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D4.3 Toolbox report on service design approaches to co-creation of public value

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Document description	This report draws together findings across the tasks and deliverables within WP4 in the Co-VAL project. The research in WP4 has generated knowledge on the potential and constraints of using service design as an approach to innovation and facilitation of value creation in public service contexts. This report is practice-oriented and provides guidance on how to work with service design. It provides access to resources, methods and tools, and discusses challenges involved.

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Executive Summary

The purpose of this report is to provide guidance and inspiration in the use of service design for renewal and innovation in public service settings. The report is based on the project Co-VAL (http://www.co-val.eu/) financed through EU's research and innovation program Horizon 2020. The report draws together insights generated through the Co-VAL research on public service design in different public service settings. We convey 'lessons learned' from our research to give directions for future service design projects in public service settings.

Our research consists of ten empirical case studies of ongoing service design projects in public service settings in five European countries. The research also covers mapping and reviews of diverse forms of literature on service design, including research articles, textbooks, government documents and practically oriented guides and online resources. In this report we integrate knowledge and examples from our empirical research with insights from resources on tools and methods that can be applied when practically managing service design projects in public services. As such, we structure and provide access to a range of valuable existing resources on service design that can strengthen public service organisations' competence and capacity for service design.

We do not suggest that service design projects should follow set pathways, nor do we suggest that service design implies the use of a stable set of tools or methods. However, we give directions to toolkits that can be helpful and we shed light on process models that are often used to guide service design processes.

The report also places emphasis on challenges and potential pitfalls involved when working with service design in public service settings. We underline that service design does not provide a quick fix to the complex problems and often contradictory demands that public service organisations are set to handle. Highlighting potential challenges involved in service design approaches will be important for providing a foundation for reflections on how to work around challenges, and it provides a foundation for assessing when service design is useful and when it is not.

The report consists of six chapters: Chapter 1 states the aim of the report and outlines the structure. Chapter 2 clarifies key terms and concepts that can help readers to navigate in the broader literature. Chapter 3 presents key issues in the planning and process of service design and provides a foundation on how to get started in a practical sense. Chapter 4 gives an overview of key service design methods and tools with links to resources that provides templates and more detailed step-by-step guidance on specific methods. Chapter 5 outlines key challenges of service design in public services and discusses ways to cope or work around these challenges. Finally, Chapter 6 provides a structured overview of resources and literature that can be used to inform and guide service design processes in practice.

Acknowledgements

This report is the result of joint efforts among researchers involved in research on service design organised under Work Package 4 in the Co-VAL project. It draws together insights from three tasks in WP4, which have contributed to the knowledge base for this report in different ways. However, the work undertaken in the other WPs in Co-VAL also intersect with our work on service design. The collective efforts in the project have enabled us to gain a holistic view of service design in relation to other, interlinked perspectives and approaches to innovation and value creation in public services. Thus, we would like to thank all members of the Co-VAL project for their direct and indirect contributions to this report.

We have also received valuable contributions and inputs from members of the Co-VAL stakeholder panel on how to plan, structure and write up this report. Continuous dialogues with members from the stakeholder panel have been valuable for ensuring that we pay attention to issues that are perceived as relevant and valid from practitioners and managers' point of view. They have also provided helpful feedback on how to convey insights in an accessible and pedagogical manner. We want to specifically thank Marie Ramon-Daré and Gerhard Embacher-Köhle (Digital Government & Innovation Bundesrechenzentrum GmbH) for their involvement and helpful contributions.

This report is also based on insights and examples from empirical case studies on service design projects in different public service settings. Our research would not have been possible without the contributions of informants involved in these projects. We are especially grateful for their collaborations and for sharing their experiences and reflections.

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1 Introduction

There exists a range of practical guides and textbooks on how to apply service design methods to innovate and improve services and service systems (see for instance Aricò, 2018; Polaine et al., 2013; Schneider et al., 2010). However, there is less literature dealing with the specificities of applying service design methods in public service contexts even though this is a field that is rapidly receiving increasing attention (see Bason, 2010, 2017; Clarke & Craft, 2019; Junginger, 2017; Junginger & Sangiorgi, 2011; Radnor et al., 2014; Schaminée, 2018; Trischler et al., 2019; Trischler & Scott, 2016). Still, service design originates from the private sector, and service marketing was at the outset influential in shaping this field (Bitner, 1992; Shostack, 1977, 1982). This is still reflected in service design literature and methods that tend to focus on how to design services that create private value for individuals (consumers), while placing less emphasis on the obligation of public services to create public value for collectives of citizens (Alford, 2016).

Understanding and dealing with these potential tensions between public and private value creation is pertinent when designing public services. Service design in public service contexts also implies the need to consider how the policy level and the legislation set premises for the design process (Junginger, & Sangiorgi, 2011). Moreover, service design assumes that service users are capable and willing to participate in and influence design processes. Yet, public services often target vulnerable and marginalised user groups whose voices can be difficult to include in both practical and ethical terms (Donetto et al., 2015; Morrison & Dearden, 2013). Moreover, the user-centrism underpinning service design can be inappropriate in many policy contexts, especially in contentious service settings (Clarke & Craft, 2019).

1.1 Aim

These features of public services indicate that there are needs for contextualised tools and methods when applying services design in the public sector. The aim of this report is to contribute to such contextualisation of service design methods and toolkits.

We do this by drawing together findings from case studies on service design projects in different public service settings, by conveying insights from research literature on service design in the public services and by providing access to resources on methods and tools that can guide service design processes in practice. We also highlight potential challenges of pursuing service design in the public sector, and we reflect on how to work around or cope with these challenges.

1.2 Structure

The report consists of six chapters:

- Chapter 1 introduces the background, aim and structure.
- Chapter 2 clarifies key terms and concepts and can be helpful for navigating in the broader literature on design and service design.
- Chapter 3 provides a foundation for how to get started with service design in or with a public service organisation.

- Chapter 4 gives an overview of central service design tools and methods and provides access and links to resources where templates and detailed guidance on methods are available.
- Chapter 5 points to challenges associated with service design in public service settings and discusses ways to cope with and work around them.
- Chapter 6 lists and structures resources and references that can provide helpful guidance when developing and advancing service design competence in public service organisations.

2 Clarification of Concepts

Accessing literature and resources on service design involves navigation of a myriad of interrelated terms and concepts. In this section we want to briefly clarify how key terms and concepts can be defined and understood. We underline that there are concepts and terms that lack unified definitions, which may not all agree with our definitions. However, we believe that our efforts to clarify can still be helpful.

2.1 Service design

We use service design as an overarching concept referring to a way of constructing services bottom-up by focusing on the service process and service encounters, and by placing emphasis on the direct or indirect involvement of service users and other stakeholders. What is referred to as 'service design' is often contrasted with the use of closed, top-down implementation processes in the construction of services. Moreover, service design acknowledges the construction of services as a *design* process and draws on thinking, methods and tools from design disciplines and architecture. As such, the essence of service design may be defined as follows:

> *[Service design] assumes the customer/user as the starting point or lens into a specific service and through the use of creative, human-centered and user-participatory methods models how the service can be performed* (Holmlid & Evenson, 2008, p. 342).

Service design is also linked to creativity, innovation and problem-solving, and it is presented as an approach to service innovation. This is emphasised in the definition of service design *as 'A creative, human-centred, and iterative approach to service innovation'* (Wetter-Edman et al., 2014, p. 109). Service design can in this way be seen as a set of methods and tools that are meant to unleash creativity and enable the creation and implementation of new solutions (innovations) in service settings.

2.2 Design thinking

Design thinking and service design is interlinked and often used interchangeably. However, design thinking is a broader term than service design, as design thinking may be used to spur innovation based on the way designers think and work in diverse settings (not merely in services) (Brown, 2009). Moreover, 'design thinking' is often associated with a specific iterative process model, originating from the d.school at Stanford University. This process model structures design processes around five sequences of activities:

- Empathise
- Define
- Ideate
- Prototype
- Test

Design thinking has in this way become a specific and popular consultancy and management concept that has spread across contexts. When travelling, the concept gets enacted in different forms, implying that design thinking may in practice mean different things in different organisational contexts (Carlgren et al., 2016).

2.3 Designerly thinking

'Design thinking' is presented as an approach to innovation based on the way designers think and work (Brown, 2009), but it is noted that the management concept associated with 'design thinking' has become quite detached from designers' actual work practices. Thus, some theorists point to the need for distinguishing between 'design thinking' as a management tool and designers' actual work practices and mindsets. There is also research that studies designers' work practices in detail (see for instance Cross, 2011). The latter is often referred to as 'designerly thinking' (Carlgren et al., 2016).

2.4 Policy design

Service design in public service settings links to policy design, but it is not the same. Designing a policy (a written document of some kind) is quite different from designing the many elements that constitute a service. However, the design of policies affects the design of services, and service design processes set in service organisations may raise issues that needs to be addressed at policy levels (Junginger & Sangiorgi, 2011). Specifically, policy design can be understood as the deliberate attempt to define policy goals and consciously connect them to policy instruments intended to reach those goals (Clarke & Craft, 2019; Howlett, 2011).

The design of policies and the design of services may also intervene and overlap depending on the service setting and the nature of the policies. This was especially evident in one of the case studies in our research, which followed the process of developing and designing a new social security agency in Scotland. In this case, the process of designing the new policies commenced in parallel with the design of the new services, which heightened the complexity of the process (see Textbox 1 for more details on this case).

Textbox 1: Designing new social security services in Scotland (extract from case study)

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. Service designers and service design methods were an important element in the process of developing this new agency.

The case is useful for understanding the role of service design and professional service designers in large service organisations and comprehensive projects, in which service design is one kind of expertise that intersects and overlaps with other forms of expertise and professional roles. Maintaining the holistic approach of service design was found challenging in this case due to the complexity and scale of the entire project. To make the whole process manageable, it had to be broken down into separate elements and work processes, which involved the risk of losing sight of the holistic service experience. As such, the process was described as a challenge of fitting the 'jigsaw puzzle back together'.

Moreover, the design processes in this case were pressured by heavy time constraints and were largely dependent on the parallel development of policies for 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. In this case, 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.

See also https://www.co-val.eu/case-studies/blog/project/design-of-the-new-social-security-agency-in-scotland-2/ and the full case study report (D4.2) available at: https://www.co-val.eu/public-

2.5 Human-centred design

Human-centred design is an umbrella concept that refers to a shift from focusing on artefacts, technology or objects of design in itself towards a focus on how design objects are interpreted by various actors in different situations (Junginger, 2017; Krippendorff, 2005). The human-centred design approach may underpin the design of services, but also design of products, artifacts and spaces. Different methods and approaches can be used to realise more human-centred design (see codesign and user-centred design for further specifications).

- User-centred design: Refers to efforts to take the user's perspective in design processes. Different forms of user research can be used to this end, such as ethnographic research, in-depth interviews and walkthrough (see further outlines on methods and tools in Chapter 4).

- Codesign and Participatory design: Codesign and participatory design tends to be used interchangeably, but codesign has become the most dominant term used. The concepts refer to the direct and active involvement of service users and other stakeholders in design processes. In codesign, different actors are brought together to create collectively. This can be collective creation of ideas or solutions.

Differentiating between user-centred design and codesign may seem like nit-picking, but we believe this has important implications for practice. Choosing the form of involvement appropriate for the service context, the problem addressed or the resources available can be vital for the overall design process.

There is a tendency to perceive direct and active involvement (codesign) as superior to more indirect forms of involvement (user-centred design), but this is not necessarily the case. For instance, codesign may imply invitation to participatory workshops in which those voices that often dominate are heard, while more marginalised but important voices can be silenced. Participation in collective fora may require confidence and certain communication skills (Morrison & Dearden, 2013).

Thus, reflecting on and finding the right approaches that enable inclusion of diverse voices is important when designing public services. In our cases, we found that it was often necessary to combine and shift between user-centred design and codesign (see details in the full case report, Røhnebæk et al., 2020). This was especially evident in one of the cases, which involved efforts to design new dementia services where the service users suffer from cognitive impairment. The case illustrates the need to combine different approaches for involvement, particularly when designing for vulnerable user groups (for further details on this case, see Textbox 2).

Textbox 2: Designing new Dementia services (extract from case study)

This case deals with the process of designing a new form of dementia care services in a Norwegian municipality, based on the construction of a 'Dementia village'. The project draws on inspiration from the Dementia Village, Hogweyk, in Holland. 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 criticised for being too focused on the somatic aspects of care, which limits room for socialising 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 focuses on creating a new home for the residents and on meeting their individual needs. The municipality is striving to create structures in which this new care philosophy underpins leadership, management and organisational structures, as well as the mindsets and practices of the carers employed.

The municipality has 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 was involved, but they were mainly used for guidance and dialoguing with the Municipal development team and were not directly involved in the design or facilitation of processes (see also https://www.co-val.eu/case-studies/blog/project/carpe-diem-dementia-village/ and the full case study report (D4.2) available at: https://www.co-val.eu/public-deliverables/).

2.6 Interaction design and user experience design (UX design)

Service design intersects with other forms of design, and the boundaries between different design disciplines and subcategories are not clear cut (Buchanan, 2001; Junginger & Sangiorgi, 2011). Particularly, the boundaries are blurred between service design and interaction design, and with user experience design (UX design).

Interaction design is anchored in human-computer interaction and engages in various ways with the design of digital interfaces and interactive artefacts. Increased digitalisation of services, and of society at large, makes digital service encounters a central part of most service experiences. As such, interaction design may often play one part in broader service design processes. While interaction design focuses on examining and designing specific (digital) touchpoints in a service process, service design takes a more holistic approach to the entire service experience. One of the informants in our study explained that while interaction design focuses on the design of specific touchpoints, she explained that a service designer '*would gain an overview of the "touchpoints", and then implement them and test them in the context they are used.'* A service designer would also raise questions as to whether a specific touchpoint (for instance, a mobile app) was appropriate in the first place. This implies that service design may address issues at system and management levels linked to broader organisational strategies.

User experience design has recently emerged as a new design discipline, and there are a range of educational programs in UX design available. UX design seems positioned in between interaction design and service design. It places particular emphasis on understanding user needs in the design of products, services or systems to enhance the overall user experience. UX design is also more linked to the design of technology and digital solutions compared to service design, which may deal with broader organisational processes.

2.7 Service design and value creation

When applied in a public service context, service design may spur debates on how to perceive value and value creation (Osborne, 2021; Strokosch & Osborne, 2020; Wetter-Edman et al., 2014). Value of public services tends to be defined in socioeconomic terms and has been largely linked to questions on organisational efficiency and value for money. Service design brings attention to a different dimension of value by placing emphasis on how users perceive or experience value. This implies a focus on the service process rather than merely service outputs (Gronroos, 2019). Service design offers concrete tools for capturing, interpreting and visualising these aspects of value in service settings (Wetter-Edman, 2010). Highlighting these dimensions of value can be an important source for transformations of how outcomes of services are understood in an organisation.

The term 'value proposition' also tends to appear in service design literature and related service management theories (Skålén et al., 2015; Wetter-Edman et al., 2014). This term is based on the assumption that it is not service organisations that create value internally, for them to deliver to service recipients. Rather, service users are seen as those creating value based on integration of resources provided by the service organisation. With this perspective, service organisations are involved in provision of *value propositions,* and these may be more or less suitable for enabling the user to create value. To use a simple example, if an organisation provides online support for service users who lack skills and infrastructure to make use of online services, then the organisations provide value propositions that are ill-suited for supporting users' value creation. Service design is largely about identifying, creating and recreating value propositions that support users' value creation.

3 How to get started: Planning and Process

There are (at least) three things that would be wise to consider when getting started with service design. Making changes in an organisation and getting started with a project can be costly, time consuming and resource intensive. Thus, creating space for reflections on why, how and whom will be an important starting point. We highlight some issues to consider for such reflections.

3.1 Why do you want to learn more about service design?

First, we will encourage you to reflect on *why* you, your department or organisation want to learn more about service design. Service design can be used as an approach for addressing specific problems or challenges and provides mindsets, process models, methods and tools that can be helpful to guide processes in a specific project (see chapters 4 and 6 for outlines of methods and links to resources). Thus, one way of approaching service design is to use elements from the service design toolbox as a way of managing, structuring and carrying out a project.

Another way of applying service design is to make it an integral part of the way the service organisation works. This may imply that the user-centrism underpinning service design gets embedded in the organisational mindset, or organisational culture, and building and sustaining systems for continuously testing solutions and ensuring feedback from service users (for an example of an organisation that has worked with service design in this way, see Kurtmollaiev et al., 2018. See also description of the case from the Norwegian Labour and welfare services shown in Textbox 3).

Such transformations take time, and require strategic decisions regarding recruitment, training and transformational work at different levels in the organisation. Thus, if methods and tools of service design are new to an organisation, working with a service design approach in a specific project can be a good way to start. Working with service design and service designers in demarcated projects may be an entrance to learning and to build experience, which may give a foundation for embedding service design as an organisational mindset in a more long-term perspective. In our case study of the Norwegian Labour and Welfare Services, we found that the organisation started to work with service design in specific projects but gradually embedded service design as an ingrained part of the organisational mindset and practices (for more on this case, see Textbox 3).

Textbox 3: Service design in the Norwegian Labour and Welfare Services (extract from case study)

The Norwegian Labour and Welfare Services (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 and a partnership with the municipal social services. 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 organisation 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 frontline 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.

One of the central solutions that emerged from the simplified follow-up project was a digital activity plan with an integrated chat for direct communication between users and councillors. Interviews with frontline employees (9) showed that they found the introduction of the digital activity plan and the new chat function a considerable improvement in the follow-up work. It transformed central elements in the interactions between frontline employees and users.

Subsequent to this specific project, the agency has increasingly adopted design approaches to develop more holistic and user-centred services. The organisation has built up a comprehensive design department and hired service designers, product designers and social anthropologists as design researchers who work together with programmers and legal experts. The integration of design approaches in the organisation has emerged alongside shifts towards more agile methods for system development and organisational learning.
For more about this case, see https://www.co-val.eu/case-studies/blog/project/simplified-follow-up/ and the full case report (D4.2) available at: https://www.co-val.eu/public-deliverables/

3.2 How to work with service design?

Textbooks and practical guides on service design often present process models consisting of sequential steps that can be used to guide the design process. In this chapter, we present some process models that are often used, and we reflect on their role in planning and structuring service design processes.

3.2.1 Process models

A well-known process model is the 'double diamond' developed by the British design council. This model consists of four main phases: 1) Discover, 2) Define, 3) Develop and 4) Deliver (see for instance https://www.designcouncil.org.uk/resources/guide/design-methods-developing-services).

Visualising the design process as interconnecting diamonds highlights that the process entails phases of opening, expanding and exploring, followed by closing and defining phases marked by decision making. Moreover, one could say that the first diamond set the stage for explorations of how to 'solve

the right problem' while the second is about 'solving the problem right'. More specifically, the first phase, discover, is about identifying problems or needs and about demarcating the space for possible solutions to gather information and knowledge, often referred to as *insights.* The next phase, define, entails systematisation and analyses of the insights and ideas generated in the discovering phase. In this part of the process, the many different ways of approaching problems or needs, explored in the first phase, will be reduced to a more limited set of options. In this phase, the fundamental problem or challenge addressed in the design process is clearly defined and stated in a *design brief*, which describes the goals, budgets, timelines, etc. for the design process (see the next chapter on more practical details on how to develop a design brief). The third phase, develop, involves the iterative development of solutions based on the design brief, including prototyping and continuous testing with users. The final phase, deliver, involves the actual launch or implementation of new solutions.

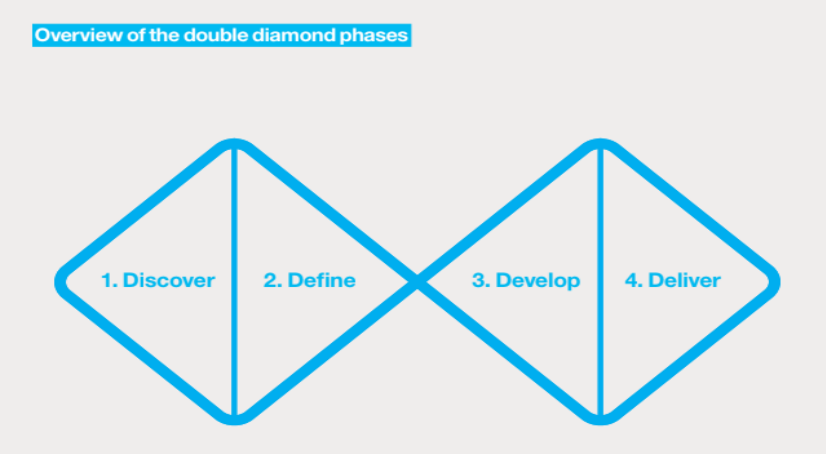

Figure 1: The double diamond. Source: British Design Council. https://www.designcouncil.org.uk/resources/guide/design-methods-developing-services

A Norwegian government program, #Stimulab, which seeks to stimulate the use of design methods to support public sector innovation, has advanced this double diamond into a triple diamond process model (a visualisation can be found here: https://www.digdir.no/innovasjon/stimulabs-metode-den-triple-diamanten/788).

3.2.2 Diagnosing and framing

The third element of this triple model is an extra phase for 'diagnosing', based on a reasoning that it is important to spend prolonged time on understanding and 'diagnosing' the problem at hand.

Other design process models dig even deeper into this 'diagnosing' aspect of the design process. Dorst (2015), for instance, has developed a frame creation model consisting of nine steps (see also Schamineé, 2018 and Lee, 2020). Frame or frame creation refers to the shift of perspective or approach to a given problem. Exploring and applying a new frame is presented as key for innovation, which entails development and implementation of new creations. The nine steps proposed as means for digging deeper into a problem through new frame creation are the following (Doorst, 2015, p. 26):

1) Archaeology: Analysing the history of the problem and the initial problem formulation.
2) Paradox: Analysing the problem situation: What makes this hard?
3) Context: Analysing the inner circle of stakeholders
4) Field: Exploring the broader field
5) Themes: Investigating the themes that emerge in the broader field
6) Frames: Identifying patterns between themes to create frames
7) Futures: Exploring the possible outcomes and value propositions for various stakeholders
8) Transformation: Investigating changes in stakeholders' strategies and practices required for implementation
9) Integration: Drawing lessons from the new approach and identifying new opportunities within the new network.

3.2.3 Reflections on process models

We believe that the different process models for service design can be helpful for structuring and guiding the design process. However, while these models may be suitable for clearly demarcated projects, addressing specific problems that can be relatively clearly defined, many projects in the public service context are complex and intertwined with processes and decisions at other government levels or in other organisations and agencies (see for instance our example from the Scottish social security services in Textbox 1 and the dementia case example presented in Textbox 2).

Thus, the process models for service design, with clearly defined phases appearing in sequence, will often not be applicable in comprehensive and complex projects. The process models can still be helpful as a kind of mental map and as a starting point for reflections on how to plan, organise and structure a design process. Indeed, the process models can be helpful because they highlight key elements to include in a design process, even though these elements may not appear in a neat sequence in the way they appear in the simplified process models. Particularly, the models can be helpful because they underscore the importance of keeping processes open and explorative and of avoiding jumping to solutions too fast. The importance of working iteratively and to include phases of prototyping, testing and learning are important elements highlighted in the models. Moreover, shifting between open and explorative phases and closing and defining phases is important in order to move projects forward.

Still, a problem with displaying the design process as consisting of phases appearing in sequence is the risk that the work with understanding the problem and working with 'insights' is confined to an initial stage. Learning and insight work should rather be perceived as integral throughout the design process. Starting work with ideation and proposals for specific solutions in the form of a prototype and accompanied testing may reveal the need for rethinking the problem, and the need for new kinds of insight work. Similarly, keeping prototyping and testing as activities happening towards the end of the project, as in the diamond models, may also be misguiding because prototyping and testing at an early stage can also be a way of working with understanding the problem addressed. One of the service designers interviewed in our study highlights that this iterative insight work is particularly important: 'It is not from the current situation we gain insight, meeting people that can tell us about how things are currently working. We gain a lot of insight through iterative insights.' This implies that the process models, such as the double and triple diamond, lay out a process that is too linear, which may undermine the iterative foundations of service design (see for instance Schneider et al., 2010).

The purpose of reflecting on this is to encourage those working with service design in public services to draw inspiration from service design process models, but also to adapt and adjust the model to the organisational context. We argue that elements from the process models are important ingredients in a design process, but they may not be structured in sequence in the way they are displayed in models such as the double and triple diamond. Following the process models in a strictly structured manner may imply that it becomes a straitjacket that limits rather than supports the process. It can be important to keep in mind that design and innovation processes tend to follow unpredictable paths, but this does not mean that a plan or a process model is unnecessary (Van de Ven, 1999). Hence, agreeing on a plan for the process, but also discussing how to relate to the plan and the possibilities for deviation, is a wise way of getting started.

The need for adapting process models to the organisational context is evident in most of the cases we have studied. One example is the case of efforts to develop a car sharing service in the outskirts of the city of Lille, France. In this case, the service was proposed as a potential solution to traffic jams and environmental problems linked to the commute to and from the city centre. To some extent, the problem was explored and defined and a solution was proposed (steps 1 and 2), and the project team was planning to move on to develop concrete solutions for the car sharing system (step 3). However, they found that the potential users (citizens commuting) were for different reasons not prepared to embrace a car sharing system, which brought the project team back to the stage of exploration instead (step 1). Allowing this kind of flexibility can be vital for the design process. For more details on this case, see Textbox 4.

Textbox 4: Designing a new car sharing service in France (extract from case study)

The inhabitants of Sailly, represented by the citizen organisation 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.

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 specialising in car-sharing concepts, it was determined that these services are often inefficient and unsustainable, and it was decided that an application would 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 design approaches used in the case were mainly centred on the organisation 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 realising the car-sharing initiative.

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 mobilise 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 case clearly illustrates the importance of working thoroughly with exploring and understanding the problem addressed, and it shows how participatory design approaches can be helpful in this respect. Without first trying to understand the attitudes of the citizens towards car sharing, there is a risk that the organisation would have invested in a solution (a digital application) that would not be used. Instead, they worked at understanding the problem in depth and continued exploring how to bring about cultural change regarding citizens' perceptions of and sentiments towards car sharing. This brings design processes beyond the design of concrete solutions and the involvement of the end user in the ideation and testing of prototypes. The design process starts instead with questioning whether a web-based application for car sharing is an answer to the problem addressed in the first place. This does not mean that the car sharing system will not be eventually developed and useful, but the case shows the need for starting with a different end than with the technological process.

For more on this case, see also the full case study report (D4.2) available at: https://www.co-val.eu/public-deliverables/

3.3 Who should drive service design processes?

Finally, a third issue to address is who should be involved and responsible for driving service design processes. This raises questions of whether working with service design requires involvement of professional designers trained in service design, or whether the service design 'toolkit' is accessible for others without a professional background in design. Service design brings design into a new area of development and creation in an organisation, beyond visual and material creations, and into arenas of institutional development and strategic decision making (Junginger & Sangiorgi, 2011). This also makes service design potentially controversial because it implies that designers enter areas that have been occupied by others and it may imply that other professions and forms of competence get side-lined. In a public service context, the introduction of service design may involve controversies particularly since strategic decision making is entangled with political processes and with legal issues. Thus, it is pertinent to understand the role of service design and service designers, and to reflect on who may occupy these roles.

Another issue to consider is whether to procure service design expertise from external firms or whether to develop service design competence inhouse. Decisions on this depend on the size of the organisation and on what kinds of services the organisation offers. Small organisations may not be able to develop comprehensive service design competence inhouse, and it may not be purposeful. However, there are also different ways of developing inhouse design competence; it can be through recruitment of professionally trained designers or it can be by training existing staff in service design methods through courses and shorter educational programs. As we show in this report, a range of resources are available through textbooks, manuals and online resources, which can be helpful for public service organisations that want to learn more about how to work with service design. Hybrid models can also be an option, where external consultants with professional design expertise are hired to provide guidance and help with how to work with service design, while managers and employees in the organisation are responsible for projects and learn through experience (this strategy was used in the work with the dementia village described in Textbox 2).

Developing knowledge and understanding of service design inhouse is important either way because procurement of service design requires an understanding of what it is. Gaining an understanding of service design is important to write good tenders, manage the design process and implement and sustain solutions developed through specific projects when external consultants withdraw. Since service design involves problem solving and innovation (see discussions above and in the previous chapter), writing good tenders can be difficult because the exact goals for the process cannot be decided beforehand. Allowing for open, explorative and truly innovative approaches requires that the aims for end results are kept relatively open. Answers or solutions to the problem addressed cannot be expected to be provided upfront. A service design process may take time, but this does not mean that it should not follow a clear budget and be subjected to monitoring. Hence, there is a series of issues to consider and many balancing acts involved in the procurement of service design. This is important to reflect on before working on tenders to avoid costly investments in consultancy services that may give meagre results and impacts.

For further reading on this, see this article written by the design agency Snook (https://wearesnook.com/how-to-procure-service-design/). Guidance on how to commission service

design in public organisations is also provided in Chapter 2 in this guide (https://www.servicedesignmaster.com/wordpress/wp-content/uploads/2016/10/Public-Service-Design.-A-guide-for-the-application-of-service-design-in-public-organisations..pdf).

For public sector organisations that seek to develop design competence inhouse, this can also be organised and structured in different ways. One model is to locate work on design in design labs, also referred to as 'reinvention labs' or 'innovation labs'. Labs are meant to provide permanent and cross-cutting structures that seek to 'temporarily unfreeze organisational embedded practice' (Carstensen & Bason, 2012, p. 7). As such, the creation of design labs can be an effective way of ensuring a physical space that differs from conventional office spaces and meeting rooms, and may support new forms of collaborative and creative work. It may also provide access to a 'neutral' zone in an organisation that allows for experimentation and learning outside conventional control lines and departmental and professional boundaries. On the other hand, there is a risk that such design or innovation labs reinforce tendencies of keeping innovation and design activities detached from daily practices in the organisation. Distributed creativity and innovation capacity throughout the organisation, among managers and frontline staff who interact with service users, may then become lost. Thus, as an alternative to innovation and design labs created as concrete, physical and confined spaces, the notion of living labs are gaining increasing attention in the public sector. Living labs are a multifaceted phenomenon, understood as network structures and 'semi-realistic' environments, or realistic environments of innovation (Fuglsang & Hansen, 2019).

For more information and examples on the organisation of design through lab structures see Chapter 3 in the UNDP's guide on design thinking for public service excellence (https://www.undp.org/content/undp/en/home/librarypage/capacity-building/global-centre-for-public-service-excellence/DesignThinking.html). See also publications on living labs from the Co-VAL project, such as reports D5.1, D5.2 and D5.3 (https://www.co-val.eu/public-deliverables/).

4 Methods and Tools

Service design tools and methods are available in abundance in written or online materials, guidelines, toolkits, templates and such collections. Some of them target an audience who are interested in developing public services; others provide general advice for service design(ers). Our report aims to provide a selection of tools that can be used as a 'starting toolkit' for a public sector organisation willing to engage itself in service design. While a professional service design consultant can, of course, provide valuable advice about how to start, these tools can also be used in a 'do-it-yourself' way. This selection of tools is accompanied by short descriptions about what each tool is useful for as well as a selection of links to online resources where further details, guidance, templates or cases can be found.

Tools have been grouped into three categories. These categories roughly correspond to various stages of a service design project; however, it should be noted that these projects tend to be complex and iterative in practice. We listed each tool under the title where it is mostly used (or first used) during a project. However, flexible application is always possible. For example, we did not separate the first two stages of the double diamond model; thus the 'Discover and define' category includes tools that can be used for beginning research in a service area, analysing service provision at a macrocosmic or microcosmic view, generating ideas about problem definition or ways of improvement as well as systematisation of information gathered to support decisions about how to proceed in the project. The 'Develop' category refers to those tools that are used for testing and refining 'almost ready' solutions in practice, while the 'Deliver' category introduces tools that can support implementation.

4.1 Discover and define

4.1.1 Design brief

To lead a successful service design project, it is essential to pose the right questions and define all the essential aspects and parameters of the work. A well written design brief can therefore point our initiative in the right direction and help us to use our resources economically. In a design brief, the service owner (maybe with the with help of a service designer) defines the central problem that has to be addressed, identifies service users, sets goals and describes time and budget boundaries, constraints and risks and expected outcomes. A design brief is usually informed by initial research about the current working of the service (if the project focuses on existing service) or the prospective service users (if we are designing a new service).

Templates and examples online:

- Description: Design Council: Design brief (p. 18) https://www.designcouncil.org.uk/sites/default/files/asset/document/DesignCouncil_Design%20methods%20for%20developing%20services.pdf
- Description: Usability: Develop a project plan https://www.usability.gov/how-to-and-tools/methods/develop-plan.html
- Template: Service Design Toolkit: Context and objectives https://www.servicedesigntoolkit.org/assets2013/posters/EN/F1-context%20&%20objective-A1.pdf

- Template: Service Design Toolkit: Research questions https://www.servicedesigntoolkit.org/assets2013/posters/EN/F1-research%20questions-A1.pdf
- Template for 'The development challenge': JAMK Service Design Toolkit (p. 5) https://web.archive.org/web/20160804093222/http://sdt.fi/materiaali/ServiceDesignToolkit_english.pdf
- Example: Briefing for Service Design Projects: Case study of the Black Diamond, Copenhagen https://projekter.aau.dk/projekter/files/239530729/Thesis_Process_Report_Final.pdf

4.1.2 User interviews

User interviews are quick and easy ways to get to know our service users and their experiences better. These interviews can target several areas of research (user background, user experience, user opinion, service usability, service process, setting, etc.), be applied in more design phases (before design briefing, to enrich research as an input for ideation, prototype or service testing) and be carried out within the service context or separately. User interviews are highly adaptable for the project's purposes; thus, they can and should be well informed by the set research goals.

Templates and examples online:

- Description: TISDD Service Design Library: Guide to contextual interviews https://www.thisisservicedesigndoing.com/methods/contextual-interview
- Description: TISDD Service Design Library: Guide to in-depth interviews https://www.thisisservicedesigndoing.com/methods/in-depth-interview
- Description: Writing discussion guides https://medium.com/design-research-methods/tips-for-writing-a-discussion-guide-c08459131a54
- Description of individual interview: Design Kit https://www.designkit.org/methods/interview
- Description of group Interview: Design Kit https://www.designkit.org/methods/group-interview
- Tips for conducting interviews
    - https://www.thisisservicedesigndoing.com/methods/interview-guidelines
    - https://www.nngroup.com/articles/user-interviews/
    - https://uxdesign.cc/how-to-conduct-user-interviews-fe4b8c34b0b7

4.1.3 Observation/User shadowing

Inquiry is not enough to understand certain user attitudes, behaviours and needs, as these are not always clear to the users either. In such cases, observation or user shadowing can be an excellent method to gain genuine insights. Observation involves presence in the users' life or interaction with our service and documenting it in some way (e.g., notes, photos). Depending on the target level of understanding or empathy, we can observe as an outsider or we can immerse ourselves in our users' reality by participating in their activities.

Templates and examples online:

- Description: Design Council: User shadowing (p. 15) https://www.designcouncil.org.uk/sites/default/files/asset/document/DesignCouncil_Design%20methods%20for%20developing%20services.pdf
- Description: TISDD Service Design Library: Non-participant observation https://www.thisisservicedesigndoing.com/methods/non-participant-observation
- Description: TISDD Service Design Library: Participant observation https://www.thisisservicedesigndoing.com/methods/participant-observation
- Description: Observation notes https://servicedesigntools.org/tools/observation-notes
- Description: Guide for user observation
    - https://courses.cs.washington.edu/courses/cse440/12au/readings_files/gomoll.html
    - https://www.interaction-design.org/literature/article/how-to-conduct-user-observations

4.1.4 Personas

Clients are not alike. Their motivations, needs and knowledge are different, and we must take these differences into consideration when we design a service to meet their expectations. Personas, with brief and lively descriptions, represent our most important client groups. Prepare 4–6 cards, describe the characters by using categories relevant to the service (e.g., age, sex, occupation, education, motivation) and make it lively with a picture, a quote and a background story. You can use these personas later to see the service through their eyes, evaluate your ideas of how they think or use the prototyped service they would most likely choose.

Templates and examples online:

- Description: TISDD Service Design Library: Step-by-step guide to persona creation https://www.thisisservicedesigndoing.com/methods/creating-personas-2
- Description: TISDD Service Design Library: Step-by-step guide to persona co-creation https://www.thisisservicedesigndoing.com/methods/creating-personas
- Description and template: Service Design Tools https://servicedesigntools.org/tools/personas
- Sample: Service Design Toolkit: Persona dimensions https://www.servicedesigntoolkit.org/assets2013/posters/EN/P3-persona%20dimensions-A1.pdf
- Sample: Service Design Toolkit: Persona profile: https://www.servicedesigntoolkit.org/assets2013/posters/EN/P3-persona-A3.pdf
- Example: Short personas at the U.S. National Archives and Records Administration https://www.archives.gov/files/digitalstrategy/persona-composite.pdf
- Example: Nurse personas https://pageandpage.uk.com/Clinical-Nurse-Specialist-Personas.pdf

4.1.5 User journey mapping

Visualising the service process from the perspective of the service user helps to gain an overview about the service process in its settings/platforms, to analyse touchpoints and connected emotional

responses, even certain roadblocks on the map. These maps can be designed to synthesise research insights and can be created as a part of the ideation process as well.

Templates and examples online:

- Description and template: Service Design Toolkit https://servicedesigntools.org/tools/journey-map
- Description: TISDD Service Design Library: Mapping
    - Mapping Journeys: https://www.thisisservicedesigndoing.com/methods/mapping-journeys
    - Co-creating journey maps: https://www.thisisservicedesigndoing.com/methods/journey-mapping
- Description: Design Council: User Journey mapping (p. 11) https://www.designcouncil.org.uk/sites/default/files/asset/document/DesignCouncil_Design%20methods%20for%20developing%20services.pdf
- Description: Design Kit: Journey map (as ideation tool) https://www.designkit.org/methods/journey-map
- Example: Customer journey map (Crealo design) https://crealodesign.com/portfolio/wcig-customer-journey/

4.1.6 Lotus blossom

The lotus blossom method is highly effective if you want to broaden the horizons of thinking and generate ideas. It can be used for creating and exploring several ideas or we can apply it to seek inspiration and collect good practices for our service.

Templates and examples online:

- Description: UX Collective https://uxdesign.cc/the-lotus-blossom-method-ideation-on-steroids-100adb26a0c2
- Description: Design Method Toolkit https://toolkits.dss.cloud/design/method-card/lotus-blossom-2/
- Template: Service Design Toolkit (for collecting inspiration and good practices) https://www.servicedesigntoolkit.org/assets2013/posters/EN/I5-lotus%20blossom-A0.pdf

4.1.7 Brainwriting

If you need to generate ideas, but the settings or the context is not fit for a loud brainstorming session, or you want to provide a calm individual thinking environment, brainwriting can be a good choice of service design tools. It not only provides the opportunity to generate ideas, but others can reflect and add to these, providing a rich written output.

Templates and examples online:

- Description: TISDD Service Design Library: Brainwriting https://www.thisisservicedesigndoing.com/methods/brainwriting
- Description: Design Method Toolkit https://toolkits.dss.cloud/design/method-card/brain-writing-2/
- Description: Mindtools

https://www.mindtools.com/pages/article/newct_86.htm

4.1.8 Focus group

If you wish to gain an overview of opinions, perceptions, attitudes and ongoing discussions about your service, focus group interview is a relevant tool. By inviting a strategically sampled group of people and asking them questions on specific services, issues, etc., you can learn targeted information about how you need to improve your services. You will just need an informal setting (e.g., meeting room) where you can observe the discussion, make notes or record the event.

Templates and examples online:

- Description: TISDD Service Design Library: Focus groups https://www.thisisservicedesigndoing.com/methods/focus-groups
- Description: Usability: Focus groups https://www.usability.gov/how-to-and-tools/methods/focus-groups.html
- Description: Design Kit: Group interview https://www.designkit.org/methods/group-interview
- Description: Design method toolkit: Focus groups https://toolkits.dss.cloud/design/method-card/focus-group-2/

4.1.9 User diaries

Working with user diaries, you can collect insights by asking research participants to monitor and record specific information about their daily life or certain experiences connected to your service. These diaries can have many formats (traditional diary, log, photo, video, etc.). They can be analogue or digital. Regardless, they can provide a genuine in-depth understanding of your customers.

Templates and examples online:

- Description: Design methods for developing services, Design Council: User diary (p. 13) https://www.designcouncil.org.uk/sites/default/files/asset/document/Design%20methods%20for%20developing%20services.pdf
- Description: Service design tools: Diary study https://servicedesigntools.org/tools/diary-study
- Description: Design method toolkit: Mobile diary study https://toolkits.dss.cloud/design/method-card/mobile-diary-study-2/

4.1.10 Stakeholder/system mapping

Mapping your stakeholders or the ecosystem of your service can support the introduction of the service or service innovation immensely by clarifying their roles and your organisation's relationships with them. Traditionally, stakeholders are analysed along two dimensions: level of influence and level of interest or engagement. The positions of the given stakeholders in this matrix help to determine how to deal with them in the different stages of your project.

Templates and examples online:

- Description: TISDD Service Design Library: Co-creating system maps https://www.thisisservicedesigndoing.com/methods/system-mapping

- Description: Service design tools: Stakeholders map https://servicedesigntools.org/tools/stakeholders-map
- Description: Design method toolkit: Actors map https://toolkits.dss.cloud/design/method-card/actors-map/
- Description: Hyper Island: Stakeholder analysis https://toolbox.hyperisland.com/stakeholder-analysis
- Description and template: Groupmap: stakeholder analysis https://www.groupmap.com/portfolio/stakeholder-analysis/
- Description and template: Mindtools: stakeholder analysis https://www.mindtools.com/pages/article/newPPM_07.htm
- Example: Ecosystem map: Refugees in NYC https://elanawolpert.home.blog/2019/02/11/ecosystem-map/

4.1.11 Service safari/Autoethnography

If you need first-hand personal experience and understanding of your service, you can go on a 'safari'. By behaving like a service user and going through the service process (your own, or your competitor's) you can observe your own experience with it and how other users experience the same service and service context. You can record your impressions via field notes, sketches, audio, video or photos as well.

Templates and examples online:

- Description: Design methods for developing services, Design Council: Service safari (p. 14) https://www.designcouncil.org.uk/sites/default/files/asset/document/Design%20methods%20for%20developing%20services.pdf
- Description: TISDD Service Design Library: Autoethnography https://www.thisisservicedesigndoing.com/methods/autoethnography
- Description: Service design tools: Service safari https://servicedesigntools.org/tools/service-safari
- Description: Design method toolkit: Photo safari https://toolkits.dss.cloud/design/method-card/photo-safari/

4.1.12 User stories

Writing user stories helps to articulate user needs in a focused manner. Stories describe what service users want, which has to be translated into your service. These stories can be fictional, but they are based on research data and the previously created personas. To support the ideation process, you can use printed templates to form the stories.

Templates and examples online:

- Description and template: TISDD Service Design Library: Writing user stories https://www.thisisservicedesigndoing.com/methods/writing-user-stories
- Description: Interaction Design Foundation: User stories https://www.interaction-design.org/literature/topics/user-stories

4.1.13 Mash-up

If you need unusual, unique, novel, out-of-the-box solutions, mash-ups can prove to be a great tool for this. After formulation of your service challenge, you pick two categories (e.g., service context); only one of them is connected to your service. You collect experiences or elements for both categories, then, randomising or choosing the most diverse ones, combine them. This gives you unexpected ideas and concepts that you can choose from to pursue further.

Templates and examples online:

- Description: Design Kit: Mash-up https://www.designkit.org/methods/mash-ups
- Description: Design method toolkit: Mash-up https://toolkits.dss.cloud/design/method-card/mash-up/
- Description: Hyper Island: Mash-up innovation https://toolbox.hyperisland.com/mash-up-innovation
- Description and templates: Ideo U: Mash-up https://www.ideou.com/pages/ideation-method-mash-up

4.1.14 Brainstorming

Do you need a lot of ideas quickly that you can use? Brainstorming provides a productive, non-judgmental, energising frame for this with the help of some simple rules. First, usually, participants collect their ideas individually, then sharing follows, where participants are encouraged to build on each other's thoughts. In brainstorming, there are no bad ideas! Finally, you can group the discussed options and chose the most promising ideas to work on next.

Templates and examples online:

- Description: Design methods for developing services, Design Council: Brainstorming (p. 17) https://www.designcouncil.org.uk/sites/default/files/asset/document/Design%20methods%20for%20developing%20services.pdf
- Description: TISDD Service Design Library: Brainstorming https://www.thisisservicedesigndoing.com/methods/brainstorming
- Description: Service design tools: Brainstorming https://servicedesigntools.org/tools/brainstorming
- Description: Design Kit: Brainstorm https://www.designkit.org/methods/brainstorm

4.1.15 Mindmap

Mindmaps are great tools to think, visualise and plan individually or as a team. They help to organise thoughts and ideas on a specific topic. These maps can contain words, pictures, icons or any kind of visual representations that are connected, grouped or otherwise organised around the problem or the phenomenon of investigation in the centre. Using online mind mapping tools can help you co-create these in real-time, even if your team is spread around the world, and to look at and easily modify these throughout the progress of your project.

Templates and examples online:

- Description: Service design tools: Mindmap https://servicedesigntools.org/tools/mindmap
- Tool: Miro https://miro.com/mind-map/
- Tool: Coggle https://coggle.it/

4.1.16 Evaluation matrix

The evaluation or decision matrix, also called idea portfolio, helps to prioritise the collected ideas and concepts of our ideation process by assessing them against the most relevant criteria. These criteria are specified by you, but usually contain two of the following: impact on customer experience, complexity/effort, added value, employee experience, feasibility, novelty and revenue potential. Each concept is evaluated and the top solutions for prototyping can be chosen.

Templates and examples online:

- Description: TISDD Service Design Library: Idea portfolio https://www.thisisservicedesigndoing.com/methods/idea-portfolio
- Description and template: Service design tools: Evaluation matrix https://servicedesigntools.org/tools/evaluation-matrix
- Description: Hyper Island toolbox: Impact/Effort matrix https://toolbox.hyperisland.com/impact-effort-matrix

4.2 Develop

4.2.1 User scenarios

Create a story for a client. Details about his or her specific situation may influence how he or she approaches the service. You might use personas to represent various types of clients. Describe in detail how your client would experience the service in the future if it was provided in an ideal way. The scenario is basically text-based, however, adding visualisation is also possible. Creating user scenarios contributes to empathising with clients' needs as well as to a shared understanding about which direction service development should go in.

Templates and examples online:

- Description: Service Design Toolkit https://servicedesigntools.org/tools/user-scenarios
- Description: Live Works Studio https://www.liveworkstudio.com/tools/service-scenarios/
- Description: usability.gov https://www.usability.gov/how-to-and-tools/methods/scenarios.html
- Description: Design methods for developing services, Design Council (p. 22) https://www.designcouncil.org.uk/sites/default/files/asset/document/Design%20methods%20for%20developing%20services.pdf

4.2.2 Role playing

If you already have some ideas in your mind, try them quickly. Let a team member hop into the role of the client, while others will act as service providers (or the technology in the background). But take the play seriously, even if acting out might feel a bit strange at first. Role playing might also use some rough prototypes. Be sure that there are team members who observe what happens so that they can reflect on how to improve your initial ideas. Or you can drop them early in the process, if they do not seem to work.

Templates and examples online:

- Description, case: Service Design Tools https://servicedesigntools.org/tools/role-playing
- Template for serious play: Service Design Toolkit www.servicedesigntoolkit.org/assets2013/posters/EN/S6-scenario-A3.pdf
- Investigative rehearsal: TISDD Service Design Library https://www.thisisservicedesigndoing.com/methods/investigative-rehearsal
- Rehearsing digital services: TISDD Service Design Library https://www.thisisservicedesigndoing.com/methods/rehearsing-digital-services
- Improvise to life: Design Thinking Bootleg (pp. 51–52.) https://dschool.stanford.edu/s/9wuqfxx68fy8xu67khdiliueusae4i
- Description: Designing for Public Services, IDEO-Nesta (p. 59) https://www.nesta.org.uk/toolkit/designing-for-public-services-a-practical-guide/

4.2.3 Rough prototyping

Use what's available (typically paper, cardboard) for creating a mock-up of the service delivery environment and test your ideas. Digital services can also be quickly prototyped: just draw some pictures of webpages or apps. Focus on touchpoints with clients. Creating the prototype together with team members will bring up lots of ideas, and when you are ready you can use the prototype for some roleplaying.

Templates and examples online:

- Description: Service Design Tools https://servicedesigntools.org/tools/rough-prototyping
- Description about cardboard prototyping: TISDD Service Design Library https://www.thisisservicedesigndoing.com/methods/cardboard-prototyping
- Description about 90-minute-prototype: Hyper Island https://toolbox.hyperisland.com/90-minute-prototypes
- Description about Experience prototyping: Design methods for developing services, Design Council (p. 20) https://www.designcouncil.org.uk/sites/default/files/asset/document/Design%20methods%20for%20developing%20services.pdf
- Template for drawing the first prototype: JAMK Service Design Toolkit (p. 16) https://web.archive.org/web/20160804093222/http://sdt.fi/materiaali/ServiceDesignToolkit_english.pdf

4.2.4 Service prototype

The plans for a nearly final service delivery process, with all the touchpoints, should be tested with users—as close to the real experience as possible. The service prototype covers the whole user journey, possibly with various scenarios, and with various personas. The service prototype is used to validate your design choices and refine the service experience where needed.

Templates and examples online:

- Description: Service Design Tools https://servicedesigntools.org/tools/service-prototype
- Template for test preparation: Service Design Toolkit https://servicedesigntools.org/tools/rough-prototyping
- Template for test evaluation: Service Design Toolkit www.servicedesigntoolkit.org/assets2013/posters/EN/P7-prototype-test-A3.pdf
- Description: usability.gov https://www.usability.gov/how-to-and-tools/methods/prototyping.html
- Description about scenes/props/roles tool: Design Thinking Bootleg (pp. 53–54) https://dschool.stanford.edu/s/9wuqfxx68fy8xu67khdiliueusae4i
- Description about how to test with users: Design Thinking Bootleg (pp. 55–56) https://dschool.stanford.edu/s/9wuqfxx68fy8xu67khdiliueusae4i
- Description: Design Thinking for Public Service Excellence, UNDP (p. 11) https://www.undp.org/content/dam/undp/library/capacity-development/English/Singapore%20Centre/GPCSE_Design%20Thinking.pdf
- Planning prototyping: HCD in Queensland Government toolkit (pp. 54–55) https://www.forgov.qld.gov.au/file/41611/download?token=FteT2kQW
- Description about how to prototype: Designing for Public Services, IDEO-Nesta (pp. 55–57) https://www.nesta.org.uk/toolkit/designing-for-public-services-a-practical-guide/
- Detailed guidance for prototyping: The Service Design Playbook, BC (pp. 64–75) https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/services-policies-for-government/service-experience-digital-delivery/service-design-playbook-beta.pdf

4.3 Deliver

4.3.1 Offering map

The offering map (or proposition map) is a structured way to describe what the service intends to deliver for clients. Although there is no standard structure for an offering map (thus it must be customised based on the service in question), it should summarise what elements the service consists of, how it is used or accessed and what benefits it brings to the user.

Templates and examples online:

- Description, template: Service Design Tools https://servicedesigntools.org/tools/offering-map
- Proposition template: The Social Design Methods Menu, Fieldstudio (pp. 31–32) www.lucykimbell.com/stuff/Fieldstudio_SocialDesignMethodsMenu.pdf

4.3.2 Service blueprint

A service blueprint is a visual representation of the service delivery process. The matrix format uses two dimensions: (1) steps or activities of the process as time passes and (2) roles, participants or actors. Both the current state and the future plans of the service delivery can be depicted. Special emphasis is given to touchpoints between the service provider and the client as well as the 'line of visibility' (between front-office and back-office activities). There might be variations in the service or different routes to be followed by different clients.

Templates and examples online:

- Description, template: Service Design Tools https://servicedesigntools.org/tools/service-blueprint
- Description: Live Works Studio https://www.liveworkstudio.com/tools/service-blueprints/
- Template: Service Design Toolkit www.servicedesigntoolkit.org/assets2013/posters/EN/F8-blueprint-A0.pdf
- Description: Design methods for developing services, Design Council (p. 19) https://www.designcouncil.org.uk/sites/default/files/asset/document/Design%20methods%20for%20developing%20services.pdf
- Description, template: The Social Design Methods Menu, Fieldstudio (pp. 43–44) www.lucykimbell.com/stuff/Fieldstudio_SocialDesignMethodsMenu.pdf
- Description, The Early Blueprint Workshop: The Service Design Playbook, BC (pp. 59–60) https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/services-policies-for-government/service-experience-digital-delivery/service-design-playbook-beta.pdf

4.3.3 Service roadmap

Think through how you plan to roll out the service. The first version, the minimum viable product (MVP), may be followed by further enhancements, and it is wise to plan them as much as you can.

Templates and examples online:

- Description: Service Design Tools https://servicedesigntools.org/tools/service-roadmap
- Template: Service Design Toolkit www.servicedesigntoolkit.org/assets2013/posters/EN/F8-roadmap-A0.pdf
- Description: Designing for Public Services, IDEO-Nesta (p. 73) https://www.nesta.org.uk/toolkit/designing-for-public-services-a-practical-guide/
- Suggestions about the 'Roadmap Phase': The Service Design Playbook, BC (pp. 76–79) https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/services-policies-for-government/service-experience-digital-delivery/service-design-playbook-beta.pdf

4.3.4 Value proposition canvas

Check if there is a good fit between your service offer and clients' expectations. Define why clients want to use the service, what problems they try to solve and what negative and positive aspects they face (pains and gains). The value proposition describes how the service aims to solve clients'

problems, ease their pains and provide them the gains they want. Remember, clients are not alike; the value proposition canvas can be different for various segments (or personas).

Templates and examples online:

- Description, template, case study: Service Design Tools https://servicedesigntools.org/tools/value-proposition-canvas
- Guidance: Digital Natives https://www.digitalnatives.hu/blog/value-proposition-canvas/

4.3.5 Success metrics

Define key performance indicators (KPIs) in advance so that you can always keep in sight what matters in the end and what you aim to achieve with the service design project. On the one hand, KPIs should refer to desired outcomes that are relevant to clients (like user satisfaction or total processing time). Public services often have a broader societal impact as well: even if these impacts are long-term and/or not measurable at the level of clients, it is still worth defining them so that you can demonstrate how service improvement benefits the society as a whole. On the other hand, KPIs for monitoring the service design process (like user involvement) can also be valuable; they help you in managing the service design project itself.

Templates and examples online:

- Description, case studies: Service Design Tools https://servicedesigntools.org/tools/success-metrics
- Description: HCD in Queensland Government toolkit (p. 49) https://www.forgov.qld.gov.au/file/41611/download?token=FteT2kQW
- Metrics Design Workshop: The Service Design Playbook, BC (pp. 50–51) https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/services-policies-for-government/service-experience-digital-delivery/service-design-playbook-beta.pdf
- Measuring Success (book chapter): The Journey to the Interface—How public service design can connect users to reform (pp. 64–79) https://lx.iriss.org.uk/sites/default/files/resources/The%20journey%20to%20the%20interface.pdf
- Regulatory impact analysis: Design Thinking for Public Service Excellence, UNDP (pp. 20–21) https://www.undp.org/content/dam/undp/library/capacity-development/English/Singapore%20Centre/GPCSE_Design%20Thinking.pdf
- Steps for measuring and evaluating, case study: Designing for Public Services, IDEO-Nesta (pp. 75–76) https://www.nesta.org.uk/toolkit/designing-for-public-services-a-practical-guide/

5 Potential Challenges

5.1 Complexity of the service context

The issue of complexity links to how public services are guided by conflicting demands and values (Røhnebæk & Breit, 2021). For instance, efforts to develop user-centred services may easily come into conflict with competing demands such as the need to adhere to bureaucratic principles and ensure due process and equality of treatment.

While service design is often presented as a way of addressing complexities, for instance as means for solving 'wicked problems', we propose that service design in the public sector requires the ability to understand and work with complexities and paradoxes embedded in the service context. Complexity, understood as competing demands and values, cannot be resolved, but understanding and even embracing the complexity can be vital for designing solutions suited to the context (see also Dorst, 2015).

Schaminée (2018) explores this insightfully, highlighting the need for bridging the skills and methods of designers with in-depth understandings of the complex context of public sector organisations. Without such bridging, there is a risk that the introduction of service design in public service settings will be conflicted and counterproductive. To achieve this bridging, there is a need for organisational translators who are 'bilingual' (Røvik, 2016), that is, persons that are familiar with the language and logic of designers and/or the design 'toolkit' *and* with the language and logics of the public service organisation. This links to our discussion on procurement of service design in Chapter 3, where we underlined that the public service organisation needs to have a good understanding of what service design involves and to work *with* the designers rather than outsourcing it in ways that makes the processes detached from the organisational context.

This kind of contextualisation of service design in the public sector context is important because service design originates from the private sector and tends to be anchored in a customer logic that is not necessarily compatible with public service provision to citizens (Alford, 2016). Private services strive to be as accessible as possible to the customers because companies want the costumer to buy and pay for the services, be loyal and come back for more. By developing services in ways that give the costumer a good *service experience*, the chances of getting loyal customers increase. This logic cannot be directly transferred to public services. In many public services, 'loyal' clients will instead imply that the service organisation is failing (Osborne, 2017).

For instance, social services are meant to give temporary benefits to clients and provide support that will enable people in a vulnerable life situation to become self-reliant. Thus, the aim is not to develop a service experience that attracts clients to 'come back for more', but to create a service experience that supports clients in managing a difficult life situation and to eventually tackle life without support from the social service system. So, while private services strive to become indispensable to the costumer, public services strive in some instances to be dispensable or unneeded.

In our case study of the Norwegian Labour and Welfare Services, we encountered stories of how designers who mainly had experience from the private sector had trouble with fully grasping these aspects of public services. One of the informants in the case emphasised the importance of taking into consideration the many contextual aspects of public services in design processes: 'It's about seeing all these contextual conditions; like law and legislation, boundaries, budgets, etc.' Sometimes, it was further argued, it may be important to balance the aim of developing good services with efforts to do the opposite: 'We should sometimes design bad services because we may not want people to have it […] but there has been a lot of conflicts around these things.'

Complexity also has to do with scale and with how different service processes are intertwined, in that making changes in one area often affects or is affected by other, interrelated processes. This was another issue thematised in the case of the Norwegian Labour and Welfare Services, where informants reflected on how efforts to address one 'pain point' in the service process linked to other areas that could be neglected (see also Textbox 3 regarding this case). One informant explained:

> *So, what are you trying to solve? Some objectives are defined, and they tend to be linked to one specific pain point. But if you have ten pain points in a user journey, which one do you prioritize the most? And if you, like us, work in many small teams, making different priorities—then well… these are the kinds of things we get into.*

These challenges of complexity, linked to the intertwining of services and pain points, also surfaced in our case study of efforts to redesign services in a British county council. Service design in this case had a positive impact on parts of the services, but changes made in one area had impact on other parts of the services in unintended ways (see Textbox 5 for more details on this case).

Textbox 5: Redesigns in a County Council in the UK (extract from case study)

One of our service design case studies examined the process of redesigning services of a Borough Council located in the southeast of England. A consultancy organisation was contracted to undertake the service design work, a core element of which was digitalisation. 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 the case studies, these had been subject to the service design process.

Those involved in the project 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 organising 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.

However, challenges of service design were also identified in this case. One central challenge was related to how the redesign of services in certain areas unintentionally affected other interconnected services. This shows how a microcosmic 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 organisation. 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 organisation should have been involved.

See also: https://www.co-val.eu/case-studies/blog/project/re-design-of-council-services/ and the full case study report (D4.2) available at: https://www.co-val.eu/public-deliverables/

Overall, we propose that complexity of the service context, understood as competing values and demands and as the intertwining of interrelated processes and problems, as well as analysing and understanding the prevailing complexities of a given context, can be an important starting point for service design processes.

5.2 Private versus public value

Complexity of the service context can be linked to how public services are guided by competing demands and underlying value conflicts as outlined above. The research literature discusses how public services are underpinned by a range of conflicts between competing public values (Jørgensen &

Bozeman, 2007; van der Wal et al., 2011), and it addresses how public service organisations find ways to deal with such value conflicts through diverse coping strategies (Thacher & Rein, 2004). We argued that service design in public service settings needs to consider and make sense of conflicting public values as a starting point for design processes.

However, working with service design in public services also requires the ability to reflect on the difference between designing solutions that aim to enhance private value for individual citizens (private value) and designing solutions that create value for a collective citizenry (public value). Alford (2016) argues that when ideas and methods originating from the private sector are transferred to the public sector, there is a risk that this dimension of *public value* creation gets lost. He argues that an accentuated focus on user-centrism runs the risk of neglecting this 'publicness' of public services.

The interests of individuals and the collective citizenry can coincide in many cases, but there are many examples of tensions between individual and collective values. This can be seen in typical controversies around how to develop fair and reasonable social security systems. Tensions typically arise between those that assess such systems from the perspective of the users, the recipients of social security, and those that place emphasis on the collective of citizens that contribute the funding of such systems by paying tax. There is no easy way of agreeing on how to develop systems for redistributing the collective resources that social security represents. Such a system needs to consider what feels 'fair', reasonable and effective to those in need of social security *and* to the collective of citizens contributing to sustain the system (and who potentially may need social security at some point).

Social security is also a clear example of how public service provision is bound by limited (collective) resources. This has implications for the user-centrism underpinning service design; placing more emphasis on individual users and tailoring services to their needs can be resource-intensive. Prioritising individuals may imply that others in the whole group of services users are neglected. Lipsky refers to this as 'creaming' or 'cherry picking' (Lipsky, 1980). This implies that frontline employees in public services need to make tough choices due to limited resources and may end up attending to cases that are easy to handle rather than the more complex and demanding cases. The result can be that the services are perceived as working well from individual perspectives but not for collectives of users. Thus, reflecting on such tensions between private and public value helps illuminate the complexity involved in designing contentious services, such as with the case of designing new social security services in Scotland (see Textbox 1).

However, tensions between public and private value can also arise in less complex and contentious service settings. When inviting individuals to provide ideas and suggestions for new designs and solutions, there is always a risk that the ideas resonate to the individuals participating in a design process, while collectives of citizens may not agree that the new solutions bring *public value.* For instance, in one of our cases based on the design of new library services in a rural area in France, the designer involved contemplated how their introduction of new elements to the library could evoke scepticism among the collective of citizens (for elaborations on this case, see Textbox 6). The library was designed as a media library, with a separate room dedicated to video games. This was considered as an innovation at that time, because it brought a form of 'sub-culture' desired by young people into

a place usually dedicated to 'legitimate culture' promoted by part of the staff and some elected officials of the municipality. The designer explained:

> *We were wondering about video games. In 2011, video games began to be (a little) integrated into some media libraries, it began to be considered as a cultural medium to which we attached a little importance, so we wondered: 'In Lezoux, will they take it well if we put a collection of video games, won't it shock?'*

Textbox 6: Designing a mediatheque of Lezoux in France (extract from case study)

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'. Before the creation of this mediatheque, the territory of the community of communes was endowed with small old libraries, in 12 communes out of 14, where the loan service was assured by volunteers. A new population was arriving to the territory with their children, but it lacked a modern library able to respond to different needs.

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 realised, 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 stakeholders. 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 specialising in questions of third digital places. The aim of the fieldwork was first to understand the territory, context and needs, and second to mobilise the engagement of citizens through different channels.

The design processes resulted in a number of innovative elements: 1) a 'mini fab lab' with access to a 3D printer; 2) a mix of services—the 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 objective 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'.

Overall, 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 kinds of social services to the local community.

See also the full case study report (D4.2) at: https://www.co-val.eu/public-deliverables/#

5.3 Practical and ethical problems of involvement: Where, who and how to involve?

Service design advocates the involvement of users and other stakeholders to spur creativity and to ensure that those using the services have a say in how they are designed and developed. While this reasoning may be easy to follow, it is not necessarily easy to make space for comprehensive involvement processes. Involvement requires access to physical space, and it requires space in terms of resources such as time, money and people. As shown in the previous chapter, there are many methods and tools available to facilitate and enable involvement, but explorations and reflections on dilemmas and barriers regarding realisation of participation and involvement in practice are relatively scarce. Shedding light on these challenges, and exploring ways to work around them, can be important for realising the ideals of service design in practice.

There are many different reasons as to why involvement processes in public sector services can be difficult. There has been limited attention and discussion on how public service organisations are not always providing services that are desired among service recipients. Indeed, public services can also be coercive, and many public service organisations are set to impose legal obligations on their service users. Thus, public service organisations are in some cases providing services to 'unwilling' or 'coerced' service users (Alford, 2016; Osborne, 2018). Obvious examples would be prison services; it could also be child protection services or the use of coercion in psychiatric care. It could also be services to elderly where the family may find that the person needs help or care, but the person in question may not agree. Similar examples can be treatment services to persons engaged in risky use of substances. There are also several public services that contain elements of coercion. For instance, within social security, recipients may be obliged to participate in activation programs or different forms of training to prepare for employment.

These aspects of coercion in public services may challenge the assumptions that public services could and should be cocreated with service users, which is a central premise of service design and interlinked service management theories. How can services be cocreated with users if the users do not want the services in the first place? Recruiting participants to take part in service design can obviously be challenging. Moreover, within services involving coercion it may be particularly important to balance inputs and ideas from service users with experiences and knowledge of professionals. Imagine a service that imposes coercion and control on users, such as child protection, which can be resented by parents but still perceived as necessary from the perspective of children and/or from a care professional perspective.

However, these predicaments related to coercion do not mean that service design principles or methods are inapplicable or unsuited to such service contexts. On the contrary, applying a new framing (Dorst, 2015), shifting between perspectives of various stakeholders and mapping and interpreting experiences with service processes from different perspectives can be particularly important in services that involve coercion. Still, working with service design in these contexts requires precautions, heightened sensitivity and more careful approaches. Understanding the complexity of the given service context becomes especially important (see also 5.1) and building trust and working with professional employees *and* service users becomes highly pertinent (see more on the relations between building trust and challenging existing systems through service design in the next subsection, 5.4).

It should also be noted that public services also provide services to vulnerable user groups, and the challenges of working with the design of coercive services is to some extent connected with the challenges of working with design of services to vulnerable users. There is no easy way to define vulnerability, but it relates to different forms and degrees of powerlessness that citizens may face when interacting with public service systems (Røhnebæk & Bjerck, 2021). Vulnerability can be linked to health conditions, language or cultural barriers, skills and more. As with coercive services, designing services with vulnerable users also requires sensitivity and precautions when planning and preparing for involvement (see for instance ideas on how to work with 'sensitising' in Dietrich et al., 2017). It also involves the ability to balance inputs from service users with knowledge and experience of professionals and professional employees.

In severe forms of vulnerability, as with service users with cognitive impairments that may be unable to give informed consent, working with involvement become particularly challenging. Still, we found interesting examples of how service design methods can be fruitful and applicable also in contexts where service users suffer from cognitive impairment (see Textbox 2). Even so, service design may then play by somewhat different rules, and service design methods may require adaptations through practical explorations. Designing services targeting vulnerable users will also require combinations of involvement of end users and next of kin or family carers. They are important to involve because they tend to service users themselves in some sense, but they can also be *representing* the voice of the end users. As such, it can be helpful to find models for representative co-production when working with vulnerable groups (Eriksson, 2019; Røhnebæk & Bjerck, 2021). However, this is not without challenges since it can be difficult to ensure that representatives do in fact voice the needs and perspectives of end users.

There are also other, more concrete challenges related to involvement, such as tight timelines and limited resources to work with involvement. This implies that service design processes ultimately may not involve end users as actively and comprehensively as is advocated in theory. For instance, in our case study of redesigns in a UK County Council (see Textbox 5), the service design process did not directly involve end users, and this was highlighted as a central weakness of the project. Various respondents (managers and employees) felt that users should have been involved more and that they should be approached to find out their perceptions of the new services. However, others felt that it was not possible to involve users, given their lack of knowledge about back-end systems, and that their inclusion would have been too costly.

In the case study of service design in the Norwegian employment and welfare services, the respondents also reflected on how recruiting participants in design was becoming increasingly difficult due to the increased focus on privacy issues and data protection. In the past, users had been recruited through contacts at the local service level where designers or developers would perhaps observe a meeting between councillors and users and follow up with questions or interviews. Now, they reflected that this could be ethically problematic because given the dependency of the service user on these services and the asymmetrical relation between the service provider and recipient, the user may feel obliged to say yes while the issues discussed in such meetings can be very personal and sensitive. Thus, one of the respondents in this case reflected:

> *Is it ethically right to do that? (…) The councillors might ask the client: 'is it ok if this person (from the directorate) sit in to observe?' But then we have been thinking maybe it's not ok to do that because that person might just feel that they need to say yes (…). Still, it is extremely helpful in terms of learning. And I think the developers, everyone in the teams, should be doing that. Because we need that reminder: who are we actually making things for? What kinds of situations are they in?*

In sum, finding ways of involving users when designing public services involve different kinds of balancing acts between ideals and realities. We find that involvement can be done in many different ways, and it is the scope or quantity that is crucial for making involvement work. Finding ways of gaining insights that enable decision makers in design processes to actually view the services from the users' point of view is what matters the most. This is possible in most projects, also when bound by time limit, tight budgets and ethical constraints, but it may require creativity and explorations of different means of involvement.

5.4 Inherent contradictions of service design

Service design is often presented as a holistic approach to the design and renewal of services. Holism refers to the ability to approach problems, user experiences and services processes *holistically* rather than in fragments. However, service design also places emphasis on iterative work and learning through testing. This often implies searching for new solutions on bits and pieces of broader service processes; to develop prototypes on these and iterate through tests and learning. There is a risk that these narrower and focused iterations undermine the intended focus on holism. In our case study of service design in the Norwegian Labour and Welfare Services (NAV) (see Textbox 3), discussions emerged on these inherent contradictions and dilemmas of service design. As described in relation to complexity (see 5.1), this is about the intertwining of service processes and interconnections between different 'pain points' in comprehensive service journeys. For instance, to what extent should a design team focus on repeated improvements of one specific pain point, potentially at the expense of attending to other pain points? And to what extent may a narrow focus on specific pain points undermine holistic understandings of the whole service? The following quote captures this dilemma:

> *So, I mean, how much are you supposed to keep iterating on what already exists versus starting to think: 'well maybe we need to create something entirely new?' These are the things that I think are easier if you look holistically at the service…*

Another dilemma and inherent contradiction of service design was raised in the same case. This contradiction relates to how service design involves the ability to challenge existing knowledge and practices, while it also requires the ability to create trust and work *with* people with often deep knowledge of how existing practices work and why things are done in particular ways in an organisation. Building trust to gain insights on existing practices, while challenging and questioning prevailing solutions and practices at the same time may entail demanding balancing acts. This dilemma is captured in the following quote:

> *So, it's about this mutual respect of each other's knowledge and experiences that can be a challenge. And I am thinking that with service design, what is underlying the whole method is*

> *that it is all about challenging and exploring, and not really trusting those that say 'well, this is how things are, so it's all that (there is)'*

Thus, service design entails the ability to balance between challenging and questioning what exists while also building trust and making efforts to understand why prevailing solutions have come about in the first place. This requires respect for different forms of expertise, but also the confidence to challenge existing knowledge and perceptions. Again, to manage this balance, it can be important to involve organisational translators (Røvik, 2016) (see also 5.1) who know the organisational context but also principles and methods of service design.

5.5 Messiness and confusion: Staying with the trouble in creative processes

Many of the people in public service organisations stated that they experienced their involvement with service design as confusing and messy. Some found this to be a challenging aspect of service design, while others found that while the messiness and confusion could be challenging during the process, they perceived it differently when looking at the design process retrospectively. We find it important to reflect on how these feelings of confusion can be understood and what the implications might be. Essentially, as outlined in Chapter 2, service design provides means to creativity and innovation. It takes an 'outside in' perspective (Holmlid & Evenson, 2008) on existing practices and ways of doing things and implies as such a 'system challenge' (Blomkvist et al., 2010). Challenging existing systems and practices is obviously no easy task, and it is bound to be met by resistance and criticism. Such resistance is not necessarily a bad thing, or an impediment to the process. Rather, resistance can be an important part of making sense of problems and proposed solutions, and to critically examine how they can be developed and refined (Bartel & Garud, 2009; Røhnebæk, 2020).

In one of our cases, the designers explained that they work with 'fuzzy orders': 'We often have fuzzy orders, that is to say that part of the work consists of redefining the order, re-problematizing'. This mess and fuzziness often serve a purpose, and it is not necessarily about disorganised and unplanned processes. However, working with creativity and innovation require the ability to work with processes that can be confusing because the end result is not clear or defined. If it was, it would not be a creative or innovative process, because the answer or solution would be already defined. Getting people on board with this open way of working can be hard, perhaps especially in bureaucratic contexts, and it may take time to gain maturity or acceptance in the organisational culture. Thus, for a public service organisation to succeed in working with service design in purposeful ways, there may be need for cultural change. Borrowing a phrase from Donna Haraway (2016), we would say that working with service design requires the ability to 'stay with the trouble' in creative processes. By this we mean accepting that the journey can be messy and unpredictable and handling the potential unease involved in staying in places of ambiguity and uncertainty. Essentially, making room for service design involves making space for failing and learning, as expressed in one our case studies:

> *There has to be acceptance for that—if the user insights tell you that you are making the wrong thing (…) the prototype is wrong... then we need space in the organisation to say (…) this is not a waste, rather, then, we have learned: This was the wrong thing.*

6 Literature and Resources—Overview

This report describes what service design entails; it provides a 'toolbox' of methods and discusses potential challenges involved. We have provided references to relevant literature for further reading and links to online resources that can support practical work throughout the report. Finally, we will give a summarised overview of selected literature and resources that may provide further inspiration and support to public service organisations that seek to learn more about service design.

6.1 Textbooks on design thinking/service design in public services

- Bason, C. (2010). Leading public sector innovation: Co-creating for a better society. Policy Press.
- Bason, C. (2017). Leading public design: Discovering human-centred governance. Policy Press.
- Junginger, S. (2017). Transforming public services by design: Re-orienting policies, organisations, and services around people. Routledge.
- Schaminée, A. (2018). Designing with-in public organisations: Building bridges between public sector innovators and designers. Bis Publishers.

6.2 Textbooks on service design (generic)

- Polaine, A., Løvlie, L. & Reason, B. (2013). Service design: From insight to implementation. Rosenfeld Media.
- Reason, B., Løvlie, L. & Brand Flu, M. (2015). *Service design for business: A practical guide to optimizing the customer experience.* John Wiley & Sons, Incorporated.
- Schneider, J., Stickdorn, M., Bisset, F., Andrews, K. & Lawrence, A. (2010). *This is service design thinking: Basics, tools, cases*. BIS Publishers.
- Stickdorn, M., Lawrence, A., Hormess, M. E. & Schneider, J. (2018). *This is service design doing: Applying service design thinking in the real world: A practitioners' handbook*. O'Reilly.
- Stickdorn, M., Hormess, M. E., Lawrence, A. & Schneider, J. (2018). *This is service design methods: A companion to this is service design doing: Expanded service design thinking methods for real projects*. O'Reilly Media, Inc.
- Norman, D. (2013). *The design of everyday things* (Rev. and expanded ed.). Basic Books.

6.3 Textbooks on creativity and ideation

- Carlsen, A., Clegg, S. & Gjersvik, R. (2012). *Idea work: Lessons of the extraordinary in everyday creativity.* Cappelen Damm akademisk.
- Knapp, J, Kowitz, B. & Zeratsky, J. (2016). *Sprint: How to solve big problems and test new ideas in just five days.* Transworld Digital.

6.4 Guides and examples on service design in public services, available online

- *Designing for public services* (Nesta, Idea and Design for Europe)
  https://www.nesta.org.uk/toolkit/designing-for-public-services-a-practical-guide/

- *The Scottish approach to service design*
  https://www.gov.scot/publications/the-scottish-approach-to-service-design/

- *The Social Design Methods Menu* (Kimbell & Julier, 2012)
  https://oecd-opsi.org/toolkits/the-social-design-methods-menu/

- *Design Thinking for Public Service Excellence* (UNDP)
  https://www.undp.org/content/undp/en/home/librarypage/capacity-building/global-centre-for-public-service-excellence/DesignThinking.html

- *Human Centred Design Toolkit* (Queensland Government)
  https://www.forgov.qld.gov.au/human-centred-design-resources

- *Public Service Design—A guide for the application of service design in public organisations*
  https://www.servicedesignmaster.com/wordpress/wp-content/uploads/2016/10/Public-Service-Design.-A-guide-for-the-application-of-service-design-in-public-organisations..pdf

- *The service design playbook* (British Columbia Government Communications and Public Engagement)
  https://oecd-opsi.org/toolkits/the-service-design-playbook/

- *The journey to the interface* (DEMOS)
  https://lx.iriss.org.uk/content/journey-interface-how-public-service-design-can-connect-users-reform

- *Designing out waiting times for breast cancer (Designit)*
  https://www.designit.com/work/designing-out-waiting-times

6.5 Guides and online resources on service design (generic)

- *An introduction to service design and a selection of service design tools* (Design council, UK)
  https://www.designcouncil.org.uk/sites/default/files/asset/document/DesignCouncil_Design%20methods%20for%20developing%20services.pdf

- *Design thinking bootleg* (Dschool, Stanford)
  https://dschool.stanford.edu/resources/design-thinking-bootleg

- *JAMK Service Design Toolkit* (JAMK University of Applied Sciences)
  https://oecd-opsi.org/toolkits/jamk-service-design-toolkit/

- *Playbook for innovation learning* (NESTA)

https://www.nesta.org.uk/toolkit/playbook-for-innovation-learning/

- Open collection of tools and tutorials
  https://servicedesigntools.org/

- Tools made available from Live works design agency
  https://www.liveworkstudio.com/tools/

- Hyper Island Toolbox
  https://toolbox.hyperisland.com/

- Usability.gov
  https://www.usability.gov/

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