerged the following understanding of what service design entails:

- Service design is perceived as **a user-centred approach**, captured in different wordings:

'Designing with and not for people' **(Scot1)**; *'Service designers take an end-to-end view of the services from a customer perspective'* **(Scot2)**; *'Involving those that are going to use it and a continuous focus on the user*' **(Nor1)**; *'It is that course that customer or user is going through in a given service. That's the traditional understanding'* **(Nor2**); *'The service design is to meet the needs of a population of all ages'* **(Fra2)**; *'Potential users must be involved to share their design'* **(Spa2)**; '*Service design, now an independent discipline, aims at designing new services and developing existing ones based on the needs of the users and on the abilities of the service provider'* **(Hun1)**.

- Service design is perceived as a **collaborative approach:**

'*Creating things together'* **(Nor1)**; *'Collaborative working within multidisciplinary teams'* **(Scot1)**; *'Service designers as facilitators of collaboration'* **(Scot1)**; *'SD engages stakeholders in the whole process. In this process stakeholders or their representatives participate as active actors' (***Hun1)**.

- Service design is seen as concerned with **problem-solving:**

'It's almost just problem-solving' **(Scot2)**. Mapping the 'user journey' was highlighted as a central means for problem-solving. For instance, in **Scot1**, **Scot2** and **Nor1**, mapping the 'as-is' and the 'to-be' user journey was central for identifying how to improve the targeted services. User-journey mapping is centred on understanding the services' 'touchpoints' (points of interactions between the users and the services) and on identifying the 'pain points' (the points where problems occur in the service process, especially from the users' perspective) to identify areas for improvement. Service design is to '*gain an overview of the "touchpoints", and then implement them and test them in the context they are used*' **(Nor1)**.

- Service design is about **creating something new**:

'See what those places could be in the future' and '*[b]reak the existing codes'* **(Fra2)**.

- **Iterations and testing** were seen as central to service design in all cases, expressed for instance as follows:

'We use methods from service design. By this I mean that we use a framework (…) based on this needs-solutions-tests. You do that over and over again, and you use different methods to gain insight on needs, and to find possible solutions and then test them in the services out there' **(Nor1)**; '*Testing, experimenting with things, starting on a small scale, with the means at hand, getting to people'* **(Fra2)**.

- **Intersecting with agility:**

Service design was seen as closely interlinked with agile methodologies. This was particularly evident in the **Scot1** and **Nor1** cases, in which digitalization was central to service development.

- Service design was also seen as a kind of design **'beyond materiality'**:

'I don't know what we can put behind "services design", perhaps it's the use of a place, of spaces, and services that are rendered, more than the building itself' **(Fra1)**; *'The relations, the glue, the activities, the everyday life. Something like that. The building is there, and the technology, it is kind of the human-related, the activities, the everyday life of the residents, their next of kin and those working there'* (**Nor2**).

- **A profession/professional expertise:**

Service design was also understood as a professional role, and a distinct form of expertise. This was most clearly expressed in **Nor1**, **Nor2** and **Scot1**. In **Nor2**, one of the informants stated: '*I am very humble regarding the fact that I see this as a profession. But, as I put it, we use methods from service design'*. In **Hun2**, service design was described as a new discipline: '*Service design, now an independent discipline, aims at designing new services and developing existing ones based on the needs of the users and on the abilities of the service provider'*.

Respondents in the cases largely had a shared understanding of what was meant by 'service design', even though it was often stated that it was a confusing term. It was also stated that it took time to understand what service design entailed, and that the understanding matured gradually. This came across clearly in **Nor1**, expressed for instance in the following statement: '*When I look back on it, then I realize that I think she [the service designer] was pointing to something very important that we only partly were able to take in'*. In **Scot2**, service design was also described as new to the managers and employees in the PSO, as well as most of the consultants involved: *'[T]his is still quite new for our team as well. It's the first time that I've worked on a project in that kind of way, where we've kind of had service design as a specific input*'. In the Hungarian cases, the term 'service design' was not known in the PSOs, except for the consultants contracted to work on the projects. In **Hun1**, the consultants referred explicitly to service design textbooks and models and understood service design as '*designing new services and developing existing ones based on the needs of the users and on the abilities of the service provider'*. In **Hun2**, the design element of the project focused more on graphic design, even though the involved designer saw the project as involving service design. In the Spanish cases, the term 'service design' was not explicitly discussed among respondents, as the cases were more focused on

citizens' participation and co-design more generally. In **Spa1**, the co-design of library services was understood as '*[emerging] from the ideas and collaboration of all the actors, not only the neighbours, also the City Council, the District Council, and anyone willing to participate'*.

In the French cases, the respondents most explicitly reflected on how they found 'service design' and even 'design' confusing. 'Design' was seen as '*[a] vague and obscure term'*. Indeed, as one respondent said: '*We don't understand what it means'* **(Fra1**); to another, '*[d]esign sounds like a very strange word. It is associated with the artistic world but not with services'* **(Fra 1)**. This confusion also came across in quotes from informants in **Fra2**: *'It is a term I didn't even know, so let me try to think about what it can be. (...) This is a new term for me (…) We do it every day, (but) we didn't know that we were doing service design'.* The confusion around the term 'design' in the French cases seemed to be related to differences in linguistic conventions, and it was noted that the term 'construction' was found to be a more suitable term.

Perceptions of service design, as they came across in our case studies, can be summarized as follows:

- A user-centred approach
- A collaborative approach
- About creating something new
- Iterations and testing
- Approaches intersecting with agile methodologies
- Design beyond materiality
- A profession/professional expertise

8.1.2 Outputs of service design

Our case studies also addressed the outputs of the service design projects. 'Outputs', in the case protocol, were defined as quantifiable, tangible results, such as new services, new products, new processes or new skills. Outputs thus relate to what emerged from the service design projects that we have studied. 'Outputs' were differentiated from 'outcomes' and 'impacts' in the case protocol, which were understood respectively as short-term and long-term effects of the projects.

Since many of the projects were still in process (particularly **Scot1**, **Nor2**, **Fra1**, **Spa1** and **Hun2**), it was not relevant to directly study outputs in all projects. Still, all cases provide a foundation for reflecting on the outputs of service design processes.

First, service design is often an embedded element in broader development processes, which makes it difficult to talk about specific outputs of service design. This is clear in **Scot1**, where service design is only one part of a comprehensive process of developing a Scottish social security service. In this context, it was stated that '*[d]esigning a service is much bigger than service design'.* The overall project is based on visions of developing social services in ways that place emphasis on the users' perspective. Service design thinking and expertise play a part in realizing this, but alongside other forms of expertise: '*There'll be service designers and user researchers embedded in delivery teams together and they'll work quite closely together with content designers as well, to provide a kind of user-centred design expertise'* **(Scot1)**. Thus, service design, or service designers, seem to play *one* part in the PSOs' shifts towards more user-centred design. In this case, the outputs of these shifts were visible in the development of

smoother service journeys for users, and more understandable and easily accessible application forms and information. The development of an online application form for a grant was referred to as a concrete example of an output.

Similarly, in **Nor2**, service design methods are being used as part of a broader development process that aims to develop a new kind of dementia care services better suited to the needs and perspectives of the residents and their next of kin. Since the process is still ongoing, it is not possible to see clear outputs/results of applying design approaches, as the actual services have not yet opened. However, we have found that the PSO has worked with user-centred design and co-design processes that have resulted in ideas that are being developed as concrete solutions in the new services. First, the organization has created a new position which is meant to have a coordinating role focused on *'life in the village'*, bringing attention to the more relational and social aspects of dementia care across the services. Inputs from the design processes are also guiding the development of a multi-purpose digital platform. In this case, service design is also an embedded element in broader organizational processes and the outputs, as the new services cannot be traced back to the application of service design. However, service design principles are shaping the way the organization is developing the new services.

Similarly, in the case of **Fra2** and **Spa1**, new library services have been developed within broader processes of constructing new buildings and the physical surroundings for the libraries. Through co-design, ideas and solutions for the new services have been developed in close interaction with citizens and the future users of the library. The library services have been extended with a range of new service offerings, which can be seen as the results and outputs of the co-design processes. Interestingly, in both these cases, the co-design approaches brought forward the fact that the users perceive and value the library as important spaces for recreation and socializing, and thus provided inputs for new areas of use beyond systems for lending books and other kinds of material. For instance, in **Fra2**, a videogaming room was added to meet the interests of younger library users, and in **Spa1**, the recreational spaces of the library have been extended with a garden area.

The remaining cases can be seen as dealing with more confined service design processes, which makes the identification of outputs somewhat clearer. In **Scot2**, the service design processes resulted in a redesigned website and the development of a new reception area in which a new triage system for organizing queries was introduced. In **Nor1**, central outputs were linked to the development of a new digital platform for communication and administration of cases, and an online chat function for direct communication between service users and frontline employees (councillors). In **Hun1**, inputs from students led to system changes that allowed them to plan and organize their studies more flexibly throughout the semester. Various aspects of the administrative processes were also changed, improving the 'user journey' from the students' standpoint. Inputs from students also led to plans for a new online platform for distance learning, but this has not yet been implemented.

The remaining three cases, **Hun2, Fra2** and **Spa2** are examples of efforts to create new service concepts. **Hun2** concerns a project initiated to promote public health, through the development of a 'health club' that could be used for integrating public health development activities in primary education as extracurricular activities. Central outputs in this project were the materials and curriculum for the health club, developed by a graphic designer. The health club was piloted in four schools but did not sustain or scale beyond the pilots. **Fra1** is a citizen's initiative that aims to develop a system for car-

sharing to reduce the burdens of heavy traffic related to commuting from the outskirts of Lille. The system itself, enabled by an app for the organization of the sharing system, is the expected output of the design processes. However, the application has not yet been implemented. Finally, **Spa2** concerns the design of a platform for citizen-participation, designed for participatory policy making.

To summarize, our case studies concern a range of outputs of service design processes:

- Smoother administrative user journeys **(Scot1**, **Nor1** and **Hun1)**
- New digital application forms **(Scot1** and **Scot2)**
- New online communication platforms **(Nor1)**
- New position (**Nor2)**
- New physical spaces/servicescapes **(Nor2**, **Fra2**, **Spa1** and **Scot2)**
- New service concepts (system for car-sharing **Fra1**; new educational programme **Hun1**)
- New platform for citizens' participation/participatory policy making **(Spa2)**

8.1.3 Constraints and challenges of services design in public services

In this section, we examine how our case studies offer insights into the constraints and challenges of applying service design in public service contexts.

Complexity of the service context

In several of the cases, we found that problems and challenges occurring in the projects were largely linked to the inherent complexity of the service contexts. While providing approaches for 'problem-solving', service design tends to be based in models suited for dealing with more one-dimensional problems. The problems of complexity especially came across in the more contentious service settings, such as welfare services and social security **(Scot1**, **Scot2** and **Nor1)** and dementia care **(Nor2)**. These services are typically guided by several contradictory demands and expectations, which creates complexity. In **Nor1**, several informants on the business side of the PSO talked about how contracted service designers might lack understanding about the complexity of the service context: '*It is about seeing all these other contextual factors, like the rules and legislation, the limits, the budgets' (…) They might have come from positions in insurance companies and such, with responsibilities to "solve this" or "increase the number of clicks" and then they deal with that, so this has created some frustrations'.*

The service context's complexity and scale were also considered a major challenge among informants in **Scot1**. Moreover, in both **Nor1** and **Scot1**, the informants thematized the dilemmas between adhering to the holistic principles of service design on the one hand (the holistic service experience), and the need for breaking down the different elements of the service processes to make the overall development and design processes manageable. Challenges of complexity and holism were also expressed in **Scot2**, where service design processes undertaken in parts of the services had unfortunate, unintended consequences in other parts of the service system. In **Nor1**, it was also found that efforts to transform and develop a new approach to dementia care services came with a complexity and scale that could only be guided by service design methods and principles to a limited extent. It was found that service design examples and methods tended to deal with *'simple things, often one-dimensional things'*, and this became inadequate when trying to create a whole new system, as in this case. One of the service designers interviewed in **Nor1**, who had considerable experience working with public services, noted that they were working on projects of increased complexity and scale for which the

conventional models of service design were inadequate. In **Fra1**, it was also evident that challenges in the project were linked to the complexity of the problem that the design process set out to address.

Time and resource constraints

Following the guiding principles of service design was found to be time and resource intensive, and thus difficult to adhere to in public service contexts with considerable time and resource constraints. This was strongly communicated in **Scot1**, which depicts a process with '*extremely aggressive'* time constraints for the design process. Time constraints was also raised a central challenge in **Scot2**, where time and resource constraints limited the range of the service design processes to only certain aspects of the services. Time constraints also limited whom they could involve. The capacity to involve end-users was limited, and frontline employees had hectic work schedules with limited time for involvement. In **Nor1**, concerns were expressed regarding how various aspects of the service process competed for the attention of developers and service designers; they had to stop working on certain solutions when there was still the potential for improvement, because they had to move on to new tasks. In **Fra1**, the project team worked with an innovative solution that was seen to require work over time to create awareness and maturity among potential user groups; the project team struggled with having insufficient resources in terms of funding to work with the design process over time. In **Fra2**, challenges of time and resource constraints were related to how the continuous involvement of users to gain inputs on new ideas could be time consuming and stressful, especially when administrating the regular services at the same time. Challenges in **Spa1** were also found to be related to how participatory processes consumed more time than conventional planning and design. In **Hun1**, the project struggled with freeing sufficient time for participation and working thoroughly and systematically with the inputs from users (students). Time was also an issue in **Hun2**, as the introduced programme was time-consuming and did not accommodate the busy schedules of the participants (staff and school parents).

Hence, challenges related to resource and time constraints were raised across all the case studies.

Ethical and practical problems of involvement

A range of practical and ethical problems related to *how* to arrange for co-creation, or how to involve users and other stakeholders in design processes came to the fore through the case studies. On one hand, this links to the resource and time constraints outlined above. Often, PSOs may not involve as extensively and broadly as they would like, simply because it is too resource intensive (see examples above). However, challenges of recruiting suitable participants who are willing to contribute in co-creation is also a challenge raised across the cases. In **Nor1**, it was pointed out as paradoxical that public services are increasingly adopting service development models based on agility, service design and emphasis on user involvement at the same time as regulations on privacy issues are becoming stricter, which hampers the PSOs' ability to co-create with users. Various ethical issues may also constrain the recruitment of users. In **Nor1**, development teams at the directorate level could no longer recruit participants from the service offices because those service users might have felt pressured or obliged to participate. Recruitment thus had to take place through other channels, which made it difficult to get access to the 'right' kinds of participants. In this case, they found that co-design in group/workshop settings became increasingly difficult as it was too logistically complicated to coordinate timing and gain access to suitable spaces for the groups to meet. Consequently, they shifted towards more individual, ad-hoc meetings. Similar concerns were raised in **Scot2**, where lack of access to appropriate spaces for co-creation/service design was raised as a challenge.

As it is set in dementia care, **Nor2** deals with several obvious challenges of involvement. Since the end users suffer from cognitive impairments, they have limited ability to directly participate in co-design processes. However, the municipality is trying to work around these challenges to find alternative ways of involving the voices of the end users.

Fra2 brings attention to challenges of bias regarding who gets involved, and which voices are heard in co-design processes. It was problematized that some did not have the confidence to participate, and that participants tended to come from higher education programmes. Problems regarding bias and representativeness in the recruitment of participants were also raised in the process of co-designing the new library in **Spa1**.

Inherent contradictions of service design

We have found that a set of challenges or problems raised in the cases can be linked to inherent contradictions of service design. These inherent contradictions can especially be found in the ambition to be holistic and focus on the service experience holistically, in combination with the ambition to work with continuous iterations, improvement and testing. The dilemmas around aiming to combine these two premises were clearly raised in **Scot1** and **Nor1**.

In **Nor1**, some informants were concerned that the ambition to work with iterations and continuous improvements, in line with service design thinking and agile methodology, led them to an organizational structure with small autonomous teams that worked with specific products or 'pain points'. The dilemma they saw in this was that the different teams would focus on specific pain points but perhaps lose sight of the bigger picture and the holistic user journey. Similarly, in **Scot2**, they found that the comprehensiveness and scale of the services and the development process led them to divide the service process into smaller pieces; they then faced the challenge of how to piece the different elements back together into a holistic service experience. The challenge essentially become how '*to break down what is a really big task into small chunks without losing sight of how it all hangs together'.*

Imbalanced user-centrism

In some cases, concerns were raised that the user-centrism in design could be taken too far. For instance, in **Fra2**, the contracted designers problematized the limits of users' involvement in design: '*At some point, we cannot hope for everything from users. Users, they will be able to tell us about their daily life, they are the experts of their daily life, (…) [but] to ask them to play the role of a designer, a sociologist, an engineer, that has limits (…) The ideas of people are very interesting, the way they perceive things, too, it's very interesting, it's very inspiring, but at some point you have to turn that into a desirable projection, that's our job'*. Similarly, the limits of co-design with users was addressed in **Fra1**: '*Many designers or design methods claim, "[L]et people express themselves and self-organize". I think it's demagogic. Co-design has limits. We have to integrate what citizens think but at the right moment. The designer has also to collaborate with politicians'*.

In **Nor1,** some informants suggested that the user-centrism following the increased adoption of service design tended to become imbalanced: '*I don't know if this is a fully accepted thing to say, but how do we know for sure that the user always knows best? Because the user… all of us are as users somehow,*

we are caught in the current contexts, so it is limited as to what we can say about needs (…) [I]t's these things that are challenging all the time, to be able to go out of the context, to think abstractly…'

Thus, on the one hand, this points to the limits of placing too much emphasis on the users as 'co-designers' of services. On the other hand, there were some concerns that the user-centrism associated with service design could go too far, more generally: '*It's the right way to go, but we have gone so far in the other direction, so I question our understanding of the concept [service design]. Have we perhaps abdicated from our administrative role in our eager to fulfil the users' needs?*' **(Nor1)**

Messiness and confusion

Working with service design was seen as a messy and confusing process in many of the cases, causing frustration among participants. First, in the French cases, the whole concept of design was found to be confusing: *'It's a vague and obscure term'* (**Fra1**). The sense of confusion and mess can be related to how service design is largely used as an approach to innovation and problem-solving, which tend to be open processes without clear, predefined goals. This was expressed in **Fra2**, where the designers explained how they often worked with 'fuzzy orders': '*On orders, we often have fuzzy orders, that is to say that part of the work consists of redefining the order, re-problematizing'.*

In **Nor1**, participants experienced the service design processes as confusing and frustrating because it felt like they were '*not moving forward*'. Retrospectively, they found that the frustrations were linked to their lack of understanding of how service design entailed important processes of asking fundamental questions about what the services were actually all about, and that these questions entailed important sources for innovation: '*When I look back on it, then I realize that I think she [the service designer] was pointing to something very important that we only partly were able to take in. Time limits, and lots of demands from others than the users, all bureaucratic things really, constrained us from revolutionizing it [the service]'* **(Nor1)**.

In **Scot2**, service design was highlighted as culturally challenging for some public service employees because it involved a *'step into the unknown'* or entering into '*obscurity*', particularly during creative idea generation. This 'obscurity' can be seen as part of the creative and developmental character of service design, which comes with a certain messiness. It seemed that in many cases accepting and relating to the mess and somewhat unpredictable trajectories of service design processes required a certain organizational maturity.

Demonstrating *impact*/problems of metrics

As service design is concerned with *creating value for users*, and as this value tends to be captured and communicated through qualitative data, such projects face problems of legitimizing and proving the 'value' in quantitative measures. This was raised as a problem in **Spa1**, where it was problematized that the positive experiences from the co-design processes of the project were hard to capture and convey, which hindered the ability to use the process as a model for running projects in a similar manner in other contexts. The lack of metrics or indicators, was seen as impeding the ability '*to explain the process in other contexts and make others understand and show that it was worth it*'.

This problem was also addressed in **Nor1.** The case project resulted in clear outputs with the digital activity plan and an online communication channel for interactions between users and councillors,

which in some ways redefined the service relations by bringing more transparency to the administrative process and granting the users a more active role in dealing with their own case. The development team had data indicating that the changes made in the system were perceived as improving the users' service experience. Still, they faced the problem of showing the wider impact and benefits of the project beyond the service experience and 'user value'. Service design in a public service context thus seems to face problems of legitimizing a focus on user value, as it competes with the need to document other forms of impact related to societal value.

In summary, we find that our case studies highlight the following challenges and constraints associated with service design in public service contexts:

- Complexity of the service context and issues of scale
- Time and resource constraints
- Practical and ethical problems of involvement
- Inherent contradictions of service design
- Messiness and confusion
- Demonstrating *impact*/problems of metrics

8.1.4 Emerging themes: Digitalization and servicescapes

While service design deals with service experiences and the more intangible aspects of services, the case studies show the fundamental connectedness between service design and the development of the physical surroundings of the services, often referred to as 'servicescapes' (Bitner, 1992). Service design is focused on the more holistic service experience, capturing both the tangible and intangible aspects of service encounters. In practice, these intangible aspects of the services are embedded in materiality, or in the 'sociomaterality' of service organizations (Orlikowski & Scott, 2008). Understanding the role of service design as playing a part in the development of broader servicescapes is one of the themes that emerged as particularly interesting for more in-depth explorations. However, going into depth on this here is beyond the capacity and scope of this research. Still, some suggestions for future research avenues can be pointed out: while servicescapes were conventionally used in reference to the physical spaces for personal service encounters, the increased digitalization of public services implies that service encounters are increasingly taking place in 'digital servicescapes' (Ballantyne & Nilsson, 2017). Focusing on the role of service design in the development of such digital servicescapes is one relevant research topic. Moreover, service design may provide a fruitful entrance to exploring the dynamics between emerging digital servicescapes and physical servicescapes. For instance, in **Nor1**, the digitalization of services and shifts to more online service encounters imply offices with reduced opening hours and the need to rethink how the physical spaces of reception areas should be designed. The interplay between shifts to online 'servicescapes' and the redesign of the physical space of the reception area was also a concern in **Scot2**. **Nor2**, **Spa1** and **Fra2** are all cases dealing with service design in broader developments of new servicescapes, which represents a fruitful point of departure for further research.

9 Discussion and conclusions

In this final chapter, we aim to discuss the findings from our case studies and the cross-case analysis more broadly, returning to the overall questions of COVAL and the research questions guiding the work of WP4. This implies also linking back to the theoretical debates on value (co-)creation, which is at the centre of the PSL framework. We also discuss limitations of the study, its relevance, and we discuss how the multiple case study may provide a foundation for future research avenues.

9.1 Discussion of main findings

We structure the discussion of main findings in two sections: First, we position service design in relation to PSL and theories on value (co-)creation, showing how service design seek to understand users' value creation and perceptions of value as a source for development of new value propositions (innovation). We show and discuss how our cases serve as illustrations of this. Next we discuss the contributions or potential of service design in a broader perspective of public service innovation and transformations.

9.1.1 Understanding value (co-)creation through service design

A basic premise of PSL is that PSOs do not create value *for* users. PSOs *propose* value, or provide 'value propositions', and it is the users that ultimately determine how or whether these value propositions are realized or enacted (Osborne, 2018; Skålén et al., 2015; Strokosch, 2018). PSL holds that PSOs need to see the service users as the ultimate value creators, and the role of the PSO is to support or facilitate this value creation (Grönroos, 2019). Value propositions can be more or less suitable for supporting users' value creation. Simplified we can say that in cases where they are well suited, then situations of value co-creation may occur. Are the value propositions ill-suited for supporting the users value creation, then there may be situations of value (co-)destruction (Echeverri & Skålén, 2011; Strokosch, 2018).

In this reasoning, the potential for innovation and renewal of public services lies in the development or modifications of value propositions (Skålén et al., 2015; Skålén et al., 2018). Relatedly, service design, which is commonly understood as a an approach to service innovation (Røhnebæk & Strokosch, 2018; Wetter-Edman et al., 2014), is concerned with developing new value propositions, or challenging and reworking existing value propositions. In these processes, service design place emphasis on understanding the users' context and lifeworld (user-centred design) and on creating space for directly involving the users in testing and developing ideas for new value propositions (co-design). The underlying reasoning is that value propositions that are detached from, or out of tune with the lifeworld and real-life contexts of users, will fail to support value creation.
In the service logic (SL) perspective, value is linked to the users' perceived quality of a service (Grönroos, 2019). Users perceptions of value can be linked to the

The cases included in our study illustrate how service design is concerned with the development and modification of value propositions by involving the users and/or by taking the users' perspective. In the library cases **(Fra2 and Spa1)** we see shifts from focusing on library services as systems for providing access to collection of books and other kinds of written and illustrated material, towards perceptions of libraries as broader cultural institutions and important arenas for recreation and socializing for local communities in rural (Fra2) and urban (Spa1) areas. This imply development of new kinds of value propositions related to offering spaces for recreation and social meeting places based on ideas and

perceptions from members in the local community (for instance videogame room in France, inclusion of outdoor spaces/garden in Spain). The design approaches to the development of new value propositions in the context of library services is thus embedded in changing perceptions of what library services *are* as cultural institutions in the local community. This is defined and explored together with various members of the local community in the cases from France and Spain, which leads to developments of new value propositions.

Similarly, we may see the case from dementia care **(Nor2)** as examples of efforts to develop new value propositions based on shifting perceptions of what dementia services are about. The focus shifts from ensuring that persons with dementia are cared for mainly in terms of somatic and physical aspects of their life, towards more focus on their overall well-being as *persons* (rather than patients) with interests, needs for stimulation, social interaction and meaningful activities. With these changing understandings of dementia care, the municipality work with development of new value propositions on a range of areas, based on inputs from persons on what constitute a 'home', what constitutes good care, good daily life etc. For instance, meals are redefined from being mainly about nutrition, to be more about social activities and stimulation of various senses (taste, smell and sight). The organization thus looks differently at the *value of meals* from the perspective of users, as something more than providing nutrition necessary from a physiological perspective, towards meals as a social and cultural activity that can play a part in creating meaningful daily life.

Furthermore, in the cases set in the welfare and social services **(Nor1 and Scot1)** we see how development of new value propositions are linked to broader shifts in understandings of how welfare benefits and social services best can be administered to support persons to become self-reliant. Welfare schemes and social benefits are largely provided as temporal benefits and constitute social safety nets for persons that for various reasons are in need of support from the government due to lack of income related to unemployment and/or health conditions. In the cases Nor1 and Scot2, we see that the systems for administration of benefits in the past has been based in a reasoning that the services should not be too accessible for the users. This reasoning may make sense from a perspective which focuses on keeping public spending on welfare benefits and social security low. However, looking at it from the perspective of the users, access to the benefits tend to be a necessary part of managing life and of coming in a position where one can be self-reliant. Cumbersome administrative processes and limited access to information and guidance on rights, obligations and procedures for applying and receiving benefit, may put extra pressure on people in already stressful and vulnerable situations. This can contribute to make it harder to focus on health recovery, managing life and gaining employment, and the systems that are supposed to be supportive become instead counterproductive. This is taken into account in the cases from Scotland and Norway, where new value propositions are developed focusing on how to make access to help on information more easily accessible for users. In **Nor1**, this materialize in the digital activity plan and the integrated chat which give users more direct access to interact with their councillors and more direct access to administer their own case. In **Scot1** this is among others reflected in the transition of making application for 'The best Start Grant' available online, with clear guidelines for how to apply.

Hence, service design links to PSL in the way it takes the users' life contexts, perceptions and valuations as point of departure for modifying or developing value propositions. Service design is concerned with learning about users' value creation, and value co-creation (refers here to the PSL vocabulary, see for

instance Strokosch, 2018), and this knowledge is used to experiment with development of new value propositions. In PSL, the PSO has been depicted as connected to the service user through 'value proposing', through a one directional link (see figure 1 below). From a service design perspective, insights on the service users value creation, and the value co-creation in service interactions, is used as a basis in attempts to create better value propositions. Service design thus creates a feedback link between the spheres of value creation/value co-creation and the PSO's value propositions (see figure 2)

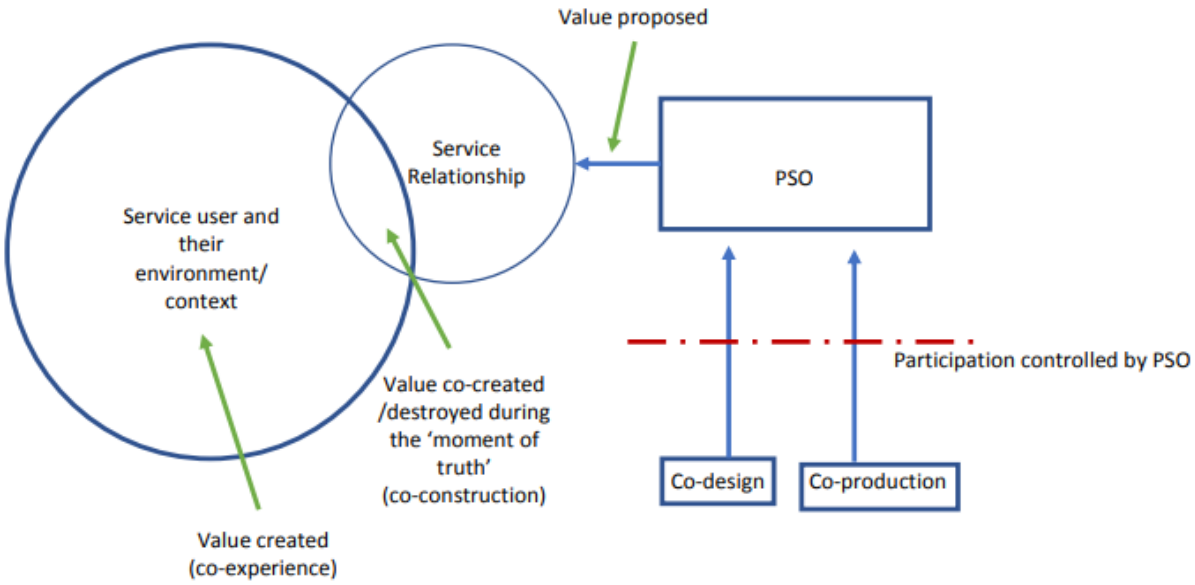

Figure 1: Illustration of PSL from D1.1. (Strokosch, 2018)

The model above illustrates the relations between central concepts in PSL. We have used this model as a basis for showing how service design links to central concepts in PSL. Figure 2 below shows how service design focuses on understanding users value creation as a source for modifying or developing new value propositions. Thus, the model shows how service design creates links from the user's value creation to the PSOs work with renewal and innovation.

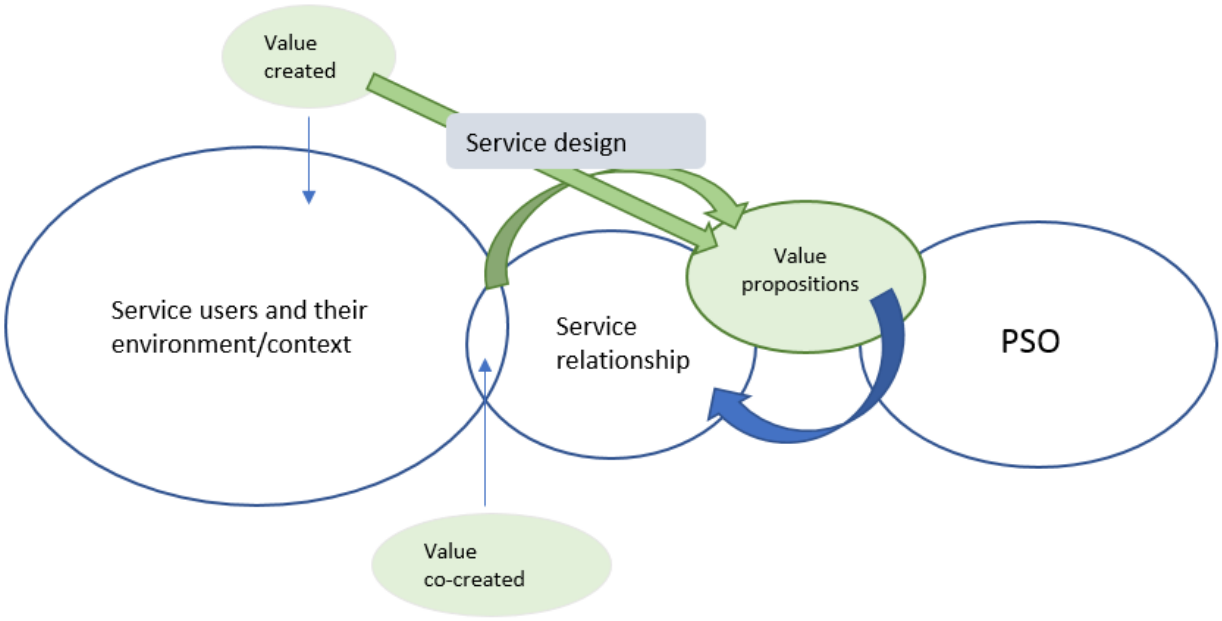

Figure 2: Illustration of how service design links to central concepts of PSL

9.1.2 Contributions and potential of service design in public services' value creation

We have found that service design introduces new and creative ways of working with innovation and renewal in public services, that are largely experienced as positive among involved and affected actors in our case studies. The findings indicate that service design is seen as bringing attention to the importance of including the user or taking a user perspective in more profound ways than other approaches. We also find indications that introduction of service design in public service organizations may contribute to transformations in organizational culture and mindsets towards more user centrism. One informant in **Nor1** captured the influence of service design in the organization as a 'tap on the shoulder' with constant reminders to keep the user's perspective in mind in innovation and development processes.

On these accounts, our research gives reasons for arguing that service design has potential to enable more user-centred innovation. However, our research points at the same time to various constraints and challenges of applying service design in public service contexts. The existing literature on service design can has tended to oversell the potential and contribution of the design and service design expertise for public service renewal. Moreover, conflicts and tensions involved in applying service design approaches has not been much thematized, which leaves the impression that service design is mainly about harmonious processes marked by win-win situations (Clarke & Craft, 2019; Røhnebæk & Strokosch, 2018).

Bringing attention to constraints and challenges evoke, among others, discussions of how the user-centrism associated with service design may also be problematic. Problems may concern controversies regarding representation; when aiming to include the perspectives and voices of users in service design – which voices are heard, and which voices may be neglected or side-lined? Moreover, new solutions may be regarded as improvements from the perspective of certain users, but as a deterioration from

the point of view of other users. To make matters more complicated, public services are not only expected to create (individual) value for end users, but also to generate value for a collective citizenry, often referred to as public value (Alford, 2016; Meynhardt, 2009; Moore, 1995). One of the aims of COVAL is to shed light on this difference, and to explore possible tensions between these value dimensions. To this end, a multi-dimensional framework for analysing value creation has been introduced, which differs between value for service users, value for the public service organization and value for society (Strokosch, 2018, 2019).

If we are to understand and discuss the potential and contribution of *service design* in relation to these value dimensions, we find that service design is largely centred on the creation of *individual value* for service users. Still, based on our cases, we do not find that this is clearly conflicting with value for the organization or for wider society. Rather, we find that individual value is largely entangled with organizational value and value for society in our cases. For instance, efforts to improve social and welfare services from the point of view of users' needs and their perceptions of 'pain points' (**Scot1** and **Nor1**) can be seen as initiatives centred on enhancing individual value, but this may at the same time correspond to societal value of ensuring inclusive societies through viable social safety nets. Similarly, efforts to improve dementia care services by focusing on needs and perceptions of a set of potential users (**Nor2**), may be seen as processes centred on individual value. At the same time, this can be seen as responding to broader societal values linked to dignity in elderly care.

This does not mean that such tensions between individual and public values does not occur in service design projects set in public services, but it was not apparent or outspoken in our cases. Nevertheless, service design set in public service contexts will always be underpinned by political debates regarding distributions of resources and public goods and their costs.

Service design, however, represent an understanding and conceptualization of 'value' which breaks with the more conventional ways in which 'value' is used in public service contexts. Value tends to be perceived as something that can be counted and measured, in terms of 'value for money' or in terms of effects of interventions based on evidence-based measuring regimes. Service design has a more experiential, subjective and socio-psychological understanding and approach to value, which correspond with Meynhardts' (2009) theory on public value. This perspective contains criticism of the economic-managerial public value theory first developed by Moore (1995). PSL (and SL) adhere to the same kind of understanding of value, focusing additionally on how users create value in broader networks of relations beyond the interactions with (public) service organizations. Relatedly, Grönroos (2019), links value to the service user's perceived quality of the service. Service quality can be perceived along two dimensions: The technical quality and the functional quality. The technical quality refers to the concrete outputs of the service (for instance surgery, social security benefits, counselling), while the functional quality refers to how the service is provided, e.g. the process.

The tools and mindset of service design is largely concerned with highlighting the importance of paying attention to functional quality; the service process and the users experiences. In various public services, the technical and functional quality cannot be clearly separated (for instance, the technical quality of a therapy session cannot be separated from its functional quality). This concern particularly services in which the service users are in a vulnerable position, and in services where the functional and technical

dimensions are integrated. The contribution of service design can be particularly important in such service contexts.

9.2 Limitations and comments on methods

This research aimed to gain insights on service design as a relatively new emerging phenomenon that is increasingly being adopted in public service contexts. We have found evidence of this in our analysis of the grey literature on service design in the partner countries, which show how 'service design' and 'design thinking' are concepts that increasingly appear in public policy documents. Relatedly, we have found that the governments, or agencies working with the governments, have developed and published various forms of methodological guidelines and tools that public service organizations can make use of to follow service design approaches. For instance, the Scottish government's digital directorate has published a booklet called 'The Scottish Approach to Service Design'. In Norway, there are examples of incentive schemes that are meant to support the use of design approaches to innovation in public services, and we have seen indications that 'service design' expertise is being asked for in tenders. In sum, this indicates that service design is a phenomenon that, in one way or another, is appearing and playing a role in European public service contexts.

However, whether the adoption of 'service design' as a concept at policy levels is helping to transform the way public services are delivered and developed is a different and more complex question. In some interviews, we have seen that employees and managers in public service organizations refer to 'service design' as trendy and fashionable, and something resembling approaches and methods used in the past. In neo-institutional theory, these adaptions to 'trends' and managerial 'fashions' that travel across organizational contexts are seen as a central part of how organizations gain and maintain legitimacy. In this perspective, preserving legitimacy by responding to trends and fashion in the surrounding environment becomes just as important as adopting models and approaches that are perceived as the most effective for transforming or bringing about change in that particular organization (see for instance Christensen, Lægreid, Roness, & Røvik, 2007). It follows that new concepts and approaches may be adopted superficially and rhetorically, and do not actually represent change in the way the organization acts. Our research merely gives insights in the form of into examples of how service design tools and concepts are making their way into public service contexts, but our data do not provide answers as to whether the introduction of 'service design' is substantially contributing to the transformation of public services. This has to do with our research design (focusing on a relatively small set of cases), but also with the fact that 'service design' is a relatively new phenomenon. We still find that the ways in which we have shed (some) light on service design as an approach to renewal in public services is useful—but the limits and reservations of the study need to be made explicit.

Next, our research assumes that 'service design' is a phenomenon in the world that can be delineated and studied. This, too, can be debated. To be sure, 'service design' is a slippery and elusive term, and a central part of our research was to come closer to articulated understandings of the concept. This shaped the case studies, as asking respondents about their experiences with service design was interlinked with their interpretations of the term 'service design'. The ways in which 'service design' was interpreted and understood across the cases thus become a central part of the findings.

Finally, service design processes are temporal events, and getting access to study cases at similar stages at the same time is not possible. Thus, some case studies explore finalized service design processes retrospectively, while others have had access to study service design processes 'in the making'. This means that the cases are based on somewhat different kinds of data.

9.3 Relevance and further research

Our research has taken an explorative approach to service design in public service contexts, attempting to understand *what it is*, and what it may contribute, seen from the perspective of the individuals involved in or affected by service design projects. The research has identified a number of constraints and challenges involved when applying service design, but our findings nevertheless indicate that service design generates refreshing approaches that are appreciated by involved actors. The findings also indicate that service design is not a clear phenomenon with a definite set of tools and methods. It is recognized as a new, emerging form of professional expertise, associated with a certain toolkit of methods and certain process models for service innovation (for instance, the Double and Triple Diamond frameworks). However, service design is also seen as intersecting and overlapping with other process approaches to creativity and innovation, and as closely interlinked with agile methods in contexts where digitalization is central to service renewal.

We find research that brings more clarity to service design in public services to be important for a number of reasons. First, lack of critical examination and lack of clarity around what service design is all about consequently makes it uncertain as to what policy makers and public sector managers are investing in and embracing. Hence, by exploring the phenomenon of service design more closely, we may contribute to demystifying it and thereby bring forward more informed debates on its strengths and shortcomings. A clearer understanding of the phenomenon itself can be one important step in a broader analysis of how it may impact or transform public services (Junginger, 2017).

Next, when service design and service designers are brought to the fore, other methods, disciplines and forms of expertise may be more side-lined. Thus, the increased adoption of service design is likely to involve trade-offs and prioritizing in the public sector that are important to understand. Furthermore, service design focuses especially on individual user experiences, and it may contribute to an intensified 'client focus' that fails to take into account the fact that public services are caught up in tensions between obligations to generate private value to individual users, while also generating 'public value' for a collective citizenry (Alford, 2016). Being aware of and sensitive to these aspects of public services is important for viable public service design.

We find that it is likely that service design will remain an important ingredient in public service organizations' renewal efforts. As contemporary organizations become increasingly embedded in digital technologies (Barrett, Davidson, Prabhu, & Vargo, 2015; Orlikowski, 2016; Orlikowski & Scott, 2008), it follows that the design, development and maintenance of digital systems is becoming one of the crucial backbones of organizational activities. Design expertise and practices is becoming in this landscape, essential for giving shape to physical objects (product design), graphical representations (graphic designers) and user interfaces (interaction designers), but designers are also increasingly taking part in shaping the non-technical and non-material aspects of organizations. It is this latter, emerging space for design and design expertise that we have been concerned with in our research.

Future research may go further into this new landscape of design from a variety of angles. One angle would be to look further into service design as having an important role in the interpretation and intermediation between the development of digital and physical infrastructures in public service contexts, and the understanding of social and human perspectives and needs among service users and frontline employees. Thus, future research may look further into the role of service design in the shaping of digital and physical servicescapes (Ballantyne & Nilsson, 2017; Bitner, 1992) in public service contexts. Our identification of a range of challenges and constraints implied in the adoption of service design approaches in public services also represent relevant points of departure for further research. We see the need for research that goes into greater depth on the different challenges and constraints that we have touched upon in this report. In-depth singular case studies cases can be fruitful for this, but also multiple, comparative case studies of different service design projects set in similar service sectors.

10 Annexes

10.1 Case study protocol

H2020-SC6-CULT-COOP-2016-2017
CULT-COOP-11-2016-2017

Co-VAL [770356] "Understanding value co-creation in public services for transforming European public administrations"

Case study protocol WP4

Project Reference No	Co-VAL [770356]
Workpackage	WP4 Service design
Dissemination Level	CO = Confidential, only for members of the consortium (including the Commission Services)
Date	10/12/2018
Author(s)	Maria Røhnebæk, INN
Document description	This document outlines the case study design and a protocol for conducting case studies on service design

Introduction

This document describes the objectives, design and data collections guidelines of the case studies to be carried out as task 2 in WP4 on service design. A separate document provides templates for interviews, observations and document studies, and another document provide an outline and templates for how to report on the case studies.

Case studies objectives

The COVAL proposal lists service design as one of four co-creation areas in which empirical studies will be conducted to gain insights on, among others: "*innovative ways of interacting with users, and innovative ways of including various types of users in the development of public services*". The shared guidelines for the case studies on the four 'co-creation areas' are further described as follows:

> *Case studies will be undertaken in those countries where team members participate to gain insight on the contingencies, potential and limitation of existing approaches in efforts to co-create value in public service delivery. The case studies will follow, document, assess and compare the use of various modes/techniques in different countries, and the empirical material will be analysed in light of the PSDL-perspective. The analysis will focus on understanding potential impacts and limitations of various approaches in different European settings. The case studies should concentrate on the level with the most face-to-face- interaction with the end-users, which will probably be the municipal and regional level for most countries, according to the subsidiarity principle expressed in the terms of the Call. They will not focus on specific sector targets, but may include services such as health, social and welfare services.*

The COVAL proposal specify further the following objectives for the case studies on service design, WP4:

> *- The case studies will be carried out in order to gain insight on the contingencies, potential and limitation of service design approaches in efforts to co-create value in public service delivery.*
>
> *- The WP will consist of multiple case studies in various countries within public services dealing with vulnerable groups such as elderly care, welfare and social services.*
>
> *- The case study report will convey findings on the potential impacts and limitations of various service design approaches in different European settings*

Research questions / issues

The overall research questions for the case studies derive from the objectives presented above. We phrase the overall research question as follows:

- *What are the contingencies, constraints and limitations of applying service design in efforts to co-create value in public service delivery?*

We understand potential as the possible benefits related to the application of service design principles and tools in public service contexts, and we understand limits as the problems or constraints related to the use of service design.

In order to ensure the development of sufficiently focused case studies, Stake (1995) advices identification of a set of 'issues' that guide the studies in addition to overall research questions. Issues are topic matters that are of particular interest or relevance to the research. (The term 'issues' resemble what R. K. Yin (2009) refer to as 'propositions', but we prefer the term issues in our research context.) The literature study conducted as task 1 in this WP identified relevant issues to explore further in the case studies. Relevant issues can be particularly derived from the identification of themes addressed in the existent literature:

1) Innovation/improvements and service design
2) Practical and ethical issues of participation/co-designing with users
3) Participation/involvement of individual users versus collectives (multiple actors)
4) Assessment of different service design methods
5) Exploration of how service design links to institutional contexts/organizational culture
6) Digitalization and service design

Based on the overall objectives of the project, we find that it is particularly relevant to focus on issues within 1-4 in the case studies. We do not expect all cases to shed light on all issues, but all cases should address at least one of the issues 1-4.

The literature review of service design highlights that there are limited research that report on the impact and results of service design. We need to make some conceptual clarifications in this regard. We differ between output, outcomes and impact, in line with the differentiation made in WP3.

- **Outputs** are quantifiable, tangible results, such as new services, new products, new processes or new skills.
- **Outcomes** focus on the short-term effect of the service design process. For instance, the service design process may have led to visible results in form of a new service or practice (output), but this is something else that the effect of the changes (outcome)
- **Impact** concern the long-term effect of a service design process for users/ citizens/ communities.

Theoretical framing

Public service logic (PSL) is developed as the theoretical framing for the research in COVAL, and the research in the four co-creation areas are meant to draw on and contribute to the PSL theory developments. In the literature reviews of WP1 and WP4, we have started to explore the linkages between PSL and service design. These explorations will continue through the case studies in WP4.

In PSL distinctions are made between extrinsic and intrinsic forms of co-creation. Intrinsic co-creation is understood as an ingrained part of the service interaction, while extrinsic processes are more voluntary and appended forms of co-creation in which service users may choose to be involved and participate in initiatives that seek to improve or innovate services. Extrinsic co-creation may take form

as co-production or co-design. Co-production refers to the active and voluntary involvement of the users/citizen in the management and delivery of their services, while co-design refers to the active involvement of the users/citizens in improving existing services and in innovating new forms of public service.

The case studies in WP4 will mainly address extrinsic forms of co-creation, by studying service design projects aiming to improve or innovate public services – understood as co-design. However, the literature review on service design suggested needs for elaborations of the co-design concept, in which co-design indicate direct participation, while user-centered design may entail more indirect forms of participation and involvement. User-centered design may for instance involve ethnographic approaches to gain insights on users' experiences and perspectives. Such approaches may prove particularly relevant in service contexts where users are not themselves capable of active, direct participation. The relations between co-design and user-centered design is one aspect to be further examined in the case studies.

Case study design

The case studies follow a design of multiple holistic case studies (Yin, 2009, p. 46), which imply that the selected service design projects each make up a unit of analysis. We acknowledge subsequently that each case is set in different contexts, which informs the analysis of the case. Each partner should conduct at least two case studies. We should strive for selection of at least two cases across countries within each of the service areas selected to strengthen the analysis and comparative dimensions.

With five partners conducting case studies, the case study will cover ten cases within 3-5 different service sectors.

Since the empirical research in this area is scarce, the multiple case studies should be explorative and descriptive, and seek to bring forward various aspects of applying service design. Thus, we will follow a strategic and intensity sampling strategy (Patton, 2002) seeking information rich cases. The aim is to gain in-depth insight on how various actors involved perceive the process and possibly the changes it has led to for the service / service organization and for users of the services.

Case study selection criteria

A set of case study selection criteria has been discussed alongside the process of identifying relevant cases in the partner countries.

There are two basic selection criteria: The cases need to involve service design tools in some ways, and it needs to clearly involve public services that primarily provide services to citizens. Since the process of identifying relevant cases has revealed that service design projects in public services are not widespread in all partner countries, selection criteria will not be much further detailed.

However, selection of relevant cases needs to be guided by the objectives, research questions and relevant issues presented above and in the project proposal. We want to select cases which deal with services to users that are distinctly different from the role of "customers" since we are interested in gaining insights on what characterises application of service design in public service contexts. Consequently, we should focus on services that are distant to services operating in commercial markets.

Preferably, the case studies should cover cases where professional service designers have been part of the service design process, but 'inhouse' cases where public sector professional apply service design methods and tools are also eligible. Moreover, with the focus on co-creation in COVAL the case studies should cover cases that involve service users in transforming/ (re)designing services or that in different ways seek to design and develop services from a user perspective. Cases might cover ongoing projects, but the first phase/phases should be completed so that it is possible to collect data on experiences from the service design processes.

Guidelines for data collection

The case studies are conducted as qualitative research and hence the data collection will be based on individual and/or group interviews, observations and document studies. If partners want to supplement their studies with other methods, please notify and discuss with the WP leader. The partners should consider the most suitable sources for data collection depending on the nature of the case. However, in order to ensure that we cover similar aspects in all cases, we provide some guidelines.

Each case need to cover at least the following data collection:

- At least one interview with service designers (professional/or PSO employees responsible for service design)
- At least one interviews with top managers in the service organization/ or department involved in the service design process
- At least one interview with middle managers responsible for services related to the service design process
- Three interviews with frontline staff
- Three interviews with users or one group interview with users (3-6 participants)
- 2 observations of service interactions and/or service design processes such as ideation workshops, development, prototyping, testing etc.
- Document studies of relevant project material (i.e. project proposals, plans, reports, background material)

The cases may cover interviews with:

- Other relevant stakeholders
- Strategic managers/ policy makers

Additionally: The cases should be positioned in a broader policy context for service design in the partner countries. Description of this policy context needs to be based on document studies of national reports, strategy documents and policy documents discussing service design.

Reporting

All fieldwork should be conducted and reported to INN by **31st of August, 2019**. We encourage partners to send their data reports as soon as they are ready, and the report from each case may be sent separately if they are conducted in sequence. A separate data report template has been provided, that can be used for reporting on each case. **Additionally, we would like you to report on the policy context**

for service design in the partner countries. This needs to be based on searches and brief reviews of strategies for service design in the public sector, white papers and/or green discussing service design (might be included in policy documents on innovation), reports that report or illustrate examples of the use of service design in public services. This can be enclosed as separate word document titled 'policy context for service design – partner country name'.

We expect this to take the format of a short report, which should be written in English and is approximately **5,000 – 1.000** words in length. *Please note that all original data should be retained to support future paper writing.*

See separate document for reporting template.

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Yin, R. K. (2009). *Case study research: design and methods* (4th ed. ed. Vol. vol. 5). Thousand Oaks, Calif: Sage.

10.2 Interview guides/templates for data collection

Data collection templates WP4

This document provide templates for the case study data collection in WP4. The document contains interview guides, a document analysis template and an observation sheet.

Please provide introductory information to all research participants about the study (e.g. the aim of the study is it generate knowledge on the use of service design in public services; the beneficial and problematic aspects of applying service design, and results and experiences of involved actors). See also the separate consent form.

Interview guide top managers and middle managers

Please conduct minimum one interview with top managers and one with middle managers in the service organization pr. case.

1. Please briefly describe your position
2. Are you familiar with the term service design? How do you understand the term?

3. Please briefly describe the (service design) ….. project and your role in it.
4. How do you understand the aim/objectives of the project?
5. Which problems/ challenges are the project addressing in your view?
6. Explain briefly how the project has been carried out, i.e. what methods/ approaches are used.

7. Are there any outputs/ from the project?
   I.e. results in terms of new service, , new products/technologies, new ways of working etc.

8. Would to say that there are differences between output (results) and outcome/impact? If so, what might be the outcome/impact?

9. Do you see the project as beneficial for the users/ groups of users/ citizens? In what way?

10. Do you see the project as problematic for users / groups of users/ citizens? In what way?

11. Has the service design process led to surprising outcome/impact? (unintended consequences?)

12. Which actors have been central/ involved in the project?

13. What are your perceptions of the cocreation processes/collaborative processes?
    i. Has the process been characterized by unified or conflicting perceptions of the projects' objectives?
    ii. Has the process been characterized by unified or conflicting perceptions of proposed/implemented solutions?
    iii. If conflicts, what is in your opinions the source/ reasons for conflicts?
    iv. Among which actors have tension/conflicts occurred?

14. What has in your view been beneficial and/or problematic aspects of involving users/ citizens?

15. Could/ should the service design process have been carried out differently? How / why?

16. Other comments?

Interview guide frontline employees

Please conduct 3 interviews with employees in the service organization in each case

1. Please briefly describe your position
2. Are you familiar with the term service design? How do you understand the term?

3. Regarding the ….. project: Have you been involved in the project or has your daily work been affected by this project? Explain
4. How do you understand the aim/objectives of the project?
5. Which problems /challenges is the project addressing in your view?

6. If involved: What are your perceptions of / experiences with the involvement processes?
7. If affected: What are your perceptions of / experiences with the (results of) project?

8. Has the project led to concrete change/outputs? For instance new services, products, procedures, new ways of working?

9. What are the implications/ consequences for you as frontline employee?

10. Do you see the project as beneficial for the users/ groups of users/ citizens? In what way?

11. Do you see the project as problematic for users / groups of users/ citizens? In what way?

12. Do you know if there has been tensions or conflicts between actors involved in the project? Explain

13. Could/ should the service design process/ project have been carried out differently? How / why?

14. Other comments?

Interview guide users (/adjust to stakeholders if necessary)

Please conduct 3 individual interviews or at least one groups interview (3-6 participants) pr. case

1. How do you know the …. project?
2. In what way have you been involved in / affected by the project?
3. What are your perceptions of/experiences with the involvement?

4. How do you understand the aim/objectives of the project?

5. What problems/challenges are the project addressing in your view?

6. Are the project leading to changes in the way users receive services/ interact with the services?

7. Has the project led to beneficial results? For whom, in what way?

8. Are there problematic aspects of the project? For whom, in what way?

9. Do you feel that your involvement has affected the directions of the project?

10. Why/ how do you see your inputs as valuable/ constructive?

11. Could/ should the project have been carried out differently? How/ why?

12. Other comments?

Interview guide service designers

Please provide at least one interview pr. case

1. Please briefly describe your professional role and background
2. How do you understand and use the term service design?

3. What has been you role in the …. project?

4. Have you worked with service design project in public service contexts earlier?

5. Have you worked with service design projects in the private sector/ commercial services earlier?

6. If experiences from both: Would you say that there are differences in the way you work with service design in public services compared to commercial services? Explain

7. What would you say characterize service design processes in public services?

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8. What are your experiences from working with this particular project?

9. How do you understand the aim/objectives of the project?

10. Which problems /challenges is the project addressing in your view?

11. Has the project led to concrete outputs/ results/ change?

12. Do you see the project as beneficial for the users/ groups of users/ citizens? In what way?

13. Do you see the project as problematic for users / groups of users/ citizens? In what way?

14. What are your experiences from the collaborations with the PSO?

15. Has there been tension/conflicts in the collaborative process? Explain

16. Has involvement of users/ citizens had an effect in the service design process? Explain

17. Has there been problems with the user / citizens involvement processes? Explain

18. Could/ should the project have been carried out differently? How/ why?

19. Other comments?

Observation sheet

Date:	Place:	Type of setting: *For instance meeting/workshop/service interactions,*	Actors present:	Time/duration:
Description of event, interactions, activities				
Highlight incidents, comments or interactions of particular relevance/ interest. Include direct quotes.				
Analytical reflections/ comments: *How are the observations relevant/informative for understanding benefits or constraints/problems related to co-creation through service design*				

Document analysis template

Include number of documents relevant for understanding and analyzing the case (add rows if needed)

Type of document (White paper, project plan, project report, minutes etc.)	**Document purpose**	**Information relevant for understanding the case** *(i.e. background, objectives, results, process etc).*	**Definitions/ understandings of services design (if relevant)**

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