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D5.3 Report on participatory stakeholder model

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Executive Summary

Background

This report is Deliverable 5.3 of the H2020 Co-VAL project 'Understanding value co-creation in public services for transforming European public administrations'. WP5 investigates the concepts and methods of innovation- and living labs, and how living labs and other participatory and experimental methods are used to enable value co-creation based on co-innovation of public services.

Deliverable 5.3, entitled '**Report on participatory stakeholder model'**, is based on Task 5.3 objectives, which is to develop a model of an experimental, participatory, stakeholder-based approach to co-creation and co-innovation.

Purpose

The purpose of the report is dual: 1) to present a theoretical framework for living labs as a specific approach to public sector innovation, and 2) to develop analytical perspectives that are relevant to policy makers and other stakeholders.

Method

The theoretical framework is to be seen as an extension of the theoretical and empirical insights gained through Task 5.1 (A cross country comparison of the use of innovation labs in the public sector) and Task 5.2 (In-depth case studies of how living lab approaches are used for co-creation and co-innovation), which are contained in deliverable 5.1 and 5.2. Moreover, to supplement the theoretical framework, the service design method of future scenarios was applied to address the call for practice-oriented perspectives. Scenarios rest on narrative methodology, and hence on the assumption that stories are crucial in identity construction, meaning-making and as constitutive for future actions. In this manner, the scenarios are to be seen as basis for strategizing living labs.

Findings

The key results of the report are based on the former analyses presented in deliverable 5.1 and 5.2, which is why this deliverable is to be read as a synthesis and final conclusion of the previous work. The synthesis is centred around:

1. A theoretical framework emphasizing how living labs can be understood as ways to engage stakeholders in defining the common goods, while also addressing and potentially creating public value.
2. Three living lab scenarios, which illustrate the derived approaches to living lab organizing in data: 1) living labs as cross-sectorial collaboration either based in or outside the public sector, 2) living labs positioned within the public sector and with the public sector as both main initiator and beneficiary and 3) Living labs initiated and led by citizens/citizen groups.

Recommendations

The recommendations to practice are disseminated through a decision-making toolbox for policymakers and practitioners. The key points are:

- The reason to set up or work with the living lab methodology should be discussed and reflected upon vis-à-vis other participatory approaches.
- It is important to acknowledge and embrace that working with citizen- and/or user centric methods might disrupt existing structures and mindsets.
- Resistance to change is an innovation barrier and something to be aware of in open innovation processes.
- It is of importance to discuss and address the different levels of influence and change – living labs tend to work at both a micro and a macro level simultaneously, and hence there are diverse stakeholders.
- Living labs are one answer to the New Public Governance paradigm, and hence they are more radical by nature than merely informing and consulting users and citizens.
- At a policy and managerial level, it is critical to understand how living labs allow the convergence of individual interests to a common good, hence the processes need begin at a user/citizen level.
- Living labs are due to their multi-stakeholder approach arenas that can create and sustain public service legitimacy.
- The living lab methodology is not a one size fits all concept – it needs to be adapted and contextualised to stay sensitive to both specific domains of public services, a variety of stakeholders and different legal and systemic surroundings.

The recommendation to the research community is that especially the democratic potential in engaging citizens and users more radically in developing future public services calls for further exploration. Also, the aspect of how living labs create impact and value, and to whom, need more refinement based on empirical studies. Such a future research plays a key role in building up the knowledge base as living labs become more widespread as an approach to public sector innovation.

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1 Introduction

This report presents a theoretical framework to better understand the phenomenon of living labs in a public sector context alongside three future scenarios for the establishment of living labs. The scenarios are practical tools to envision how living labs might be organized and hence they serve a strategic purpose in decision-making processes by considering the operational problems to solve.

1.1 Purpose and Scope

This deliverable reports the development of a model for living labs as an experimental, stakeholder based approach to co-creation and co-innovation. In this manner, the report is a logical continuation of deliverable D.5.1 and D.5.2., which provided a conceptual and empirical frame for understanding living labs.

In continuation hereof, the phenomenon of living labs is extracted and theorized, to understand its use in public services in both domain specific areas, e.g. elderly care, and more broadly on welfare services targeting the larger population. The main focus is on the rationales for setting up living labs, their different participatory structures, and how they generate individual and public value. In addition, three future scenarios that describe the stakeholders involved, especially the role of citizens, are presented. The scenarios provide input to strategic decision-making and discussions to strengthen co-creation and co-innovation in public administration.

The task contributes to the overall Task 1 in the Co-VAL project to be conducted as part of WP4, WP5 and WP6, which is to identify special characteristics and commonalities across the existing empirical and theoretical literature on value co-creation cases.

1.2 Structure of the deliverable

The report is structured as follows: firstly, a short summary of the key findings from the literature review on living labs (D.5.1.) and the qualitative case study of the phenomenon of living labs as exposed across Europe (D.5.2.) is given. Then a theoretical framework is developed and presented followed up by practical implications – presented via three scenarios/use cases of living lab implementation and a list of generic recommendations.

1.3 Note on the living lab concept

WP5 is mainly concerned with the notion of *living lab* and how it can be understood in a public context. However, the concept of living lab is often juxtaposed with or related to the concept of *innovation lab*. In the literature, both living labs and innovation labs are seen as practice-driven concepts that emerged at the beginning of the millennium as ways of ensuring collaborative innovation in the public sector. Yet, the main distinctions between the two concepts lie in their different antecedents and that living labs have a broader application across sectors, whereas innovation labs are often concerned with the public or the third sector. Moreover, Schuurman and Tõnurist (2017) argue that innovation labs and living labs operate in different phases of the innovation process: innovation labs are seen as initiators of innovation and living labs as executors of

innovation (Schuurman & Tõnurist, 2017). However, this is not consistent with all other approaches (cf. Björgvinsson et al., 2010; Nesti, 2017).

The interrelatedness between the two concepts was taken into account throughout the study, both in joint discussions among partners and in case sampling. Hence, despite the main focus being on living labs, initiatives labelled innovation labs or organizational forms not applying to either of the concepts were not excluded.

2 Methods

The theoretical framework, the three scenarios and the final recommendations of this report rest upon data from Task 1 and Task 2 of the work package.

Task 1 provided a review of current uses and conceptualisations of living labs. The approach taken was 1) a review of the published scientific literature on living labs and the related experimental and participative methods in public, private and civil sectors; 2) a review of a sample of grey literature and research literature in various languages identified by each research partners in their home country; and 3) an analysis of a selection of living lab initiatives across partner countries.

Work in task 2 was realized as 22 qualitative case studies of living lab initiatives, encompassing desk research, in-depth interviews, observations and field studies, across nine EU countries. A shared research design and case protocol ensured consistency in conducting and analysing the cases. Afterwards, the case studies were subject to a cross-case analysis, focusing on how each case added to and revealed insights regarding the overall unit of analysis: living labs in the context of public sector innovation

In sum, the outcome of this deliverable is based on a comprehensive data set and saturated analyses. In the following the specific method for developing future scenarios will be accounted for.

2.1 Narrative methodology and the use of story/scenario templates

To help practitioners model future living labs, three hypothetical scenarios of establishing living labs have been developed. Scenarios as development tools stem from a service design tradition and can be applied to generate new ideas, discuss concrete elements of future services (here living labs), to imaging and envisioning how a service can be designed and implemented, to identify gaps and challenges, develop prototypes and finally as a way to better understand complex aspects of a given situation (Bechmann, 2010: 157).

The development of scenarios, as models and practical tools, is based on narrative methodology and hence the assumption that storytelling acts as social kit (Holstein and Gubrium, 2002; Reissman, 2008), and that stories are to be seen as means for:

- identity construction
- meaning-making
- constitutive for future actions.

The scenarios support the development of a living lab identity, a shared understanding of what living labs are and what they might contribute to, and lastly, that the stories outlined in the scenarios will constitute future actions. The last point is especially key in regard to strategizing and innovating. Strategy is basically a story of the future (Boje, 1995) and in innovation processes the focus on stories, and storytelling ensure development based on existing practices and understandings (Müller, 2013).

Moreover, scenarios (which might also be referred to as use cases or story templates) are founded on the basic premises of service design (Stickdorn, 2011):

- User-centred: an on-going focus on the customer/user perspective
- Co-creative: involvement of various stakeholders
- Sequenced and based on evidence: the use of visualizations to envisage intangible services and presenting the interrelatedness of actions
- Holistic: to take the context of the service into account – understood as both subjective mental processes and the wider physical environment.

A story is characterised by sequentiality (beginning, middle, end), temporality (specific context) and plot - meaning that the parts, which lead to the main theme of the story, structure the story itself (Riessman, 2008). The story needs to say something about something, in this context: how living labs with different overall targets can be organised. Therefore, the below scenario template has been developed.

Table 1: Scenario template to be used in modelling

Beginning	Middle	End	Obstacles
• Background for the LL initiative? • What is the physical context? • Who are the key actors? • What does the actors want to accomplish?	• What happens? • Which choices do the actors take? • Why do they make these choices?	• Do the actors achieve what they aimed at? • Or do they not succeed?	• What might go wrong in the scenario outlined? • What could prevent that from happen?

3 Theorizing Living labs

Theorizing (Hansen and Madsen 2019) is the attempt to go beyond the mere descriptions of a phenomenon, such as living labs, and seeking to capture and conceptualize the logic of it (Langley 1999). Whereas theorizing is not the same as theory, or the "grand theories" of society (Swedberg 2017), it represents the researchers' ongoing struggles of working towards a better theoretical understanding. Involving such elements as abstracting, generalizing, relating, selecting, explaining, synthesizing, and idealizing (Weick 1995), it builds on previous research and analysis and is moving forth and back between theoretical concepts and empirical descriptions to get the phenomenon right. Theorizing represents the researchers aims to bring novel and relevant understandings to the empirical material in question. As such, theorizing intends not only to understand well described phenomena, but also to explore and unveil aspects of these phenomena that are thought to be important but were previously ignored. Theorizing creates conceptual frameworks for supporting intelligible language about given empirical context.

3.1 Conceptual base (theoretical framework)

Building on tasks 5.1 and 5.2, this section provides some basic perspectives for theorizing living labs with the aim to create a language and conceptual basis for researchers and practitioners that can guide research and action. Focus should be, according to task 5.3, on the rationales of the living labs, their different participatory structures, how they can generate individual and public value, the institutional work that is needed to strengthen co-creation and co-innovation in public administration, how strategic actions can be set up to strengthen robust and sustainable forms of co-creation in public services, and a model that describes the stakeholders involved, including especially the role of citizens.

3.2 Rationales/frames of Living labs

Living labs can be described as environments or settings for open innovation offering collaborative platforms for interaction between research, development and experimentation (Gascó 2017) thereby engaging researchers in practical problem-solving and practitioners in research. As societal phenomena, living labs in public sector emerge as a response to changing governance structures such as government experiments with New Public Management (NPM) and networked governance (Hartley 2005; Osborne 2006). Responding to such emerging and experimental governance structures, living labs contribute to reframing innovation as open, user-centric and stakeholder-based and give more attention to innovation as a specific task of public sector services. This is a radically different approach than earlier modes of top-down, internally driven and universal innovation spurred by political reforms and political leadership. It is also different from more informal innovation activities that grow out of everyday practices as living labs provide more structure to the innovation process. However, living labs are not widely spread phenomena in the public sector. They are niche activities (Smith and Raven 2012) through which niche actors engage in developing and framing (public) innovation. Designing innovation activities for the public sector and solutions for complex problem-solving requires an effective engagement in framing public innovation activities (Schot and Steinmueller 2018). The rationale for reframing innovation along these lines is to enhance public sector's innovation capacity and improve public innovation processes.

The cases investigated in D5.2 offer insights into three strategic framings of public innovation improvement, its rationale and potential resistance to it: 1) Living labs as processual learning, 2) living labs as relational space and 3) living labs as democratic engagement.

1) Living labs as processual learning implies that living labs are introduced in public sector learning processes to improve the skills and change the mindset of public employees. Living lab activities enhance employees' knowledge of innovation methods and potentially impact the overall organizational mindset towards a more outward-going approach. Thus, living labs empowers employees by providing knowledge about innovation tools and enabling employees to draw on wider resources in the eco-system environment. However, such an approach may also cause internal organizational resistance because it may be seen to weaken the professional identity and comfort zones of employees and challenge existing procedures and routines.

2) Living labs as relational space means to open up the silo- or box-like space of public organizations and turn public sector into a platform organization where people can meet, exchange knowledge and experiment with solutions. This can lead public employees to create network relations and become more pro-active in solving challenges, however it may also cause resistance since public sector may tend, for good reasons, to be risk-averse.

3) Living labs as democratic engagement means that citizens and communities become more involved in innovation activities which may create more effective solutions but also increase the legitimacy of public services and create public value. However, participatory forms of democratization can also create conflicts, biases and injustice which can in the end block decision-making and innovation.

3.3 Different participatory structures of Living labs

Living labs are set up to solve complex societal problems. They often emphasize the engagement of users in co-creative problem-solving activities. Yet the construct of user engagement has several dimensions. First users can be distinguished by their capabilities. Some users are knowledgeable and resourceful, whereas others are less resourceful, less capable or less willing to participate in living lab activities. Further, users can be involved along a continuum from being just informed, over consultation to have more control and power over decision-making processes (cf. Arnstein 1969), thus with more or less influence on the innovation process. Moreover, involvement can be superficial and thin, for example through surveys, or deep and thick, when users take part in collective processes of deliberation, design and innovation (Nabatchi and Leighninger 2015). Living labs can further engage users as individuals, as a group of people who is dependent on and has interests in particular services (i.e. elderly care), or as citizens that make priorities across varied services and political issues.

These different dimensions of user involvement imply that living labs can be used for multiple purposes in different contexts with more or less active participation of citizens. A dominant purpose is to improve innovation, that is to create innovations that contribute to coping effectively with public sector's multi-dimensional complex problems. Another, perhaps less dominant purpose, is to democratize innovation. In this case there is potential for further development. Living labs may help fulfil some of the expectations of citizens to participate more directly in decision-making processes in areas that have impact on their lives. Innovations, not least technological innovations, may often be suffering from democratic deficits. In the initial stages of development, innovations are flexible and may be influenced in different directions, however they have little public attention; yet when they

gain public attention and impact people's lives, they have often achieved a certain momentum and are more difficult to stop or change.

3.4 Living labs as targeting individual and public value creation

Living lab may generate knowledge about users' and other stakeholders value creation, i.e. the value users create by means of the services offered to them. They create this value either alone or together with others. Research on the Service Logic (Grönroos 2018) and Public Service Logic (Osborne 2019) have lately emphasized the service relation of public services, i.e., that users' value creation should be a central concern and starting point for research and for public managers and employees. This approach is radically different from focusing only on policy-decisions, production and distribution of services because it pays attention to the service experience of users. However, this immediately raises new questions about how to access users' value creation and how users' value creation might provide input to innovation processes. Yet, we may theorize living labs as entities that seek knowledge about users' value-creation and use this knowledge in public innovation processes.

Public sector is, however, not just about individuals' value creation, but also necessarily about public value creation. Public service innovation needs to consider broader societal values such as administrative value, social value, and democratic value thus adding not just to the individual sphere but also to the public sphere (Benington, 2011). However, these approaches are not necessarily contradictory, since public value creation can be an element of individuals' value creation and vice versa. Public value has been treated in slightly different ways in the literature either as specific public values (such as public ethos and justice) (Jørgensen and Bozeman, 2007), or as continuously negotiated and discussed through discursive activities in interactions and consultations among politicians, public managers and citizens (e.g. Alford and O'Flynn, 2009).

Living labs may be theorized as a micro-cosmos where such interactions about public and individual value creation can take place on an experimental basis. The advantage of the living lab construct is that it constitutes a protected space shielded from society's larger conflicts and thus enables greater alignment of actors' interests and values around the creation of new specific services. The disadvantage may be that living labs live a life of their own, become decoupled from societal interests, and are unable to mobilise sufficient numbers of supporters to solve societal problems.

3.5 Institutional work of Living labs

Living lab activities are not mainstream activities of the public sector. By contrast, living labs operate as newcomers in a highly institutionalized field where there are strong interests, practices, structures and systems of traditional public administration. Traditional public administration is supposed to be steered by politicians, who negotiate innovation decisions or reforms which are then implemented by public managers and professionals in a just way. There are many vested interests in the public sector, including labour union interests, citizens' and consumer organizations' interests and political parties.

As niche activities, living labs may mobilise actors for more collaborative approaches and experimentation with entrepreneurship and innovation. New practices can emerge from these experiments that find their way into public sector activities and help bring actors together to address

some of the major unsolved societal problems of education, inequality, climate, digitalization, unemployment, and social heritage.

Thus, living labs may be theorized as new practices emerging from the bottom, while also being supported by policymakers and politicians. They engage in institutional work (Lawrence and Suddaby 2006) in the sense that they contribute to theorizing and framing what public innovation is about. Further, they also enable new work routines. Following Lawrence and Suddaby (2006) institutional work means to enable institutions by interpreting what institutions are about, how new institutions can be created and maintained over time, such as new types of interactions and worldviews. Institutional work is a dynamic process. Living labs, while emphasizing interaction, collaboration, solving problems across varied organizations (public, private, civic), must also be concerned with what Vargo et al. (2014) call repairing and concealing tensions and potential conflicts among the involved actors. Thus, from this perspective, the role of living labs is not just to solve specific problems, but also to frame, create and maintain new structures in the public sector and thereby also disrupting existing institutional structures, handling the risk and repairing conflicts that follows and reconciling actors and institutions.

3.6 Sustainable forms of co-creation via Living labs

Co-creation of innovation in the public sector is not an easy task. For one thing, innovation entails risk, and research has emphasised that public sector is risk-averse (e.g., Osborne et al. 2020) and therefore may not appreciate co-creation and innovation. Furthermore, the public sector is organized in silos and employees' interests and professional identity are embedded in these silos. This ensures effective specialization and division of labour, but it also creates comfort zones for employees and barriers to collaboration with respect to solving pressing and important societal problems.

Co-creation of innovation can take place both at the micro- and the macro-level. Micro-level co-creation occurs in close interaction between employees and citizens. Such micro-innovations may add up to larger changes over time (Fuglsang 2010). Living labs may facilitate such micro-processes seeking to make them more visible and systemic. Macro-level co-creation is about handling widely shared societal and public problems. Co-creation in this case concerns social innovation through mobilisation of many actors and improving their access to benefits and power through transforming social relations (Moulaert and MacCallum 2019; TEPSIE 2015). In such cases, co-creation entails stages of aggregated interest struggles and compromises, yet also re-framing of risk and redistribution of power.

Living labs may be theorized as potential tools of sustainable social innovation targeting social and public innovation for economic, social and/or environment sustainability. In this case, living labs would have to find ways to mobilise larger groups of people for social innovation. Such social innovations may depend on the ability to mobilise large audiences of stakeholders that can put pressure on societal actors and authorities to change direction. However, this requires living labs being mission-oriented – they need to define their purpose and then find ways to move towards such purpose. Thus, since living labs are advanced experimental structures that through feed-back mechanisms generate solutions (Ansell and Bartenberger 2016) they may concentrate more on constructing and refining important societal purposes, mobilising actors and providing a focused workspace for moving towards such solutions. However, one challenge is that living labs often are

short-lived projects struggling for funding. If they want to survive, they may need to address the wider concerns of policy-makers.

3.7 Stakeholder involvement in Living labs - modelling

There are varied ways of thinking about stakeholders in the literature (Freeman 1984; 2003; Fassin 2009). The most common way is to take a firm/organizational perspective and then analyse the stakeholders of the firm/organization, sometimes divided into internal and external stakeholders (Freeman 2003) with different salience and urgency, which are more or less pressing for the firm to cope with (Mitchell et al. 1997). In such models, the firm is always at the centre, and stakeholders are those actors that seek to impact the firm.

Social stakeholder models would instead place the 'common good' at the centre (Figure 1); stakeholders are those organizations that contribute to defining and realizing the common good. Another related stakeholder model argues that ethics of care (e.g., caring for employees or the local community) can play a role in stakeholder management (Spence 2014). In such a context, living labs may be theorised as organizations that work with the common or shared good and ethics of care as the central concern of stakeholder management, and then seeks to involve relevant stakeholders in defining and realizing the common goods.

Stakeholders can include NGOs, public sector organizations, the state, the municipality, civic society, firms, media and press, consumers, local community and so on. These may mobilize themselves for various reasons, for example to be close to the government, to create better reputation, to solve important societal problems, or to reduce uncertainty about the future.

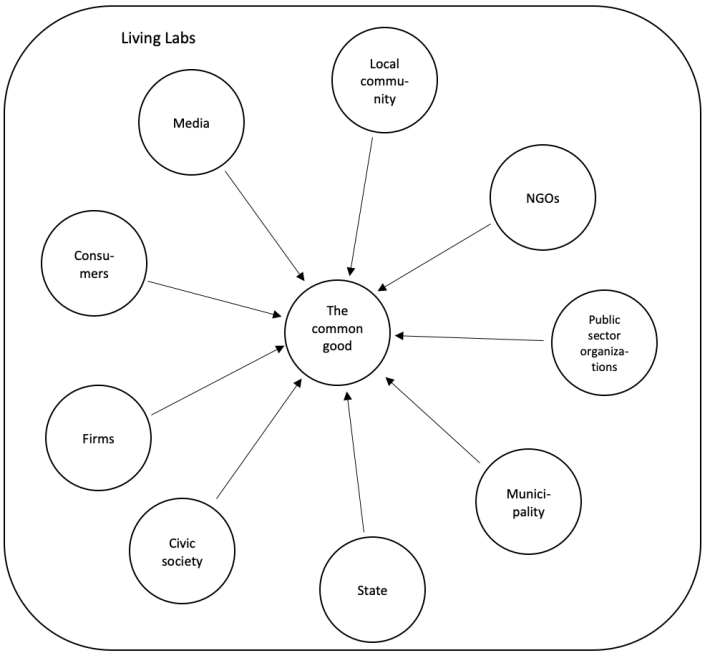


Figure 1: Living labs engaging stakeholders in defining and solving the common good

In this latter approach, living labs may therefore be theorized as a framework to engage stakeholders in defining the common goods. They should convince stakeholders about their interest in developing the common good, maintain a healthy climate among stakeholders, aligning individual interests, and reconciling actors with institutional concerns. Thus, according to this stakeholder model, on the one hand, living labs may direct interests towards a general care for society, on the other hand, they need to engage and mobilise actors based on their individual interest and treat them as stakeholders.

3.8 Summary

The above theoretical assumptions are summarized in Table 2, which also provides a structured model for future research questions and implications for practitioners.

Table 2: Theorizing living labs

Assumptions	Research questions	Implications for practitioners
Living labs work with varied structures of open innovation, however there is also resistance towards such new structures, and they need to be adapted to each context.	RQ1: What practices of open innovation are emphasized and combined in different public service contexts? RQ2: What practices exist for resisting open innovation?	Develop robust structures and guidelines for open innovation while also keeping in mind that these have to be adapted to each public service context.
Living labs can involve citizens in different ways in innovation, giving them more or less influence in more or less thick relationships. They could potentially focus on democratizing innovation.	RQ1: How can citizens in different ways impact innovation processes in the context of living labs? RQ2: What processes of democratization of innovation are emphasized and what are their limitations?	Make it crystal clear whether living labs primarily seek to enhance innovation by involving citizens or enhance the democratization of innovation, or both.
Living labs must target both individual and public value creation.	RQ1: Through which practices are individual and public value dimensions emphasized and combined in different public service contexts? RQ2: How can individual value creation and service experiences provide input to public value creation?	Focus on the service experience of individuals, yet as an input to public value creation – adding value to the public sphere.
Living labs are niche activities that create, maintain and disrupt institutional structures while also providing a social	RQ1: How can living labs repair conflicts between stakeholders and reconcile actors with institutions?	Be sure to create a healthy innovation climate by taking care of individual interests as well as collective interest.

structure for repairing tensions and conflicts that may result.	RQ2: What does a 'healthy' innovation climate of living labs look like?	
Living labs are potential structures for sustainable social innovation targeting broad societal problems.	RQ1: How can living labs mobilise large audiences and critical societal stakeholders (such as labour unions) for social innovation? RQ2: How do living labs work with purpose-driven innovation and what are the pitfalls?	Make it clear whether living lab activities work with domain specific challenges with relevant stakeholder or grand societal challenges via major societal stakeholders.
Living labs provide structures for stakeholder management around common goods.	RQ1: Through which processes do living labs direct stakeholders' attention towards the common good? RQ2: How can the different ethical dimensions of living labs be described?	Place the common good at the centre of living lab activities and engage stakeholders in defining and contributing to the common good.

4 Practical contribution: three scenarios of living lab implementation

Based on the theoretical conceptualisations the following chapter will dive into practical dimensions and recommendations of operating and implementing living labs as ways of doing and ensuring public sector innovation based on user and citizen centric approaches. This will be presented in the form of three fictive stories/scenarios. Scenarios are hypothetical stories created to explore and discuss particular aspects of a future service, in this context living labs. The three scenarios presented are developed on research data and can be applied in different development phases as tools to review and analyze potential aspects of establishing a living lab (Stickdorn and Schneider, 2011:184). The scenarios were based on the recurring features observed in the full data set of 22 living labs (D.5.2) alongside theoretical knowledge (D.5.1) – hence they do not exist as presented but are to be read as illustrations of key findings and insights.

The data material revealed a pattern of three overall approaches in living lab organization. First, living labs as cross-sectorial collaboration either based in or outside the public sector. These types of labs often address what is referred to as 'grand' societal challenges, which might trigger the recognition and urge to partner across sectors. Second, living labs positioned within the public sector and with the public sector as both main initiator and beneficiary. These labs often target domain specific challenges relative to public services and welfare. Third, living labs initiated and led by citizens/citizen groups. These types of living labs address wider societal challenges, reaching beyond specific welfare services, and hence seek to add and create public value. A note in this regard is that due to the nature of living labs operating close to end users/citizens the case material is mainly from a municipal level. Therefore, the scenarios do not explicitly address what is to be done at a policy/governmental level to create support structures and/or infrastructure.

The scenarios are basically visualized stories of the establishment of living labs. Using the structure of storytelling the scenarios/stories are built around a beginning (denotes why the lab was initiated and whom the key actors are), a middle (reflects the actions taken and what logic these are based upon) and an end (what did the actors achieve and what did not succeed). Moreover, since plot is always part of storytelling, to spark reflection and creative thinking the scenarios outline a series of obstacles alongside a reflection on how to overcome these.

The purpose of the scenarios is to act as inspirational models driving reflection and focusing the attention to the process of establishing future living labs. Since the scenarios are fictive it is also possible to e.g. play with mixing key points from each or to think across scenarios.

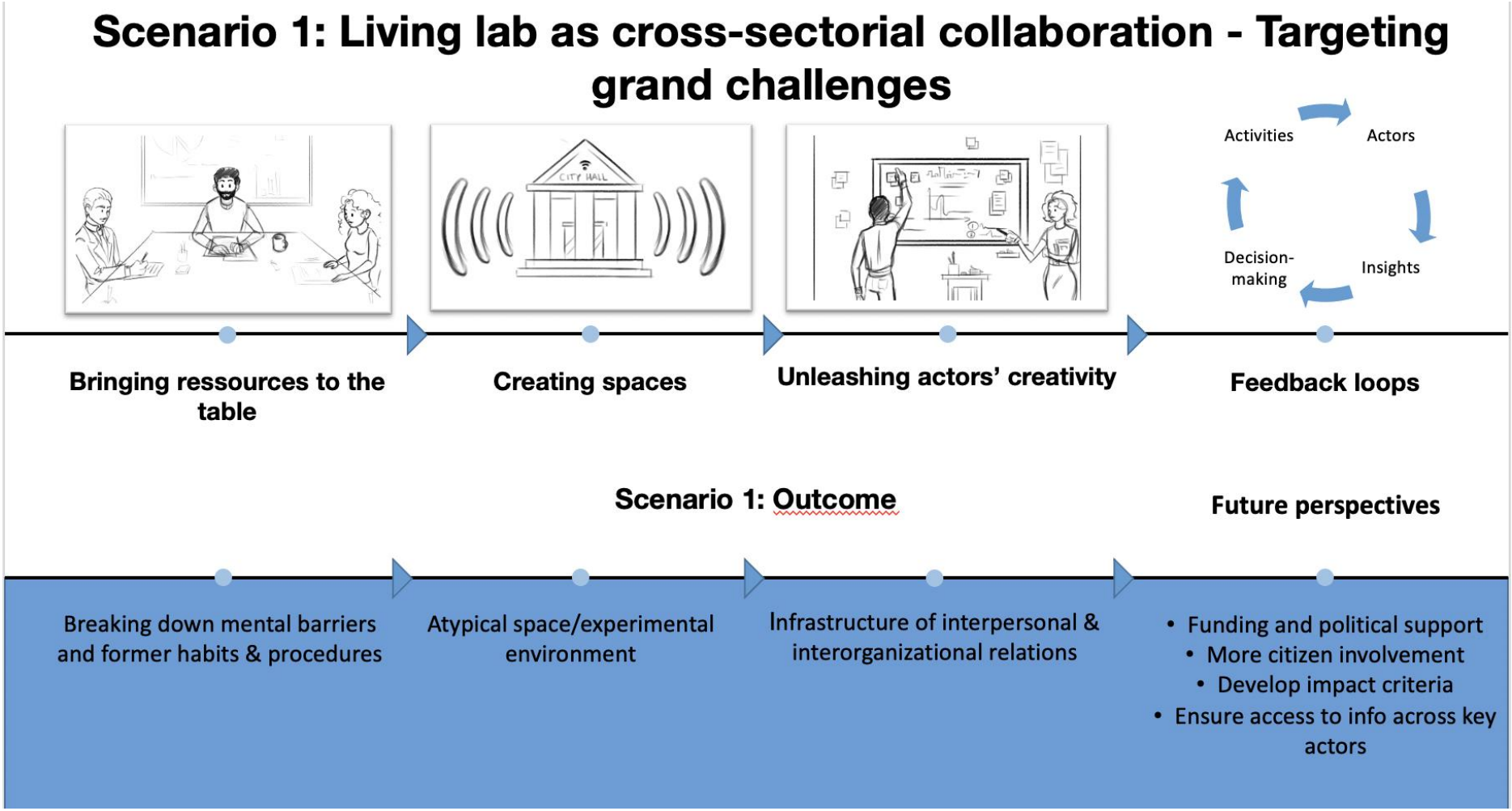
Scenario 1: Living labs for 'grand' challenges

Background: Living labs can act as innovation platforms for addressing challenges to society at large - not only in a here and now context but also for future generations. These types of living labs are often organized as cross-sectorial networks, that might be positioned in or outside a formal public sector organization.

Case inspiration: Public Intelligence, PWC Experience Center, Kraków Living Lab, GovLab Austria, ERASME, Torino City Lab, Guadalinfo

Beginning	Middle	End	Obstacles
• What is the physical context? • Who are the key actors? • What does the actors want to accomplish?	• What happens? • Which choices do the actors take? • Why do they make these choices?	• Do the actors achieve what they aimed at? • Or do they not succeed?	• What might be an obstacle in the scenario outlined? • What could prevent that from happen?
A ministry in a large European country wants to enhance the digital literacy of the population and by that also enable sustainable solutions that respond to strategic problems, including making citizens more self-reliant. Based on a quadruple helix model of innovation with key actors from a chosen municipality, the private sector, academia and civil society a living lab of experimentation is created. To have a physical space the lab activities are based in a municipal building in the city center. Moreover, a digital platform is created to establish an online community. The lab is to be used by a wide range of different actors, from citizens to commercial organizations. Hence the role of the public sector as 'project owner' is	A consortium with the following actors are established: municipal managers, researchers from the regional university, private IT and innovation consultants alongside key actors from civil society organizations. One of the first activities is a one-day Hackathon with the local actors; citizens, public administrators, private consultants and researchers. The main aim is to create a roadmap, to both get a common ground for the process and to make it clear that the living lab will be developed in different phases according to matureness and needs. It is from the beginning perceived crucial to ensure a feedback loop, so the users and citizens continuously	The living lab methodology succeeded in creating an atypical space that allowed the public administration to relegate testing and co-creation of new solutions to an experimental environment with less constraints than the public administration itself would be able to foster. Also the collaboration itself is by the actors perceived a success due to an explicit focus on breaking down mental barriers of former habits and procedures. Nevertheless, a challenge is to tell the story of a laboratory that is not only linked to a physical space but rather is an infrastructure of interpersonal and interorganizational relations. Also, and despite the lab being depicted	An obstacle to succeed is the coordination of the internal collaboration of a large network of actors with different organizational structures and logics. And herein to ensure access to information across and within organizations based on a safe and trustful environment. It is also a challenge to 'start' the right place; not too big of a change and not too little and local. Therefore, it is important to work close to the current practices, while pushing the boundaries from within. Creativity and free thinking based on equality can be rendered by existing hierarchical structures – thus being explicitly aware of power structures is deemed important and also methodologies of design thinking and rapid prototyping might counteract this.

to enable and establish a network community/network organization. The assumption is that such an initiative will also spur the innovation capabilities in the context of public administrations.	are part of shaping and forming activities of relevance. To increase legitimacy regarding funding, and to obtain access to a larger European network of living labs, it is decided to apply for an ENoLL certification, which is eventually obtained.	by positivity, funding and long-term political support is a struggle. Future foci area will be to make the initiatives more sustainable, to work more radical with citizen involvement and to move away from being an initiator to an intermediary that enables collaboration across different and existing networks.	To ensure long-term funding and political support, impact criteria needs to be developed – but still based on criteria that embraces both quantitative and qualitative parameters.



Scenario 2: Living labs for domain specific challenges

Background: Living labs can be organized to address challenges relative to specific public service domains. In these cases, they are often positioned within the public sector and even though they invite cross-sectorial collaboration, the main decision-making power lies in the hand of public managers. Moreover, these types of living lab often have the public sector employees as either sole target group or as important a target group as citizens.

Case inspiration: Aalborg Municipality, AUTONOM'LAB, Stimulab, Norwegian Labour and Welfare administration, SIILAB, Living lab of the ministry of economy and finance, GovLab Arnsberg, Wallonia e-health Living Lab, L.I.V.E

Beginning	Middle	End	Obstacles
• What is the physical context? • Who are the key actors? • What does the actors want to accomplish?	• What happens? • Which choices do the actors take? • Why do they make these choices?	• Do the actors achieve what they aimed at? • Or do they not succeed?	• What might g be an obstacle in the scenario outlined? • What could prevent that from happen?
A medium-sized municipality wants to develop their elderly care based on health care technology and innovating the work routines of the front end employees. A unit focusing explicitly on user and citizen-driven innovation is established, and the idea is to work closely together with future suppliers from the private sector. The concept of living lab is applied since activities take place in real-life contexts, that is, people's homes or at elderly care centers. It is an explicit demand that all activities in the living lab need to address a triple bottom line: increased quality of life for the	A board with members from academia, the private sector and the municipality is established. The living lab serve as a project hub, where internal public actors and external private sector actors can apply for project funding, and where the hub itself initiates projects. There is a dual focus on technological innovation and the human dimension – either in interplay with technology or in itself due to betterment of life of elderly or refined work processes among front line employees. Since the living lab and the living activities are mainly run by public employees it is needed to develop and learn appropriate skills e.g. service design thinking	The living lab succeeds in creating new more context sensitive solutions to both front end employees and to elderly citizens. A positive side effect acknowledged in retrospect is the high degree of intra-organizational learning in the municipality alongside an increased innovation maturity. To the actors from the private sector, it is perceived successful to work closely together with citizens and public administration in developing and refining products and services. Qualifying the front end of innovation is seen as an outcome, but it is still difficult to identify (unknown) needs of the future, because the time horizon of the	A challenge to foster ground-breaking innovation is that the sole decision-making power are positioned in the public administration – and hence disruptive and radical ideas does not seem to prevail. To release existing resources among employees, incentive structures for innovative thinking in public administrations can be implemented. Mainly working project-based is a challenge in regards to diffusion of innovations and knowledge both across the municipality itself and across municipalities in other regions. By the end of the project the focus is already on the next project, leaving little time to more strategic knowledge sharing across the public sector.

citizens, a better work environment for the employees and value creation for the organization – as either money or resource savings, or increased efficiency or quality.	techniques, gamification, agile development and robotics. Also, versatility, pedagogic and problem-solving skills turns out to be of importance.	public administration in identifying problems is quite short. Measuring not only output but outcome and impact in a more long-term perspective is still to be implemented and proper evaluation needs to be designed.	Gaining access in ethically sound ways can be challenging, since targeting specific citizens group opens up for GDPR and ethical concerns.

Scenario 2: Living lab 'owned' by the public sector - targeting domain specific challenges




Identifying key actors | **Creating new work routines in elderly care** | **Unleashing actors' creativity** | **The project Hub**

Scenario 2: Outcome

			Future perspectives
Context sensitive solutions	Organizational learning	Increased innovation maturity	• Create innovation incentive structures for employees • Play with more open decision-making processes • Ensure strategic knowlegde sharing

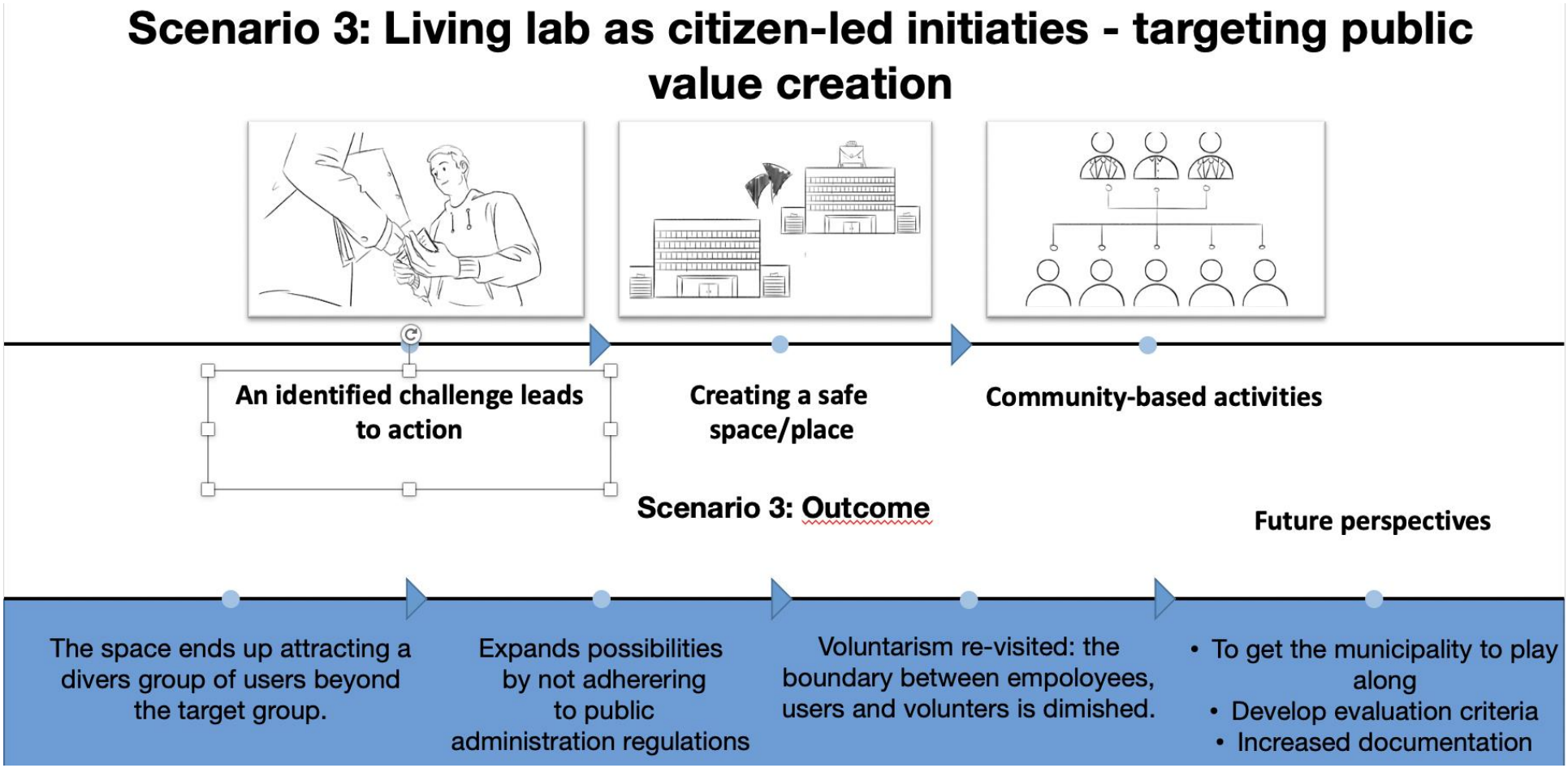
Scenario 3: Living labs for public value creation

Background: Living labs can be initiated or led by citizens, that identify and hence seek to address societal challenges. These types of living lab initiatives are often depicted by a strong civil society engagement and collaborate mainly with the public sector to ensure partly funding. As such, they seem to enact an explicit urge in European public sectors to engage citizens in development of public services and creation of public value, which is why it becomes relevant to better understand how the public sector might support such bottom-up initiatives.

Case inspiration: Verschwörhaus Ulm, INSP, IDES Living lab, Rome Cooperative Heritage Lab, Library Urban Lab

Beginning	Middle	End	Obstacles
• What is the physical context? • Who are the key actors? • What does the actors want to accomplish?	• What happens? • Which choices do the actors take? • Why do they make these choices?	• Do the actors achieve what they aimed at? • Or do they not succeed?	• What might be an obstacle in the scenario outlined? • What could prevent that from happen?
A group of citizens living in the same neighborhood is frustrated to see young unemployed people hanging in the streets not being able to enter the job market. They make contact to their local municipality and backed up by a few civil servants they agree to create a place for the youngsters to come and be together in 'meaningful' ways. They do not apply the term living lab, but the notion of 'space' is central since they seek to create a maker/open/flexible space. This means a place to try out and play with mock-ups and ideas for job opportunities and also place/space where the users/citizens themselves define content.	An advisory board with actors across the public and third sector is organized and based on external funding two of the principal organizers are hired to facilitate the initiative. They choose that the physical place need a certain atmosphere that resemblances that of being at home – they fortunately get access to a former warehouse, where there is room enough for more activities going on at the same time. Moreover, the employees invite a group of volunteers to be part of running the place and they together create a shared vision and mission emphasizing an inclusive approach where everybody is perceived to bring resources to the table.	The actors succeed in creating a safe place and space for creative thinking and development. Eventually it turns out to become a place not only for young unemployed but also for people at all ages and in all life situations. The success is mainly due to an organizational structure, where the space/place is not being part of administrative processes that hinder creativity, while it also seems important that it is not considered as essential part of the administration regarding unemployment and need to adhere to all the same the rules that public agencies are subject to. Moreover, it is a case of voluntarism revisited, since it presents new forms of being volunteers and user and citizens at the same time – hence the self-perception is different from more established volunteer organizations in the third sector.	A barrier is the existing culture and a structure of public administrations – that counters the free and playing aim of the initiative. A key role for the public administration is instead to play along and dare to take risks regarding formal procedures and demands for assessment criteria. Therefore, it is important to acknowledge the non-commercial approach, and the openness towards what pops-up of ideas in the user/citizen group. A challenge is to balance the start-up atmosphere and openness with the maturity of the initiative and the need over time for some work routines and decision-making processes. It might be hard to diffuse since the initiative is highly reliant on specific

The initiative is from the outset voluntary driven and there is an explicit awareness on having a community-based approach focusing on empowerment and trust among the involved actors.	The organizers mainly facilitate and cultivate connections between the citizens/users, either in the situations where activities are led by the users or in the events that they host themselves. The living lab is partly funded by the city administration, by project grants and by a small café that is part of the 'house'.	The initiative relies on and has obtained political support – but still it is person-driven and no long term strategic collaboration is ensured. There is no official set of evaluation criteria to measure the activities of the space. Nevertheless, to become financially sustainable and independent it is acknowledged that some evaluation parameters need to be developed - and the agreed upon success across all actors involved need to documented.	individuals, with specific competences – instead the support structures for such initiatives can be shared and act as inspiration in other municipal settings.



5 Practical contribution: Recommendations

In Table 3 generic conclusions, questions and recommendations regarding implementation of living labs in a public sector context are given. The list is not exhaustive, and should be considered as inspirational to dive further into the aspects of living lab application.

Table 3: Living Lab or not Living Lab, a toolbox for policymakers and practitioners

Main theoretical conclusions	Questions for practitioners and politicians	Recommendations to set up a living lab
Living labs are set up to solve specific problems in public services or administrations but also complex societal problems (education, inequality, climate, digitalization, unemployment, social heritage).	- Why must we engage in a living lab approach rather than more classical participatory sessions? - What is the mission of the living lab?	It is important for politicians or practitioners to know why they want to adopt a living lab approach in order to define the best methods, framework, space or stakeholders necessary for the success of co-creative problem-solving activities.
Living labs are problem-solving practices based on open, user-centric innovation. A Living Lab emerges from the bottom or is proposed by politicians or practitioners to mobilize the service experience of users, or participation of citizens.	- Do policymakers or practitioners prefer to support a bottom-up initiative of citizens? - Or do policymakers or practitioners prefer to take the initiative to control the degree of open innovation in the living lab?	It is important for politicians or practitioners to be conscious that open user-centric innovations are new practices in the public sector. Co-creative problem-solving activities may reframe or even disrupt traditional highly institutionalized institutions and power balances.

Living labs are advanced experimental structures to solve practical or societal problems through feed-back mechanisms that generate innovative solutions: new public services, new work routines in the public sector or even new institutions. Resistance to innovation is a risk as well as the failure of experimental solutions.	- Are the skills and mindset of civil servants, practitioners or policymakers open to experimental and risky practices? - Is the traditional political system or administrative sector ready to adopt new solutions imagined in the living lab?	It is important for politicians or practitioners to be conscious that the degree of resistance to change is a barrier to innovation because the public sector is risk-averse. Organization in silos, division of labour, professional identities create barriers to collaborations between administrations and with the stakeholders of the living lab.
Living Labs are tools for systemic changes over time through two levels of co-creation. Micro-level co-creation through interactions between employees and citizens may add up to systemic changes. Macro-level co-creation for social innovation needs to mobilize large groups of stakeholders.	- What type of problem is to be solved (specific or complex)? - What level of co-creation is needed (micro or macro)? - How large must the mobilisation of stakeholders be? - How many stages are necessary for a systemic change to occur rather than a one-shot innovation?	It is important for practitioners to know if politicians agree with the aim of a systemic change (and the risk of disruption) or if they prefer to sustain specific problem-solving with micro-level co-creation and a change step by step. From that choice depends the number of stakeholders to engage in the living lab.

The efficiency of a living lab approach depends on user engagement in the process: a superficial involvement (survey, consultation…) or a deep involvement (co-design, test, or even participation in the decision-making process).	- At what stage of the innovation process is it necessary to mobilize users? At the initial stage when the problems to solve are to be defined? Or at the development stage when prototypes have to be tested and validated? - At what stage of the innovative process does the service experience of users become input to increase public value creation?	It is important for politicians or practitioners to be conscious that user engagement in living labs is a way to test emerging networked governance according to the model of NPG (new public governance). It differs from NPM (new public management) where users are superficially involved (to express preferences) in an innovation process controlled by public managers.
Living labs must target both individual and public value creation. Users can be individuals, groups of people (for specific services) or citizens (democratic engagement). They have different or even divergent interests. Living Labs are organizations that can help users in defining the common good, orienting individual interests towards a renewed stakeholder model.	- Is the living lab created to enhance service innovation by involving citizens or to enhance the democratization of innovation? - How to create a healthy innovation climate to take into account individual interests as well as collective interest? - How to place the common good at the centre of living lab activities?	It is important for politicians or practitioners to understand that users are at the starting point of innovation processes as well as at the heart of value creation in a Public Service Logic. Living labs are tools that allow the convergence of individual interests to a common good which is at the heart of social responsibility stakeholder models.

Living labs provide a protected space for 1) repairing conflicts that may occur from the alignment of individual interests to a common good (democratic engagement); 2) helping civil servants or policymakers to engage in public innovation with less resistance (processual learning); 3) experimenting open institutional networks for public employees to become more pro-active (relational space).	- How to make sure that individual interests are addressed even if the goal of a living lab approach is to create public value through innovation? - How to avoid that the protected space created by the living ab does not decouple the creation of new specific services from larger societal interest? - How to mobilize sufficient numbers of stakeholders to legitimate the co-created value and for this innovation to be accepted by policymakers?	The shift from New Public Management to New Public Governance and the Public-Private-People Partnership (PPPP) principle plead for the living labs. They are protected spaces to reduce conflicts or tensions that may appear during these participatory processes. Politicians or practitioners have to be conscious that living labs can consolidate or even restore legitimacy of public services in a context of digitization and global change.
Living labs are collaborative platforms for interaction, settings for varied structures of open innovation. Methodologies, workplaces, objectives and audience size need to be adapted to each context to avoid resistance to change and allow innovations to emerge and to be then adopted. Contexts mean different types of public administrations, the political context of a territory or even the spatial scale of the future living lab (a district, a metropole, a region...).	- What are the best methodologies to use in the context of the living lab to be created? - What type of public service or administration could be disrupted by the innovation invented through a living lab approach? - What spatial scale is concerned by the living lab to be created and what types and number of stakeholders may be mobilized?	It is important for politicians or practitioners to be conscious that living labs have to be adapted to different contexts. Even if guidelines for open innovation may reduce the risk of failure, even if benchmarking of best practices are useful, it is necessary to avoid «Xerox policies» that is to say living labs that are copycat of other examples without taking into account the specificities of the local context.

To conclude, living Labs present themselves as a more structured, participative and open ways of doing public innovation, in comparison with the usual internally driven top-managed or ad hoc innovation processes in the public sector. Living Labs could be chosen as innovation tools in public services if the aim is to promote a more structured and participative way of thinking about public innovation.

Living labs are inherently about change; it is about targeting complex challenges in new ways, by integrating resources from different sectors. As innovation model, living labs can be seen as illustrations of triple/quadruple helix models of innovation. It is important that there is a real commitment to engage in such radical cross-sectorial collaboration – and herein that policy makers dare to open up for the stakeholders to be part of problem identification and decision-making. Otherwise there might not be a reason to label the process as a living lab.

How best to arrange a living lab depends on the context and on how far one is thinking about open and user-oriented innovation. An advantage of, for example, the project model is that one gets tied up to create results and gets committed to a number of stakeholders, but a disadvantage is the risk of living labs not being part of mainstream activities. It is therefore important to create a connection between experiment and operation.

A key point when it comes to living lab is that it is to be understood as an umbrella term for many and differing practices – and across the case organisations of the thorough European case study almost all actors stress that they need to develop tailor-made methods/approaches. This is related to the main aspects of living labs; that they are user/citizen centric and based in real-life setting/challenges.

The outcome and impact aspect is a sore spot when it comes to living labs, since there are very few measurement tools and documented insights. But it depends on what we want to measure; there might not be a clear causality between the use of living lab as innovation approach and the societal challenge targeted, but instead it is possible to do process evaluation and continuous evaluation to be able to document how solutions and learning have evolved. An important aspect of living labs is that they often lead to organisational learning and user learning, and hence the process itself opens for increased innovation competences.

6 Conclusions

As emphasized in the initial literature review of WP 5, there is an articulated need for conceptual clarification and for a better understanding of how and with what resources users and citizens are engaged in living lab activities for public sector innovation (Schuurman & Tõnurist, 2017).

In many respects this has been the overall objective of WP 5, and the reason for diving into living lab as both a theoretical and empirical phenomenon. Through a thorough review of scientific and grey literature a research design for realizing the 22 case studies across nine EU countries was developed (D5.1 and D5.2). In this manner the first two deliverables have laid the ground for the conclusions of this final deliverable.

In sum, we can conclude that living labs as a tool of public sector innovation is organized differently than top-down internally driven innovation processes. Moreover, living labs hold potentials of democratic engagement, which is yet to be unfolded. Living labs are about developing a model of an experimental, participatory, stakeholder-based approach to co-creation and co-innovation.

To do so, there must be an interest in experimentation as a practice for administrations. Further, participation of citizens and stakeholders is important, not only being invited into the innovation process, but also potentially having impact on decision-making. Hence what makes living labs a potentially more radical form of public sector innovation is the possibility to give citizens and other stakeholders agency by giving them decision-making power – an aspect which might be challenging to public sector organizations who have responsibility for public services. This raises issues of how handing over more agency to living labs may be combined with assigning increased responsibility to them. This is especially crucial for two reasons: to ensure 1) that the living lab approach is not applied to blur that citizens, end users and other stakeholders are in fact only consulted, and 2) that the implementation phase, and the changes, become more sustainable and more integrated with actual development of public services.

7 References

Alford, J. and O'Flynn, J. (2009), 'Making sense of public value: Concepts, critiques and emergent meanings', *International Journal of Public Administration,* 32(3-4), 171-191.

Ansell, C. K. and Bartenberger, M. (2016), 'Varieties of experimentalism', *Ecological Economics,* 130, 64-73.

Arnstein, S. R. (1969), 'Ladder of citizen participation', *Journal of the American Institute of Planners,* 35(4), 216-224.

Bechmann, S. (2010), *Servicedesign*, Århus: Academia.

Benington, J. (2011), 'From private choice to public value?', in Benington, J. and Moore, M. H. (eds.), *Public value: Theory and practice*, New York: Palgrave Macmillan, pp. 31-51.

Boje, D. M. (1995), 'Stories of the storytelling organization: A postmodern analysis of Disney as "Tamara-land"*', The Academy of Management Journal*, 38 (4), 997–103.

Björgvinsson, E., Ehn, P. and Hillgren, P.-A. (2012), 'Agonistic participatory design: working with marginalised social movements', *CoDesign,* 8(2-3), 127–144.

Fassin, Y. (2009), 'The stakeholder model refined', *Journal of Business Ethics,* 84(1), 113-135.

Freeman, E. (1984), *Strategic Management: A Stakeholder Approach*, Noston: Pitman.

Fuglsang, L. (2010), 'Bricolage and invisible innovation in public service innovation', *Journal of Innovation Economics,* 2010 (n° 5)(1), 67-87.

Gascó, M. (2017), 'Living labs: Implementing open innovation in the public sector', *Government Information Quarterly,* 34(1), 90-98.

Grönroos, C. (2019), 'Reforming public services: does service logic have anything to offer?', *Public Management Review,* 21(5), 775-788.

Hansen, A. V. and Madsen, S. (2019), *Theorizing in organization studies. Insight from key thinkers*, Cheltenham: Edward Elgar.

Hartley, J. (2005), 'Innovation in governance and public services: Past and present', *Public Money & Management,* 25(1), 27-34.

Holstein, JA. and J. F. Gubrium (2002), 'The Self We Live By. Narrative Identity in a Postmodern World.', Oxford: Oxford University Press.

Jørgensen, T. B. and Bozeman, B. (2007), 'Public values - An inventory', *Administration & Society,* 39(3), 354-381.

Langley, A. (1999), 'Strategies for theorizing from process data', *Academy of Management Review,* 24(4), 691-710.

Lawrence, T. B. and Suddaby, R. (2006), 'Institutions and Institutional work. ', in Clegg, S. R., Hardy, C., Lawrence, T. B. and Nord, W. R. (eds.), *The Sage handbook of organization studies* (2nd ed.), London: Sage, pp. 215-254.

Mitchell, R. K., Agle, B. R. and Wood, D. J. (1997), 'Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts', *The Academy of Management Review,* 22(4), 853-886.

Moulaert, F. and MacCallum, D. (2019), *Advanced Introduction to Social Innovation*, Cheltenham: Edward Elgar.

Müller, M. (2013), 'How innovations become successful through stories', in L. Becker, and AP. Müller (eds.), *Narrative and Innovation*, Karlshochschule, International University, Germany: Springer, pp.139-151.

Nabatchi, T. and Leighninger, M. (2015), *Public participation for 21st century democracy*, Hoboken, NJ: John Wiley & Sons.

Nesti, G. (2017), 'Living Labs: A new tool for co-production?', in Bisello, A., Vettorat, D., Stephens, R. and Elisei, P. (eds.), *Smart and sustainable planning for cities and regions*, Cham: Springer.

Osborne, S. P. (2006), 'The new public governance?', *Public Management Review,* 8(3), 377–387.

Osborne, S. P. (2018), 'From public service-dominant logic to public service logic: are public service organizations capable of co-production and value co-creation?', *Public Management Review,* 20(2), 225–231.

Osborne, S., Brandsen, T., Mele, V., Nemec, J., van Genugten, M. and Flemig, S. (2020), 'Risking innovation. Understanding risk and public service innovation-evidence from a four nation study', *Public Money & Management,* 40(1), 52-62.

Riessman, C.K. (2008), *Narrative Methods for the Human Sciences*, New Yoork: Sage Publications.

Schot, J. and Steinmueller, W. E. (2018), 'Three frames for innovation policy: R&D, systems of innovation and transformative change',*Research Policy,* 47(9), 1554-1567.

Schuurman, D. and Tõnurist, P. (2017), 'Innovation in the public sector: Exploring the characteristics and potential of living labs and innovation labs', *Technology Innovation Management Review,* 7(1), 7-14.

Smith, A. and Raven, R. (2012), 'What is protective space? Reconsidering niches in transitions to sustainability', *Research Policy,* 41(6), 1025-1036.

Spence, L. J. (2016), 'Small business social responsibility: Expanding core CSR theory', *Business & Society,* 55(1), 23-55.

Stickdorn, M. and Schneider, J. (2011), This is Service Design Thinking, John Wiley & Sons, Inc., Hoboken, New Jersey

Swedberg, R. (2017), 'Theorizing in sociological research: A new perspective, a new departure?', *Annual Review of Sociology,* 43, 189–206.

TEPSIE (2015), 'The theoretical, empirical and policy foundations for building social innovation in Europe', in TEPSIE (ed.), *Doing Social Innovation: A Guide for Practitioners*, Brussels: European Commission, 7th Framework Programme.

Vargo, S. L., Wieland, H. and Akaka, M. A. (2015), 'Innovation through institutionalization: A service ecosystems perspective', *Industrial Marketing Management,* 44, 63-72.

Weick, K. E. (1995), 'What theory is not, theorizing is', *Administrative Science Quarterly,* 40(3), 385-390.