il

a multichannel publishing to bridge the knowledge gap between service design and public sector

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Co-supervisor | Eun Ji Cho

Author | Serena Chillè

A.A | 2018/19

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Politecnico di Milano
School of Design
Master Degree in Product-Service System Design

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Double Master Degree POLITONG

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Abstract

Ensligh

Today, we are living in a world in continuous development, where fast changes and new technologies are undermining the conventional mechanisms of public administration. Slow processes and obsolete systems are no longer suitable to deal with public challenges. Current governments increasingly deal with complex challenges, that are requiring the adoption of new methods and solutions. At the same time, increasing expectations and demand for better services by citizens and communities are continually pressing public sector organisations to provide services with increased user focus and lower costs. In order to cope with complexities, innovation and transformation have become fundamental for local governments to overcome organisational and cultural limits, and service design is increasingly chosen as an alternative to drive impactful changes.

This places designers in front of a series of changes and raises some questions to which this study aims to answer: 1) How and why is service design linked with public sector innovation?, 2) Which roles is service design playing in public sector innovation?, 3) What are the primary limits and barriers of public sector innovation? Can service design help to overcome them?. To answer these questions, field and desk researches, including a literature review, fourteen service design experts interviews and case studies analysis were carried out. The research revealed that, despite the increasing relevance that service design is gaining in the public sector, there is still a knowledge gap between the two fields, including little mutual awareness and understanding and the absence of a shared language.

Based on these findings, the thesis focused on the development of a design solution to bridge the knowledge gap. ***"il"*** is a multichannel publishing created by a small collective of designers passionate about public sector innovation and aimed at filling the lack of knowledge while triggering and encouraging future collaborations between service design and public sector. By using four different digital channels, it intends to support the establishment and growth of a community of practice around the topic of public sector innovation, disseminating languages, methods and approaches. In addition, the project seeks to involve service designers and civil servants in an innovative and participatory learning journey. The system is composed of five main touchpoints: a digital book online with an embedded analysis framework, a blog on the platform Medium, a reference Instagram account and a podcast collection of experts' interviews on Spotify. To verify the concept, three co-creations and a prototyping session were carried out; these proved the interest of users toward the proposal and their willingness to be actively involved in the process.

public sector,
service design-driven
innovation,
knowledge gap,
interdisciplinary
collaboration,
participatory learning

Italian

Viviamo in un mondo in continuo sviluppo, dove rapidi cambiamenti e nuove tecnologie stanno minando i meccanismi convenzionali della pubblica amministrazione. Processi lenti e sistemi obsoleti non sono più adatti ad affrontare le sfide pubbliche. I governi si confrontano sempre più spesso con problemi complessi, che richiedono l'adozione di nuovi metodi e soluzioni. Allo stesso tempo, le crescenti aspettative da parte dei cittadini, spingono il settore pubblico a fornire servizi con un maggiore focus sugli utenti e con costi inferiori. Innovazione e trasformazione sono diventate componenti fondamentali per far fronte a queste complessità e superare i limiti organizzativi e culturali, ed il service design è sempre più scelto come alternativa per guidare cambiamenti di impatto.

La situazione attuale pone quindi i progettisti di fronte a una serie di cambiamenti e solleva alcune domande alle quali questo studio intende rispondere: 1) Come e perché il design dei servizi è legato all'innovazione del settore pubblico?, 2) Quali sono i ruoli del design dei servizi nell'innovazione del settore pubblico?, 3) Quali sono i limiti e le barriere principali dell'innovazione del settore pubblico? Può il service design aiutare a superarli? Per rispondere a queste domande, è stata condotta una ricerca che ha incluso una rassegna letteraria, quattordici interviste a esperti di service design e analisi di casi studio. Nonostante la crescente importanza che la disciplina sta acquisendo nel settore pubblico, la ricerca ha rivelato l'esistenza di un divario di conoscenza tra i due ambiti, che include la scarsa comprensione che un settore ha dell'altro e l'assenza di un sistema terminologico condiviso.

Sulla base di questi risultati, la tesi si è concentrata sullo sviluppo di una soluzione progettuale per colmare questo gap. ***"il"*** è un progetto editoriale multicanale creato da un piccolo collettivo di designers appassionati di innovazione del settore pubblico e volto a colmare la mancanza di conoscenza reciproca, innescando ed incoraggiando future collaborazioni tra il design dei servizi e il settore pubblico. Attraverso l'utilizzo di quattro diversi canali digitali, intende sostenere la creazione e la crescita di una comunità di pratica sul tema dell'innovazione nel settore pubblico, diffondendo linguaggi, metodi e approcci. Inoltre, il progetto intende coinvolgere i progettisti e i dipendenti pubblici in un percorso di apprendimento innovativo e partecipativo. Il sistema è composto da cinque touchpoints: un libro digitale online con un framework di analisi integrato, un blog sulla piattaforma Medium, un account Instagram ed un podcast su Spotify con le interviste agli esperti. Per verificare il concept, sono state realizzate tre co-creazioni e una sessione di prototipazione che hanno dimostrato l'interesse degli utenti verso la proposta e la loro volontà di essere attivamente coinvolti nel processo.

settore pubblico,
innovazione guidata
dal service design,
divario di conoscenza,
collaborazione
multidisciplinare,
apprendimento
partecipativo

Chinese

今天，我们生活在一个不断发展的世界中，快速的变化和新技术正在打破公共行政的传统机制。缓慢的进程和过时的制度已不再能应对公共挑战，当前政府越来越多地面临与其他问题直接或间接相关的复杂挑战，这使得解决这些问题变得困难（如果不是不可能的话）。这些问题需要采用不同的方法和解决方案。

此外，市民和社区对高质量服务的期望和需求增加，不断向公共部门提出更高要求，要求他们以更高的用户关注度和更低的成本提供服务。面对所有这些挑战，创新和转型已成为地方政府克服组织和文化局限的根本，越来越多的地方政府选择服务设计作为推动有效变革的替代方案。

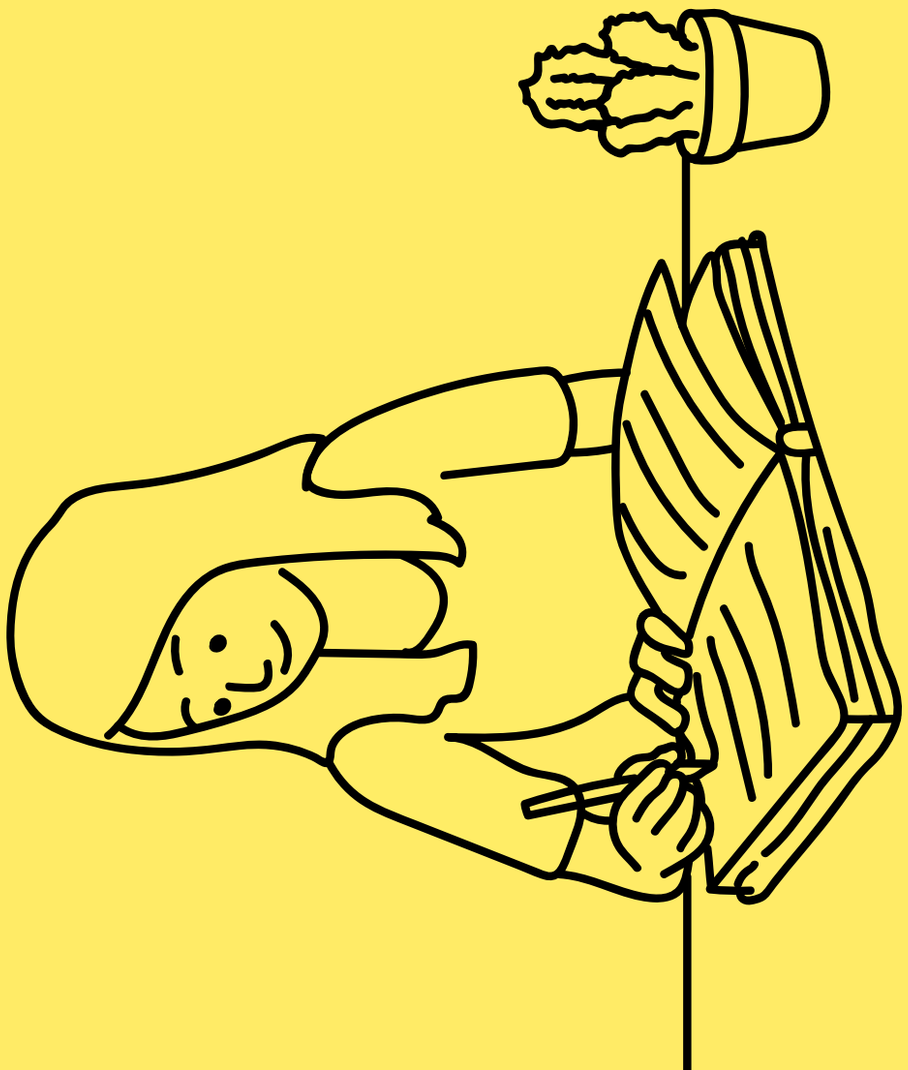
因此，当前的情况将设计师置于一系列变化面前，并提出了许多问题，本研究旨在回答这些问题：（1）服务设计如何以及为什么与公共部门创新挂钩？（2）服务设计在公共部门创新中扮演什么角色？（3）公共部门创新的主要限制和障碍是什么？服务设计有助于克服这些问题吗？为回答这些问题，进行了包括文献回顾、14名服务设计专家访谈和案例研究分析在内的实地和案头研究。研究表明，尽管公共部门的服务设计越来越具有相关性，但这两个领域之间仍然存在知识差距，包括对另一个领域的认识和理解不足，以及缺乏共享语言和术语系统。

在此基础上，本文提出了一种解决这两个领域知识鸿沟的设计方案。“il”是一种多渠道出版系统，旨在触发和鼓励未来服务设计与公共部门之间的合作，填补知识的不足。通过四种不同的数字渠道，它旨在围绕公共部门创新、传播语言、方法和路径等主题支持实践界。此外，该项目力图让服务设计师和公务员参与到创新的和参与式的学习过程中。该系统由五个主要触点组成：一本内含分析框架的在线数字图书、一个Medium平台上的博客、一个辅助参考的Instagram账户和一个专家访谈的播客集。为验证这一概念，进行了共创会议和原型制作会议。这些会议证明了用户对这一方案的兴趣以及他们积极参与该过程的意愿。同时，最后的测试表明还有改进的空间，对未来概念实施的路线图提出了可能的改进意见。

公共部门，
服务设动的新，
知差距，
跨学科协作，
参与式学

Index

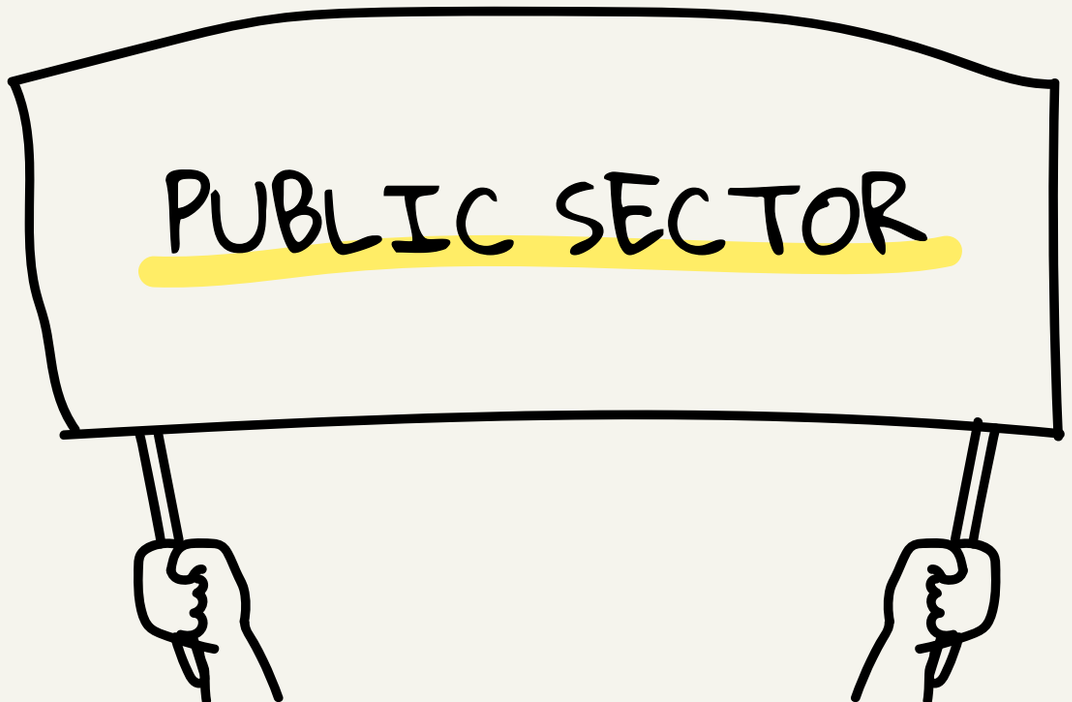
Research phase



1 Introduction

One of the numerous branches of design that is playing a critical role in public sector innovation is the service design discipline, which is expanding its horizons towards new challenges that largely belong to the public sphere (Mager, 2016).

This thesis is going to explore the intersection between service design discipline and the phenomenon of the public sector innovation, trying to give a clear answer about some crucial points of the analysis and bridging certain existing gaps that do exist between existing theories and the still little number of practices.



1.1 Why a thesis about service design-driven public sector innovation

Standard processes and old approaches are no longer suitable to face the growing number of issues and 'wicked problems'

We are living in a world of fast changes and transformation, narrowed by the advent of new technologies that are radically shifting the present. Simultaneously, cities and urban realities are gaining more and more importance and the phenomenon of the 'urbanization' is a clear proof of this: future forecasts show that, over the coming years, an ever-increasing number of people is going to move from rural areas toward urban settlements. Existing cities are then growing, and world will witness the emergence of the so-called 'megacities' (United Nations Department of Economic and Social Affairs, 2018; United Nations, 2018). Moreover, upward expectations and demand for better services by citizens and communities are continually pressing public sector organizations to provide services with an increased user focus and a higher level of efficiency. In order to best address this ongoing phenomenon and ensure a sustainable living environment for future generations, providing an advanced and innovative service delivery has become one of the main objectives of today's governments all over the world.

To cope with these present challenges, innovation and transformation have become two fundamental parameters for all the different dimensions of public administrations: standard processes and old approaches are no longer suitable to face the growing number of issues and 'wicked problems' that characterized the public sector (Bason et al., 2017; Polaine, Løvlie, & Reason, 2013; Schaminée, 2018). In this complex panorama, the role of design is gaining in relevance and designers are more and more involved in solving big challenges and societal issues. For this reason, design solutions have large impact not only on physical products, but also on social mindset, and the role of experts of this field is facing a radical change (Bason et al., 2017). In particular, one of the numerous branches of design that is playing a critical role in public sector innovation is the service design discipline, which is expanding its horizons towards new challenges that largely belong to the public sphere (Mager, 2016).

This thesis is going to explore the intersection between service design discipline and the phenomenon of the public sector innovation, trying to give a clear answer about some crucial points of the analysis and bridging certain existing gaps that do exist between existing theories and the still little number of practices.

1.1.1 Public sector & innovation

Many experts tried to draft a univocal definition of what 'public sector' is and embraces. Nevertheless, being such a vast and broad concept, there is still a variety of fragmented and different meanings.

To facilitate the comprehension of the overall analysis, in this thesis the term 'public sector' will refer to "that portion of an economic system controlled by national, provincial or local government" which is in charge of providing various public and government services and managing public enterprises ('Public sector', 2019) (Figure1.1).

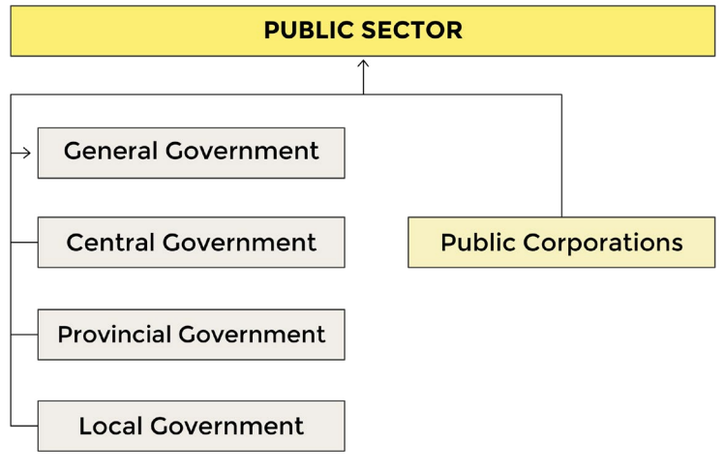


Figure1.1 Public sector map. Source: https://whatis.techtarget.com/definition/public-sector. Graphically readapted by the author.

Even though its composition significantly varies by country, the public sector usually includes such services as infrastructures, healthcare, education, transportation, communication and policy-making (Schaminée, 2018) together with the ones directly embedded in government - as elected officials, politician and organizational departments (WebFinance, 2019). The public sector role is to ensure those essential services that must be accessible by every citizen, to establish a benefit for the whole of society and not only for those who directly use them (i.e. prisons system). Its structure - also called 'public ownership' - can be shaped in diverse ways, including:

- Direct governance, financed by public funds; the administration doesn't have any specific regulations to satisfy a successful service delivery, and decisions are taken directly by the government.
- Public companies (or 'state-owned enterprises'); which are slightly different from the previous category in that they enjoy greater commercial freedom and must work following commercial criteria. Moreover, decisions are usually not directly dictated by the government.

- Out-tasking - also called ‘partial outsourcing’: it could be one among the public sector format.

The public sector is framed accordingly to a series of values that usually guides its functioning together with the work of civil servants. We can identify mainly seven key values that define both important actions within the organization and the approach to be followed (Figure1.2):

responsiveness: there is a need for speed in facing changes and answering the community’s needs, providing at the same time good public services;

integrity: public sector work should always be open and transparent, without exploiting in a negative way its public power. Additionally, it should be active in searching and solving inequalities and disparities;

impartiality: the work of the public organization and its employees should guarantee a high level of objectivism. Implementation should be carried on without “bias, caprice, favouritism or self-interest”;

accountability: civil servants have to work in order to answer explicit purposes, trying to accept and forecast the effects of their actions. They also must use consciously all the resources that they have;

respect: the public sector and its officials should guarantee freedom and respect among people;

leadership: public administration should lead in a responsive way its work;

human rights: it’s necessary to keep a focus of citizens’ rights, also trying to improve, advertise and support them (‘Public Sector Values’, 2015).

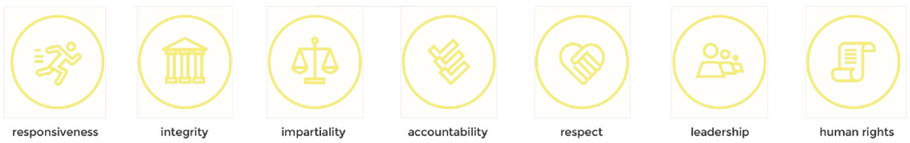


Figure1.2 Public sector values. Source: https://vpsc.vic.gov.au/ethics-behaviours-culture/public-sector-values/ . Graphically readapted by the author.

These values are also part of the so-called ‘bureaucracy’ (see Chapter2) and identify the attitude that the government and the community expect from all the public sector officials and leaders. The efficiency of the public sector together with its capacity to achieve specific public goals, automatically increase when civil servants follow this model of values. At the same time, failing to address these values, can lead to a citizens’ distrust toward the work of the public sector.

Unfortunately, the present often puts a strain on the respect of these values and places the public sector and its officials in front of complex, connected and difficult challenges that still need to be solved (‘Public Sector Challenges’, 2018). These peculiar challenges need to be faced with new approaches since ‘classic’ and incremental methods are not efficient in this complicated panorama. For this reason, different ways to frame problems and design solutions are required and this could be possible only undertaking an ‘innovation path’ (OECD, 2017).

Public sector innovation is a journey and, like every journey, in order to understand what’s happening in the present, we should go back to find the trigger points in the past. So two key questions automatically arise: *What does push governments to innovate its public sector? What are the main reasons for change?*.

Giving a univocal and clear answer – as for everything linked to the public ambit – is not easy. But, analyzing the ongoing situation, we can list four main reasons why administrations are changing and adapting their offer:

- **a period of crisis;**
- **citizens request for better services;**
- **the advent of new technologies and faster changes;**
- **good examples from others.**

Reason 1 - a period of crisis

Thinking about the past we can notice that, somehow, we are living, again and again, similar situations since a long time: many historic events seem to be a kind of cycle. For example, we know that many countries – no matter how big or powerful they were – have faced periods of crisis which have often been overcome thanks to changes. Nowadays, many countries are living a new period of crisis, not merely economic in nature. To fight against all of this, a lot of public administrations are putting their trust in the power of innovation, and they are trying to change the public sector as a first step. Innovate the public sector means a lot of things: it means to enhance better public services, as well as improving policy making and the government organization itself. A better public sector is, of course, a synonym of fewer costs for administrations, so, together with the crisis, it is also possible to state that also money is a great push for innovation.

Reason 2 – citizens request for better services

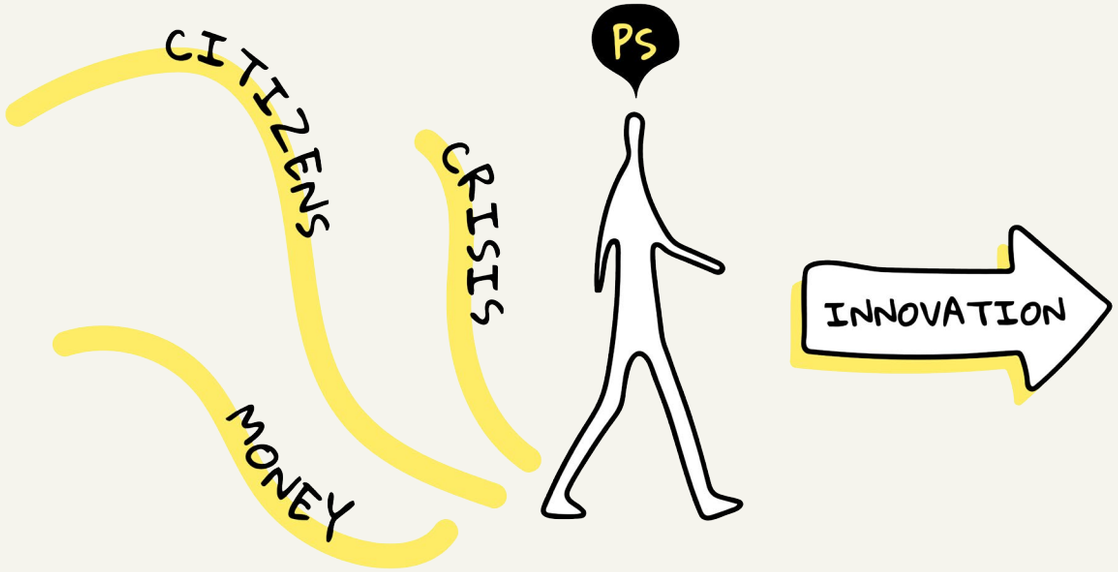
More and more communities are demonstrating for their public rights, asking for faster and more accessible services. Governments are forced not to ignore this important voice, and many pioneer administrations are including in the innovation process citizens and other associations. In this way, they act a sort of co-design, working with users and other relevant actors to consider opinions and ideas from different perspectives, in order to create a more successful system that tries to satisfy all the stakeholders' needs.

Reason 3 – the advent of new technologies and faster change

Today, we are living in a world in continuous development, where classic models and standard structures are not suitable anymore to answer the present requests. This general statement perfectly fits also the public sector fields: slow procedures, paper-based documents, old processes and so on, are all obsolete elements that are not working in today's scenarios. Administrations are trying to change and improve their current offer to go hand in hand with the developing technologies, also to take advantages from their huge potential in the public field. This will also allow governments to better face the future requests, trying to anticipate scenarios and possible situations to provide solutions also for hidden public needs.

Reason 4 – good examples from others

Last but not least, another reason why governments are trying to innovate their offer is that they look at what the 'neighbors' are doing. Pioneer countries such as the UK, Finland, Netherlands and Singapore, represent nowadays sources of inspiration for many other cities all over the world. With their good practice in innovating the public sector, they constitute successful examples of how a country can really improve its public sector, and they provide useful instances about right methods, processes, and approaches to use.



When innovation is applied to the public sector, it is possible to observe some common patterns that are:
- novelty
- implementation
- impact

The concept of 'innovation' is linked with two connected activities that are: doing something new and shaping, improving and scaling this 'new' to make it suitable for a specific context. Therefore, inventing something is not enough to read this action as 'innovative': innovation happens only when an invention is implemented until its adoption in an organization, in the market or society (Fuglsang, 2010).

When innovation is applied to the public sector, it is possible to observe some common patterns that are:

- **novelty**: change implies the adoption of diverse methods and approaches;
- **implementation**: innovation - as previously said - cannot be just a proposal, but needs to be improved and scaled;
- **impact**: innovation's objective is to enhance some values, such as efficiency, effectiveness and citizens' satisfaction (Arundel, Bloch, & Ferguson, 2014).

Additionally, the OECD (2015) identifies three unique aspects that highlight how innovation is approached in the public sector, 1) "as a verb rather than a noun" - it focuses a lot on the whole process; 2) "as the application of concepts rather than the invention" - contextualize innovation is fundamental for its success; 3) "as a means to an end" - innovation aims at reaching real results.

Public sector innovation tries to design new public value in line to the changing society. This objective can be satisfied only changing the way the public sector currently works, involving new and different actors, putting citizens first to structure a more inclusive and open society and delivering better services. Moreover, innovation can be used by governments also to redesign current policies with better users-focus (OECD, 2017).

Adopting innovation in government it's a difficult journey since innovation is risky and unknown and usually public bodies prefer to develop solutions in 'secure' environments. The present tendency is to keep old structures, trying to maintaining the status quo. Moreover, the most significant change is that new ideas have to be generated, rather than existing proposals being improved. This goal can only be achieved by "re-thinking, re-scoping, re-designing and re-engineering the processes/procedures, services or systems of the public sector" (OECD, 2017). The innovation journey in the public sector is living a sensible change, moving from the so-called "green-field" (where a new proposal is designed from zero), to "sustaining" (in this case a running system is enhanced) to "disruptive" innovations (where the whole system is entirely re-invented and re-designed). In fact, as soon as the public sector started to challenge and change its offer and public services delivery, innovation itself moved from the 'secure' green-field area towards more challenging transformation environments.

Still, a lot of doubts and confusion toward the meaning of innovation and its role in the public sector do exist. *Which is the right attitude? Are there innovative activities that are better than others? Does the government have to reshape its structure to better deal with innovation?*

The reality is that innovation has many distinct aspects that seem very different from each other and can involve multiple actions with several goals. In this regard, the Observatory of Public Sector Innovation (OPSI) sustains that governments have to accept this, trying to develop a repository of approaches to take advantages from the power of innovation in the best way possible. To help this process, OPSI has recently developed a model that shows four main facets of public sector innovation (Figure1.3):

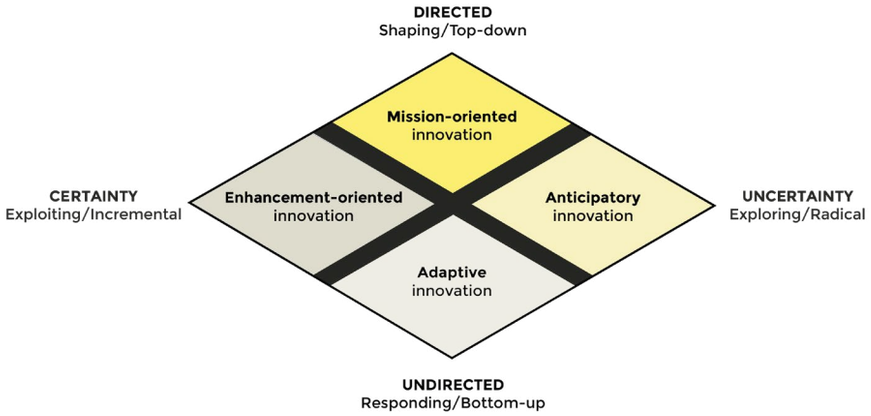


Figure1.3 OPSI Innovation Facets Model. Source: https://oecd-opsi.org/projects/innovation-facets/. Graphically readapted by the author.

- **'mission-oriented' innovation**: this happens in those cases where a clear goal is set since the beginning. The achievement could be both at a local dimension or at a larger scale and is driven by a strong ambition toward the specific objective;
- **'enhancement-oriented' innovation**: focuses on enhancing and improving methods and present approaches in order to gain better results. This facet is the one that current governments usually adopt since it doesn't require to challenge present structures, rather it tries to exploit existing resources and models;
- **'adaptive' innovation**: this facet is about prototyping and trying new approaches to answer new needs dictated by a transforming context. In this case, innovation is exploited to adapt to a specific ongoing change in the environment;
- **'anticipatory' innovation**: is projected toward the future and aims at exploring and understanding emerging public issues in order to design suitable proposals. This facet can actually drastically transform current models and reshape existing structures and approaches: for this reason this specific category is strictly linked to a high level of uncertainty (OPSI, 2019).

The best scenario for impactful and successful change is the one that sees the transformation happening in the intersection between the four different facets. For this reason, it is important that governments learn and understand how to deal with all the four models, and in which specific situation one facet is more suitable than the others.

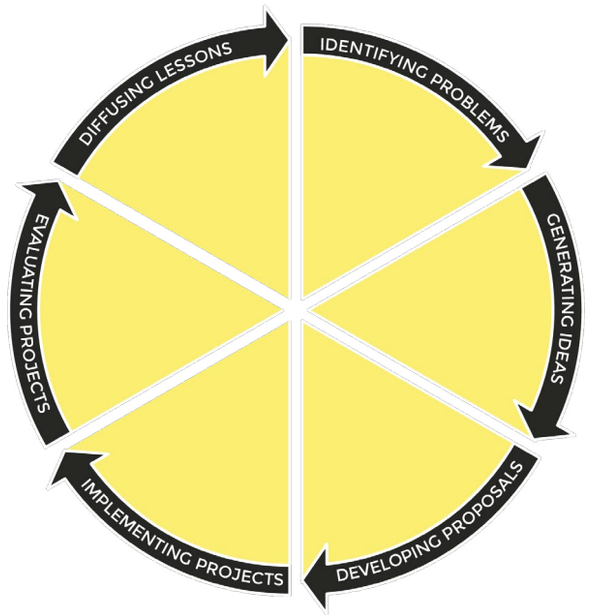


Figure1.4 OECD innovation lifecycle. Source: OECD, 2017. Graphically readapted by the author.

Public sector innovation needs to be supported: it is necessary to identify the right problems and translate ideas into real and achievable projects

Public sector innovation needs to be supported: it is necessary to identify the right problems and translate ideas into real and achievable projects, which can be implemented, translated into other contexts and disseminated. This is only possible when the public administration is able to identify processes and structures that can support innovation at every step of its life cycle. To support this, OECD has structured an innovation lifecycle, built upon six phases (Figure1.4):

- identifying problems: explore current issues and understand which one to solve is the first step to develop a successful proposal. The public sector is usually not good in locating challenges and opportunities of the context they are in;
- generating ideas: proposals that encourage and support innovation can both come from the community, through a bottom-up approach, or from government leaders. Usually, this implies setting some incentives to trigger a bigger ideas generation;
- developing proposals: in order to shift from concept to real proposal, it is necessary to test and prototype the ideas. As already said, innovation, by definition, is linked to newness and this obliges the public sector to deal with uncertainty, trying to change it into "manageable risk";
- implementing projects: it is important to reiterate the proposals after the testing phase. In this way it is possible to implement ideas considering also the business side and the funds' management;
- evaluating projects: the impact of innovative proposals must be assessed in order to understand if they are actually solving the challenges for which they were designed;
- diffusing lessons: divulging successful examples of innovation is a key activity to enable more proposals to start also in different environments (OECD, 2017).

In order to design successful strategies, it is crucial to bring together different key actors to trigger the innovation process. The Deloitte Center for Government Insights defined an ecosystem that presents five key roles in public sector innovation: **the problem solver, the enabler, the motivator, the convener and the integrator.**

Of course what actually matters in the reality is the perception of governments toward innovation, since they are the real drivers of change. How they want to use innovation, for doing what and what they expect in terms of impact are just some of the important points that are part of this analysis. As we can see, it is crucial to understand what the public sector thinks about innovation. One way to do that is basically studying the practical outcome of their "minds", or, in other words, the strategies they put in place. These strategies can be profoundly different by context, but they give a clear point about the perception of governments, what they actually want from an innovative approach and how they value it (OPSI, 2017).

Additionally, in order to design successful strategies, it is crucial to bring together different key actors to trigger the innovation process. The Deloitte Center for Government Insights defined an ecosystem that presents five key roles in public sector innovation: the problem solver, the enabler, the motivator, the convener and the integrator (Figure1.5).

The **problem solver** is actually the person that we identify as 'innovator': he/she comes up with a relatively innovative solution for a specific challenge and use methods and approaches that are typical of the design discipline (design thinking, ideation methods, innovation activities, etc.).

The second role is linked to the provision of fundamental resources to innovate. **Enablers** are usually the ones who organize training and sharing sessions, workshops and they also design toolkit and/or incubators and innovation hubs.

The **motivator**'s role is to provide incentives to encourage potential innovators to suggest innovative proposals: this is possible by establishing competitions and rewards or using a gamification approach.

The fourth role is one of the **conveners**, namely the ones in charge of bringing actors of the ecosystem together, during conferences, hackathons, jams, events, in physical spaces (such as co-working), but also in digital contexts (such as crowdsourcing platforms or other websites).

Finally, **integrators** represent the core of the whole system, since they are the ones who choose the actors who can potentially partner together to support an innovation process. They are also responsible for connecting and aligning them as well as keeping the innovation alive. In order to obtain a successful and responsive ecosystem, it is necessary that public organizations embrace at least two of the identified roles, accordingly to this analysis (Holden et al., 2017).

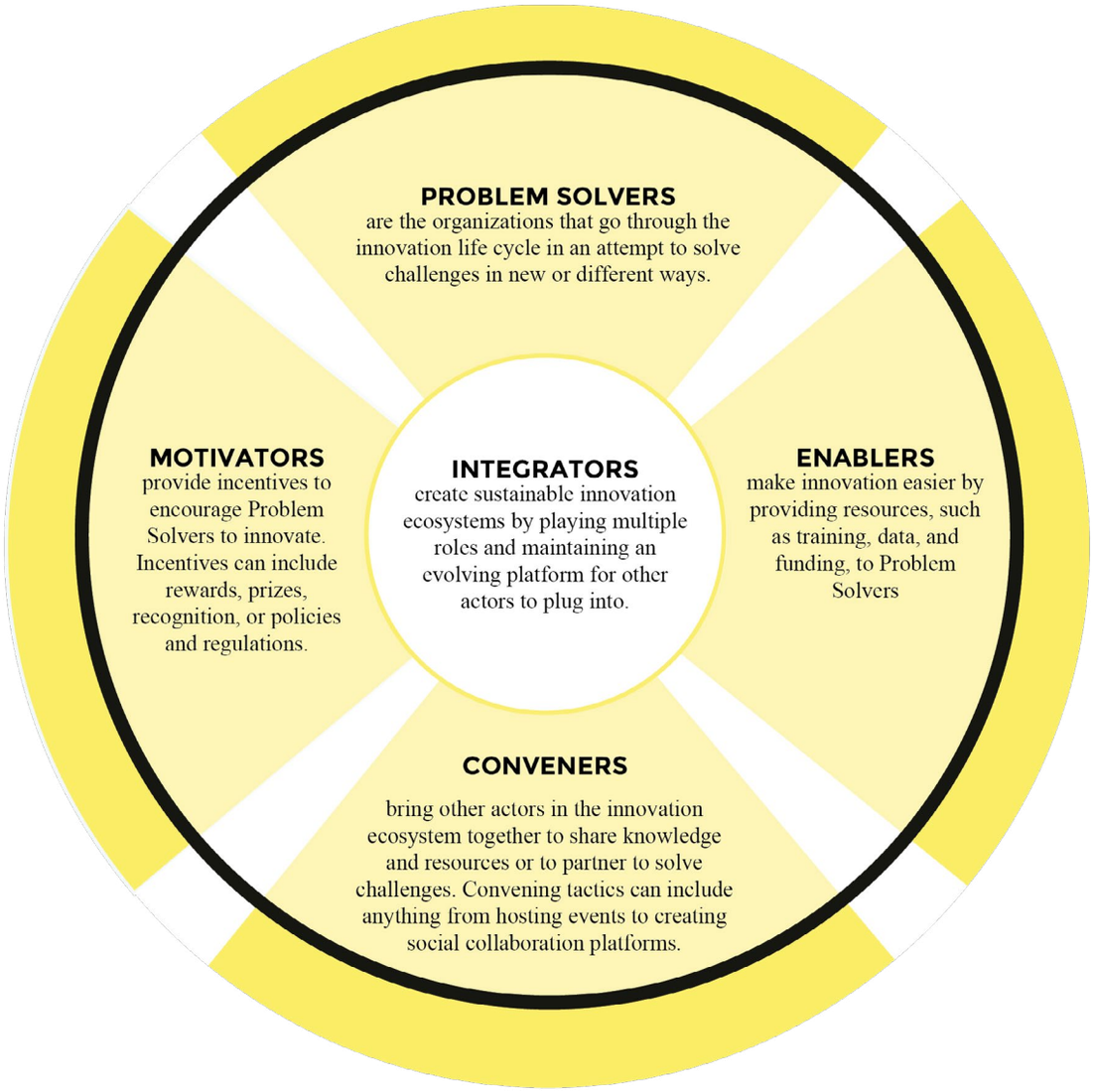


Figure1.5 Five roles in public sector innovation. Source: Holden et al., 2017. Graphically readapted by the author.

'dedicated innovation units' contribute to the transformation process in several ways:
- they help the identification of the issues
- they sustain the phases of development
- they support the evaluation steps

The roles just presented are usually embedded in government teams, whose aim is specifically to bring innovation in the public environment. Those groups can be identified as 'dedicated innovation units' and contribute to the transformation process in several ways that can be summarised as follows by reconnecting to the innovation lifecycle framework built by OECD (Figure1.6):

- they help the identification of the issues that primarily need to be solved, offering consequently innovative solutions to address these challenges;
- they sustain the phases of development and prospective implementation of the generated ideas;
- innovation units may also support the last two steps of evaluation and diffusion of findings from completed projects (OECD, 2017).

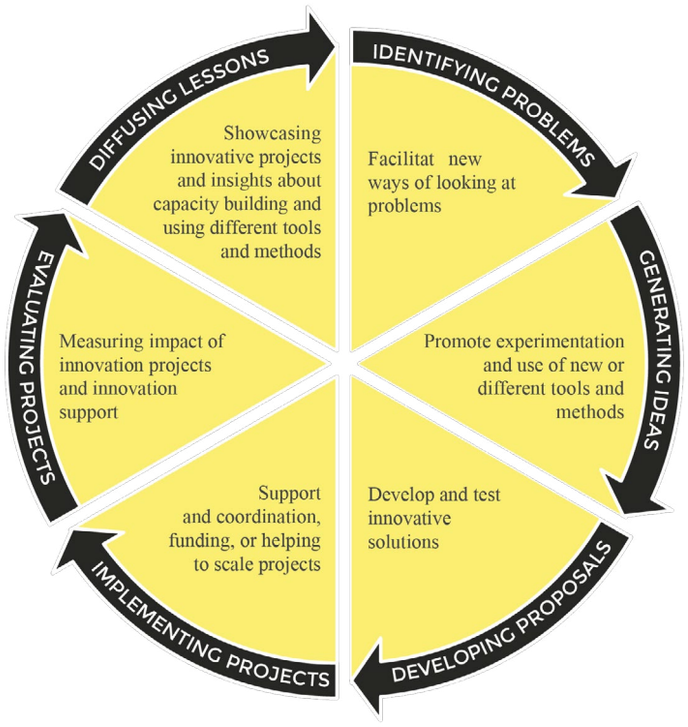


Figure1.6 How innovation units can support the innovation lifecycle. Source: OECD, 2017. Graphically readapted by the author.

Moreover innovation units can help to overcome some of the barriers this thesis is going to present in the following chapters, such as the absence of government leaders able to drive change (Boyer, Cook, & Steinberg, 2011), obsolescence and rigidities that many times characterized the public organization (Mulgan, 2014), the lack of an effective communication between governments' departments.

Existing groups in support of the public sector innovation can be clustered into five groups by their main purpose: support and coordination for innovative solutions, experimentation, supporting service delivery, investment and funding and networking support.

Existing literature offers a vast and detailed analysis of these existing groups in support of the public sector innovation which proves how both their structures and the relationships established toward governments change case by case. For instance, taking into consideration their assets and principal functions, it is possible to cluster them into five groups by their main purposes: support and coordination for innovative solutions, experimentation, supporting service delivery, investment and funding and networking support (OECD, 2015; OECD, 2017) (Figure1.7).

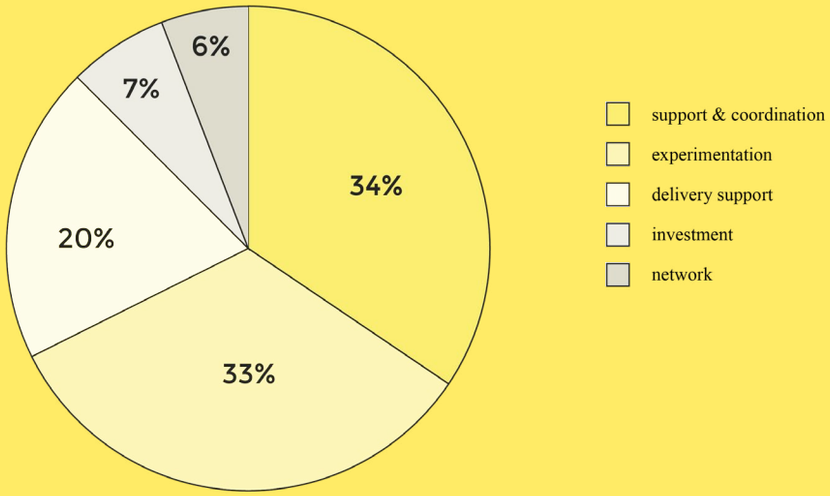


Figure1.7 Innovation organisations: Breakdown of activities. Source: OECD, 2017. Graphically readapted by the author.

It is fundamental to point out the fact that it is not necessarily the case that the groups follow only one of these activities: there are many examples that show how existing innovation units actually operate in a cross-functional way, uniting together more than just one cluster. Moreover, in recent years, thanks to the analysis of various innovation laboratories, it has been possible to define some elements of success, summarized in the following graph (Figure1.8).

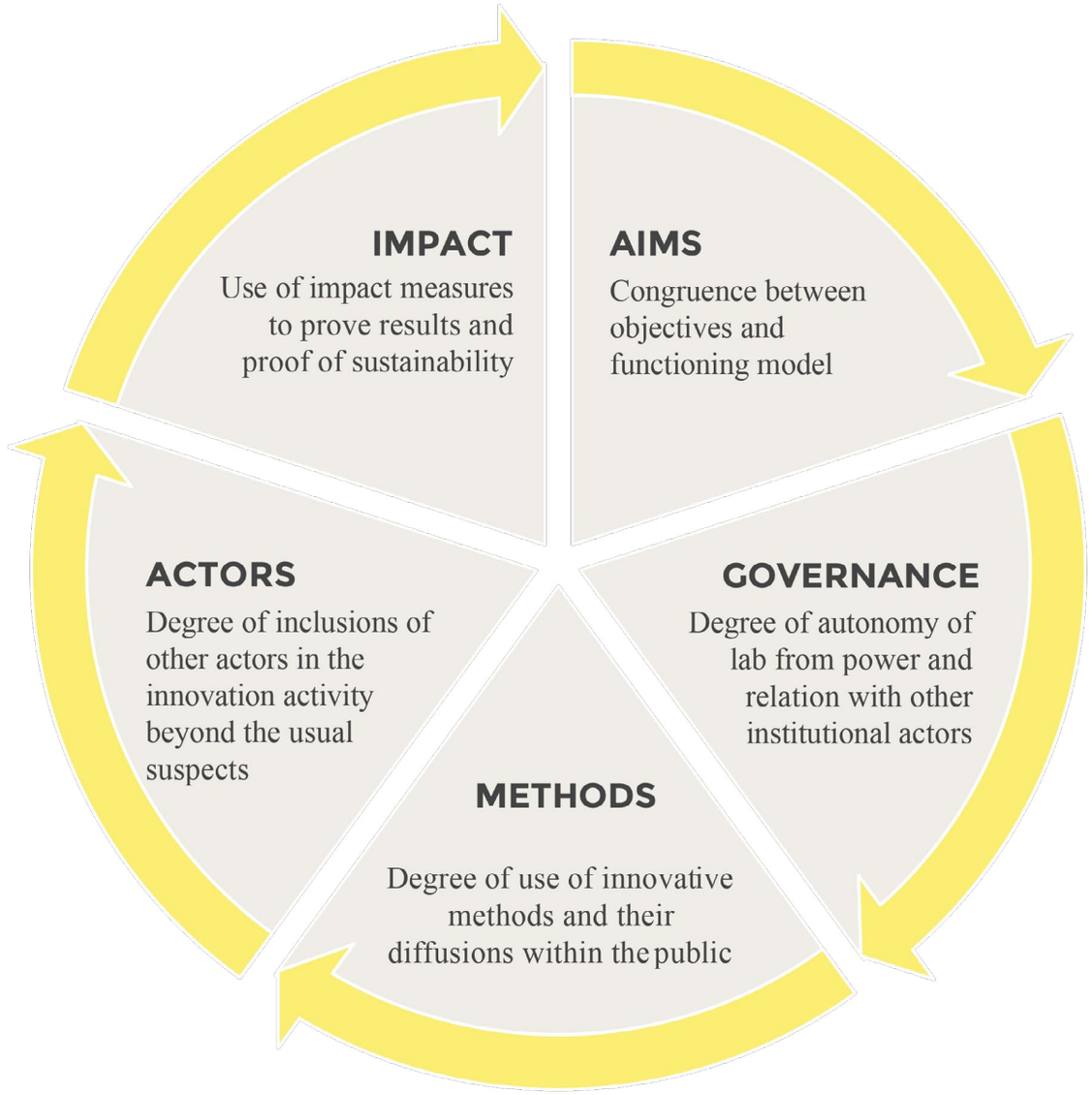


Figure1.8 Innovation labs: elements for success. Source: OECD, 2017. Graphically readapted by the author.

Looking at the history of innovation labs, an analysis carried on by NESTA and OECD shows how most of them have been established in the period between 2010 and 2014, with a sensible rise between 2013 and 2014 (Figure1.9). This increasing number demonstrated the growing interest in public sector innovation both as a concept and as an asset that modern governances want to improve and support. The research was conducted in 2014 and updated in 2016 and allowed to get an overall picture of various teams working for or within the government with a specific objective toward innovation.

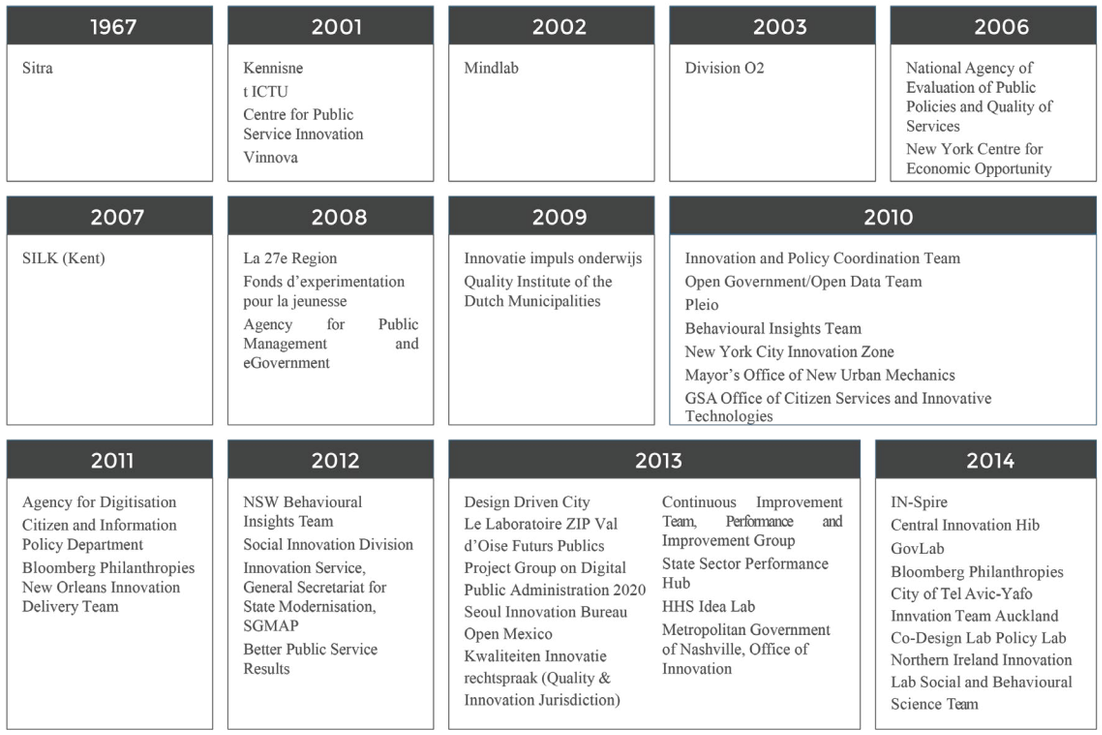


Figure1.9 A timeline of selected innovation teams and units. Source: OECD, 2017. Graphically readapted by the author.

The same study also enabled the design of a useful model aimed at helping public organizations in the identification of the right approach and type of innovation unit to embrace during the process. The scheme considers the final goals matching them with the linked activities, the diverse kinds of groups or organizations involved, the methods used together with some actual examples of the time (Table1.1).

Objective?	Core activity					What type of organization?	Methods used	Examples
Promote innovation across government	**Support and co-ordination**	Support in specific area or function	Experimentation	Investment and funding	Capacity building and networking	- central government innovation units	-tools and guidance -monitoring and co-ordination -training and coaching -events	-Innovation and Policy Coordination, Australia -Central Innovation Hub, Canada -Better Public Services Results Programme, New Zealand
Promote service improvement in functional areas	Support and co-ordination	**Support in specific area or function**	Experimentation	Investment and funding	Capacity building and networking	- dedicated teams and units for functional policy areas (e.g. digital or open government)	- project implementation support - dedicated squads /change teams	-Open Government Team, Germany -Open Mexico, Mexico -Laboratorio de Gobierno, Chile
Develop and test innovative solutions	Support and co-ordination	Support in specific area or function	**Experimentation**	Investment and funding	Capacity building and networking	-innovation labs -behavioural insights units -innovation units -delivery teams	- prototyping - human-centred design - randomised controlled trials - project-based working - data analysis	-Futurs Public, France -Mindlab, Denmark -Laboratorio de Gobierno, Chile -Behavioural Insights Unit, United Kingdom
Fund innovation	Support and co-ordination	Support in specific area or function	Experimentation	**Investment and funding**	Capacity building and networking	-funds	- piloting - grant funding - competitions and awards	-Vinnova, Sweden -NYC Innovation Zone (iZone), United States
Develop capacity for innovation and networking	Support and co-ordination	Support in specific area or function	Experimentation	Investment and funding	**Capacity building and networking**	-central government -innovation units -innovation labs -formal and informal networks across government	- project shadowing - training and coaching - tools and guidance - events - regular meetings - network communications	-Mindlab, Denmark -Laboratorio de Gobierno, Chile -Slimmer Network (Smarter Network), Netherlands -Change Agents / Change Makers, Finland

Table1.1 Organisations for innovation: A typology and selected examples. Source: OECD, 2017. Graphically readapted by the author.

To understand the results of innovation activities and their actual impact on society, the right evaluation is required and necessary. This would help to measure the efficiency of public sector decisions and to ensure the value of the public organization itself. Evaluating results in public sector innovation is a big challenge (Şandor, 2018): in fact, results usually arrive in the long-term perspective and may be spread in different parts of a specific context. Additionally, the evaluation of outcomes in this field is usually done in terms of quality and subjectivity, so defining common patterns and similar parameters of analysis is hard.

The academic world is trying to accelerate and support the research of standard for effective evaluation. For instance, the "Trends and Challenges in Public Sector Innovation in Europe" (2012), taking in consideration some successful cases of innovation in the EU, has recognized six main application fields where innovative approaches reached a successful result. These six common patterns have been mapped together to identify common success factors and the lessons learned through the process (Table1.2).

Sector of application	Success factors	Lessons learned
E-government	• Support from high-levels of management • Ensuring the online services are performed in conditions of high data and transactions security • Training civil servants and providing incentives to foster their commitment for simplification measures • The 'friendliness' of the only systems towards the users (citizens and business) is an important determinant of success	• Acknowledging the digital divide, particularly for citizens with lower digital literacy • Ensuring that there is demand for the new services introduced • Local institutions usually take longer to adhere to online systems • Careful planning is needed for implementing large IT platforms • The IT systems need to be user-friendly • The technical infrastructures need to be robust
Administrative simplification	• Continuous communication between all public agents involved, notably through internal communication actions • Strong leadership from high-levels of hierarchy, and direct involvement in promoting the initiatives • Peer pressure from contributors and users (citizens and businesses)	• A more targeted approach to reducing administrative burdens and more coordination between different administrative units could ensure a more efficient implementation of PSIs
Public procurement	• Wide agreement across government on the urgent need to transfer public procurement to an electronic environment • Knowledge transfer from other countries or similar initiatives, EU policies and regulations regarding e-procurement • Using a gradual step-by-step implementation process • Commitment of all stakeholders involved • Engagement of users and producers in the planning and design phases of PSI projects	• More emphasis should be given to the user-friendliness of procurement systems • Innovations might require further needs to re-adapt legal frameworks • The digital divide and digital illiteracy should be acknowledged • Training and standardisation are also needed • Resistance and prejudice of various stakeholders needs to be taken into account
Health and e-health	• Finding the right balance between regional/local and national interests and priorities	• Cooperation from all relevant stakeholders needs to be established from the beginning • A flexible demand management process must be put in place • E-health initiatives need to account for the technical divide in order not to discriminate towards people that is not computer illiterate or does not have access to technology
Social participation and governance	• Leader support from high-levels of government	• A citizen perspective/viewpoint should be used • Provide strong local, collective and focus leadership is key
Education	• Use of a partnership approach involving all relevant constituents in the design and implementation of PSI • Keeping projects on-time and budget	• Utilising efficiently expertise from both the public and private sectors

Table1.2 Success factors and lessons learned of Public Sector Innovation in the European Union.
Source: León, Simmonds, & Roman, 2012. Graphically readapted by the author.

1.1.2 Service design & public sector innovation

In the previous section, a short overview of the public sector innovation has been provided to readers. Once we also identified the reasons for innovation, there is still a question that needs an answer: *why does the public sector decide to work together with service design to address changes and transformation?*

Although this topic will be widely investigated later on this thesis, along with the whole research, it is essential to give an introductory background. Design – particularly service design – can provide all the methods and tools for effective and successful innovation. Innovating the public sector assets requires time and right strategies, but most of all, it requires a radical cultural and mindset change inside and outside the public administrations, objectives that service design can help to achieve. Going back to the Table1.2, if we accurately analyze the factors that ensured the corresponding innovation, it is possible to recognize some key elements proper to the service design discipline, such as the stakeholders' involvement during the process, users importance for the decision-making process and the capacity building approach. Service design puts users and stakeholder in the centre of the idea generation, and this makes the discipline one among the most powerful approaches to deal with societal changes. What makes service design unique compared to similar disciplines is its focus on systems and on organizations, something that allows is to deal with transformation and change within organizations, particularly public ones. "Service design breaks down the front-stage and backstage of the customer experience in a way that helps align organization and business capabilities with customer needs, wants, and experiences" (Quicksey, 2018).

Drafting an univocal service design process is difficult, if not impossible, since one of the most important principles is the reiteration and the continuous adaption of elements to the reference context. This means that this challenge is unique, and as this also the approach and methods used by service design to overcome it.

Nevertheless, there are some common patterns in the phases that almost all the service design projects follow (both in the private and in the public sector). These five steps are observation, brainstorming, testing, refining, and evaluating and have been linked to five groups of activities by experts (Whicher, Swiatek, & Cawood, 2013):

- **framing the challenges**: identify the current state of the art, which are the issues and main problems that users experience, going deeper into the users' analysis phase;
- **concept development**: once the challenges are identified, understand the opportunities as a starting point for the ideas generation. This phase includes brainstorming sessions possibly involving also finals users and other actors of the system/proposal;
- **prototype development**: the testing development helps the shift from concept to a workable idea;
- **prototype testing**: this phase involves a specific group of users that tries the proposal to find issues and opportunities to improve the service;
- **full-scale delivery & evaluation**: service designers and service providers work together to collect users' feedbacks, understand the impact of the proposal, make additional changes and correction.

"Service design breaks down the front-stage and backstage of the customer experience in a way that helps align organization and business capabilities with customer needs, wants, and experiences"
- A. Quicksey

The table below summarizes the main methods and tools of service design, connecting them to the five phases just taken under analysis (Table1.3).

STEPS OF A SERVICE DE-SIGN PROCESS	DESCRIPTION OF THE STEP	SERVICE DESIGN METHODS	DESCRIPTION OF THE METHODS
1: FRAMING THE CHALLENGES	Developing insight into how users and providers current navigate the service system in order to identify challenges and opportunities.	Ethnographic research	Observing and analysing how users and providers engage with the service.
		Focus groups	A feedback loop between service users and providers.
		Video diaries	Users document how they interact with a service to glean insight.
		Stakeholder mapping	Visualising the relationships and actors in a service system.
2: CONCEPT DEVELOPMENT	From the exploration of challenges and opportunities, brainstorm potential ideas for a new service and examine how different stakeholders may respond.	Ideation	A structured and facilitated process for generating and refining ideas.
		Personas	A profile of typical and atypical users to explore a service concept from different perspectives.
		Scenario building	Using role play to explore theoretical scenarios in a service concept.
3: PROTOTYPE DEVELOPMENT	Refining the service concept by examining each stage where the customer interacts with the service whether on the phone, face to face, in store or online.	Customer journey mapping	Plotting steps where the client interacts with the service in various 'touch points'.
		Storyboarding	A story-like series of images presenting components of the new service.
		Service blueprinting	A schematic representation of the key components of a system
4: PROTOTYPE TESTING	Test the service prototype with a sample of users to identify strengths and weaknesses and integrate user feedback into improving the service.	Rapid Prototyping	Building a service model using low fidelity materials such as cardboard and plastic models.
		Pilots	Implementing a scaled-down version of the service with a sample of users. An approach to interviewing and observing people in their own environment
		Immersion	Field research and analysis by observing how people use the service firsthand.
5: FULL-SCALE DELIVERY & EVALUATION	Roll out the new service on a larger scale. Collect data according to indicators to determine the impact of the intervention.	SWOT analysis	Using visual tools to analyse the strengths, weaknesses, opportunities and threats to make an assessment of viability.
		Surveys or interviews	Surveys or interviews to gain qualitative and qualitative feedback from service users and providers.
		Benchmarking	Establish key performance indicators as well as softer indictors to monitor progress over time.

Table1.3 An overview of key service design methods and tools. Source: Whicher, Swiatek, & Cawood, 2013. Graphically readapted by the author.

Accordingly to Christian Bason, chief executive of the Danish Design Centre, a real innovation approach can't really happen without involving professional service designers. To begin a real path to change, the public sector needs practices and methods coming from the service design discipline, such as prototyping to comprehend users' necessities, data visualization to give an impactful appearance to the developed proposals and make the stakeholders' behaviours visible, and the designers' skills in user research. Designers bring innovative approaches: co-design, creative workshops, ideas generation activities, all those specific practices that stimulate civil servants to come up with new and disruptive ideas, that they wouldn't have developed alone. In fact, the power of service design lies in the fact that it is a future-oriented discipline, capable of envisioning later scenarios and foreseeing users next needs and attitudes. Additionally, the discipline also follows a defined path that shifts from the mere abstract concepts toward the concrete project, reiterating and improving proposals along the entire journey (Camacho, 2016).

The collaboration between the world of design and the public sector has its roots in the past. Historically speaking—quoting the words of Stéphane Vincent and Romain Thévenet—"a socially-anchored design approach dates back to pioneers like the Austrian-American designer Viktor Papanek (1927–1999), who stressed the importance of designers' societal responsibility and strongly pushed in favour of sustainable design, not for an elite, but for people with real needs" (Vincent & Thévenet, 2013). Those first interventions were mainly product-oriented but, years later, the service design practice started also collaborating for the final services delivery at the beginning of the 2000s in the UK, where new policies of the time aimed at stimulating the civic involvement, have prompted design agencies to open up toward the public sphere. Almost simultaneously, MindLab was set up in Denmark. It worked for sixteen years, until 2018, as a multidisciplinary group of experts with several backgrounds (design, business, marketing, sociology, etc.) which aim was to bring a user-centred approach to the governments' projects and activities (Guay, 2018). These two were doubtless the pioneering examples that helped the interest in public sector innovation rising among the service designer practitioners. In fact, this signed only the beginning of a series of projects linked to the public sphere. Since then, interest in the topic has been growing as well as examples of design organisations, groups or agencies that have started working with or for the public service (Figure1.10).

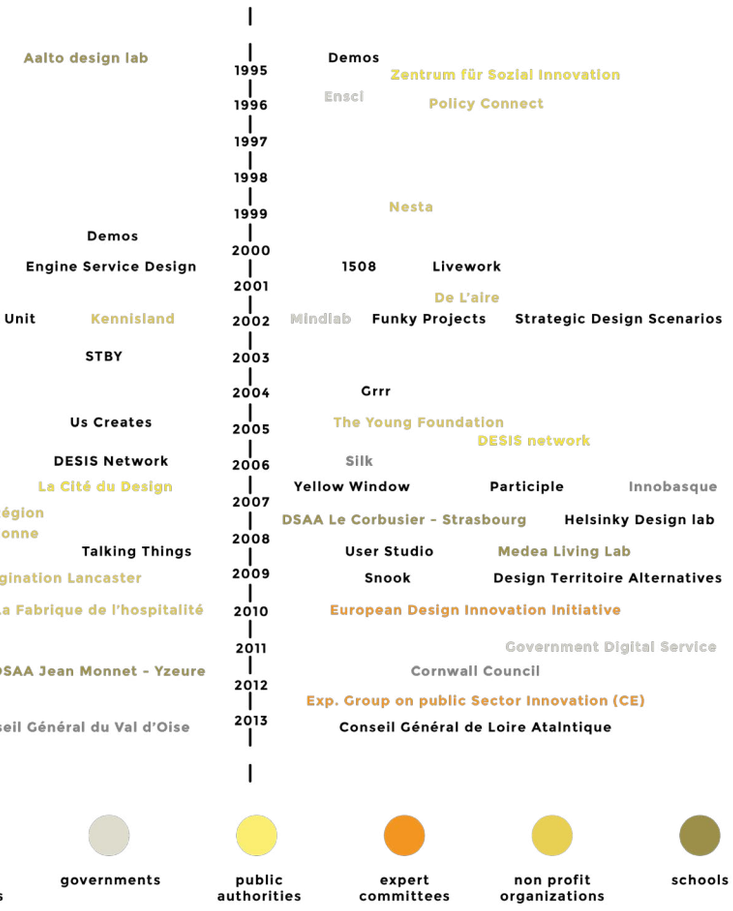


Figure1.10 Design for public policy: timeline (2013). Source: Vincent & Thévenet, 2013. Graphically readapted by the author.

1.2 Research questions

After having introduced the background of the present thesis, it is possible to present the three main research questions upon which this study is built:

How and why is service design linked with the public sector innovation?

Which roles is service design playing in the public sector innovation?

What are the primary limits and barriers of the public sector innovation? Can service design help to overcome them?

These research questions aim at defining the ongoing phenomenon, understanding which is the actual service design contribution and what are the present challenges of this field, in order to set all the basics required to define problems and opportunities for the further project development.

1.3 Purpose and significance of the study

The goal of this thesis is to analyze the ongoing service design-driven innovation of the public sector and the growing collaboration between public sector providers and service design discipline. Trying to give a satisfying answer to the presented research questions, the author seeks to have a complete mapping about the situation that will help her to define preliminary problems and opportunities for the project phase. Specifically, combining findings from different sources, the author would like to give her contribution to the existing studies among a similar topic, filling the current gaps both from the literature panorama and from the practice world.

The research will follow a structure from a general introduction about the topic (context, data, facts and relevances) to a more specific analysis about the collaboration between the two fields (service design and public sector) that will present actors, relationships, tools, methods and existing activities. Moreover, an additional objective will be to define the roles of service designers and the contribution that the discipline could give to enhance a better and faster innovation.

In order to have a deeper understanding of the system and to define a perimeter of analysis, also considering different perspectives, the study will focus on five different urban realities: the European London, Milan and Helsinki, and the Asian Singapore and Shanghai. In fact, despite existing differences among them, the author identified common patterns that link together these five realities. In particular, it is possible to cluster them into two main groups:

- cities, where service design is currently working with the public sector toward an innovation process and the collaboration is already underway (London, Helsinki and Singapore);
- cities where the phenomenon is still developing, but the interest in the topic is growing (Milan and Shanghai).

It is essential to specify how this geographic distinction doesn't want to be a driver for the research, rather these cities aim at representing some reference contexts for the study.. The author believes that the comparison between the two different kinds of realities can bring interesting findings as well as encouraging the developing realities to follow good examples from the developed ones. Moreover, this comparison can activate an interesting exchange of resources and knowledge among the different countries' methodologies, as well as producing the first step for a bigger construction of global research on the topic. In conclusion, the thesis's objectives can be summarised in five points:

1. To construct a precise analysis - based on the combination of literature review, case studies and experts' interviews - on the ongoing service design-driven public sector innovation;

1. To **construct a precise analysis** - based on the combination of literature review, case studies and experts' interviews - on the ongoing service design-driven public sector innovation;
2. To **understand and position the role** and contribution **of service design** in overcoming limits and barriers linked to this field;
3. To **identify the main difficulties** of the collaboration between the two different areas;
4. To **build a conceptual framework** that could work both as a guide for future studies and as the starting point for the design phase;
5. To **formulate a practical design solution** starting from problems and opportunities identified in the research phase.

2. To understand and position the role and contribution of service design in overcoming limits and barriers linked to this field;

3. To identify the main difficulties of the collaboration between the two different areas;

4. To build a conceptual framework that could work both as a guide for future studies and as the starting point for the design phase;

5. To formulate a practical design solution starting from problems and opportunities identified in the research phase.

The relevance of this thesis for the field of PSSD studies is that it can represent an updated overview of the ongoing service design-driven innovation in the public sector, with a peculiar international perspective. Both the research and the project part will be addressed to answer existing gaps, to encourage and support future collaborations between service design and public sector to enhance the practice community.

1.4 Methodology

In order to meet the above objectives, the author has employed a methodology divided into two main parts, the research and the design phase. The whole process has been built upon the principles of design thinking, trying to elaborate and shape the different methods to better meet the topic peculiarities.

Research phase

The first phase has involved both desk and field research plus the design of a final research framework. The literature review has been the initial step of the desk research: the author analyzed several sources among academic papers, books, articles, and other publications to find answers to the research questions and define the existing literature gap. More specifically, the objectives were to collect updated data and relevances about the topic, to get the theoretical perspective, to learn about barriers against innovation in the public sector and existing projects and activities, to investigate the reasons behind this collaboration and the linked opportunities and finally define the gaps of the present studies. The author also designed a literature map, to cluster sources by topic, looking for relationships and association between them. The literature analysis provided the theoretical framework used to develop the structure of the 14 semi-structured interviews that were carried on with both service design practitioners and experts coming from the academic world. In this case, the objectives were to analyze the experts' experience toward the field of the public sector innovation and the projects they are currently following, their perspectives regarding limits and barriers of innovation, the role of service design and the opportunities that the discipline has approaching this field and, finally, the existing gaps coming from the practice side.

The author prepared two different sets made of 8 open questions: one addressed to practitioners and the other to academic experts. The questions asked to the various categories of respondents were very similar but aimed at acquiring a more defined perspective on the two different worlds and different schools of thought. All interviews lasted about an hour and were conducted partly face to face with the interviewee (5 of them), partly via Skype (the remaining 9). Of the fourteen people interviewed: 7 were practitioners, 6 had a mixed background between the practical and the theoretical world and one person belonging exclusively to the academic world (Figure1.11). The author also grouped the interviewees according to their degree of experience in the public sector field:

- service designers with little experience in the public sector field (three practitioners, one person from the mixed background category);
- service designers who are now starting public sector projects

(two practitioners, one person from the mixed background category and one academic expert);

- service designers experts of public sector innovation (two practitioners and four people with mixed background).

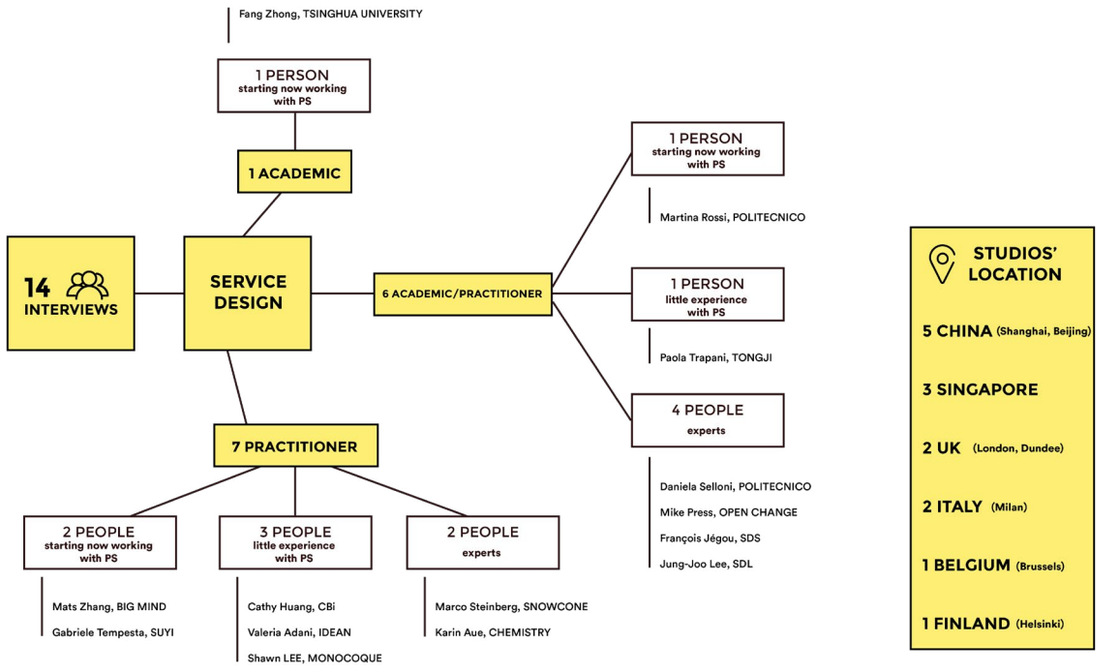


Figure1.11 Interviews diagram. Source: the author.

At the end of the interviews phase, the author created two different affinity maps to group the main findings and being able to compare and associate information coming both from the literature and from the interviews. This step was fundamental for structuring the conceptual framework, due to the fact that allowed a direct comparison of information and relevances coming from the two different words. At the same time as the interviews, the author also carried out a collection and analysis of case studies from the urban contexts of reference, grouping them by areas of intervention that will be presented in the following chapters.

Moreover, from the very beginning of the research phase, it immediately seemed essential to keep track of the various progresses of the ongoing study. Thus, both to create a research record and to trigger the interest among this topic, the author together with another

Italian fellow Master's Candidate, Francesco Olivieri, under the advice of professor Marzia Mortati and the designer Alessandra Canella, have created a public blog on the digital platform Medium. The two students firstly collaborated to design the contents' structure, decide the frequency of publishing and the overall style of the blog – both in terms of graphics and also in terms of language style. They decided to follow the index of their research for writing the articles, setting a publishing frequency of one piece every two weeks on Wednesday, alternating in the drafting of articles. By mutual agreement, they decided to write in a simple tone of easy understanding for all, students, experts and even non-designers interested in the topic. Consequently, also the graphics had to be easy and not too serious: for this reason, they design a style guideline based of basics colours and hand-made drawings, in order to 'lighten' the serious and complex topic of the public sector innovation with a simple appearance (Figure1.12).

The title of the blog, PSJ (Public Sector Journal), aims at immediately communicating the topic and the aspect of continuity of the online publication.

Figure1.12 Medium blog: COVER. Source: the author.

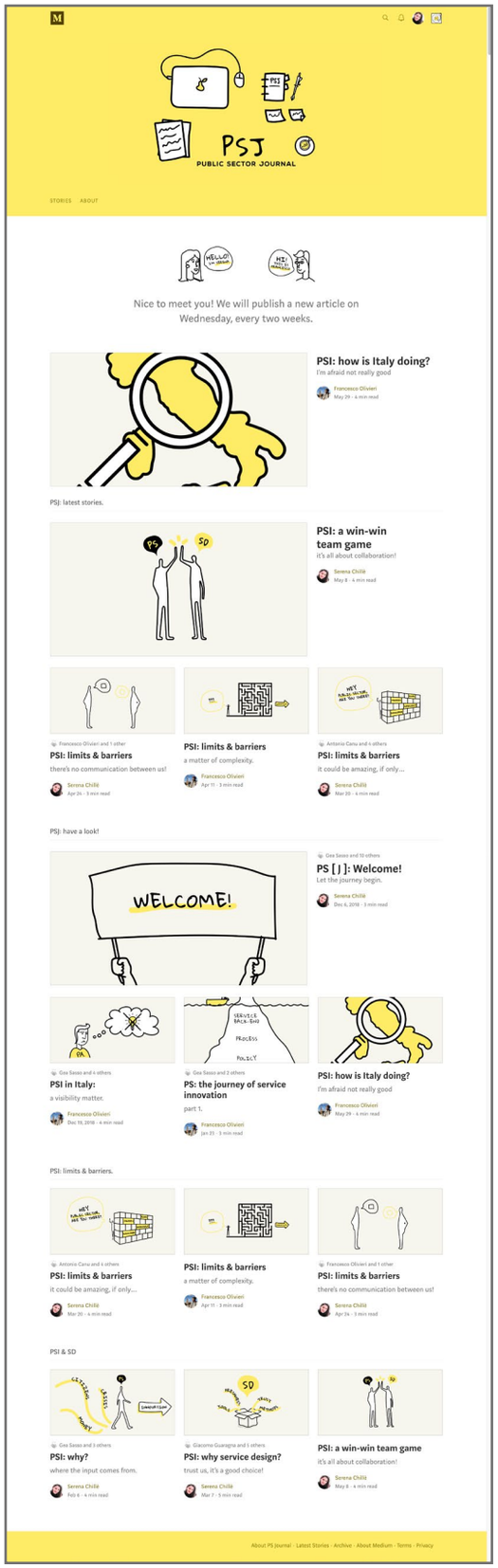


Figure1.13 Medium blog: HOMEPAGE. Source: the author.

During the publishing the two students rearranged the structure until arriving at the final organization: the blog presents at the beginning the last published story and the so-called 'trending articles', namely the readings that have had particular success among readers. Suddenly after readers find on the page some introductory stories about the ongoing project and the overall topic of the public sector innovation and, after this first background part, other collections of articles divided by themes (limits and barriers, the ongoing collaboration between service design and the public sector, etc.).

The activity of the blog has represented for both students a unique opportunity to share at an early stage the findings of the research and parts of interviews with experts, being able to have already a first practical feedback from the audience of readers. In fact, the stories published on Public Sector Journal succeeded in capturing the attention of many students and university colleagues, activating their interest in this topic, which many know only in a cursory way. Many experts also shared their appreciation for this activity during the interviews.

All these analyses served the author for the realization of the 'SD and PS collaboration framework', built on the question *"Where, why and how is service design collaborating with the public sector?"*. The framework will be presented in detail in the fourth chapter of this thesis, but on the right page there is a summary diagram of its structure (Figure1.14). The framework represented the last step of the research phase as well as the catalyst of the main findings of this part. It functioned as the springboard for the following design phase.

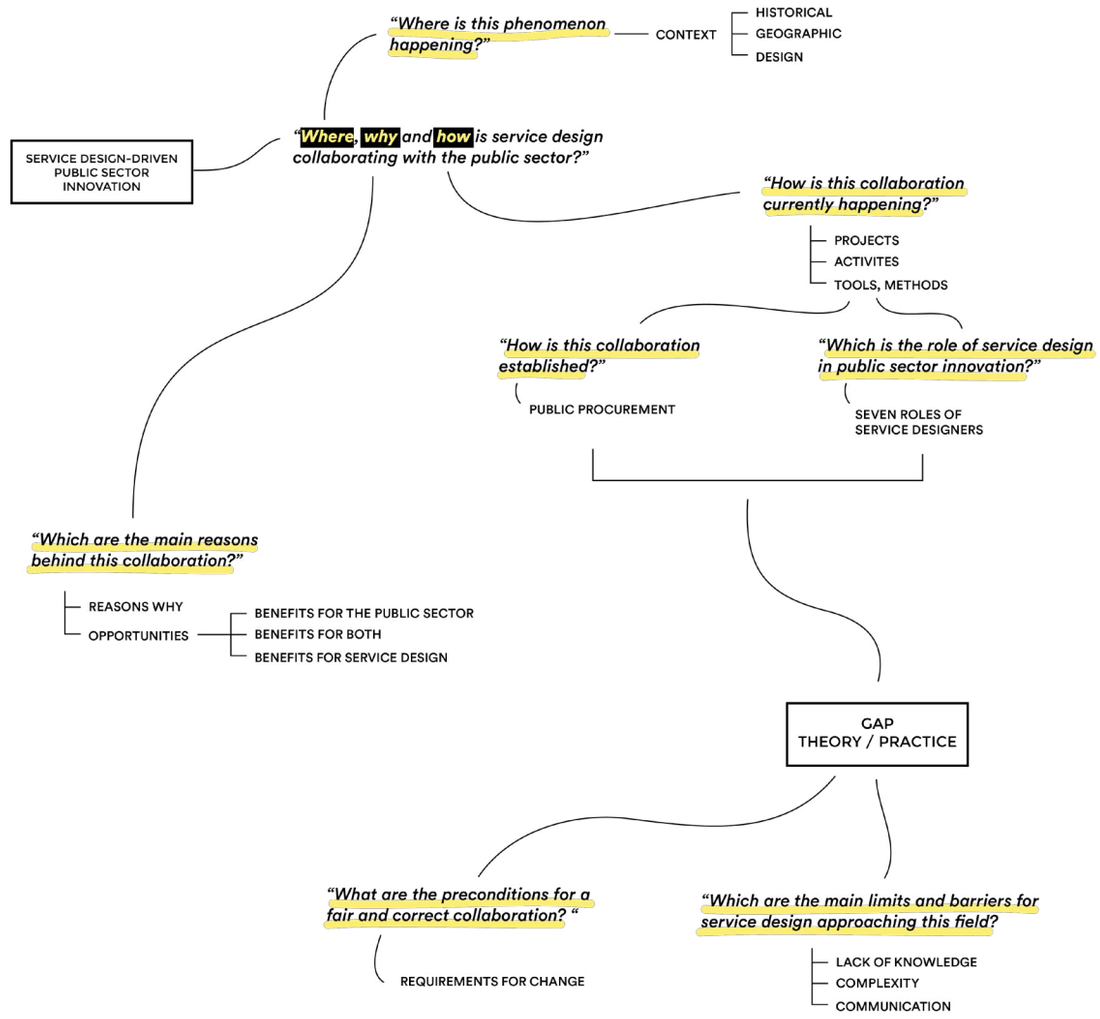


Figure1.14 Research framework structure. Source: the author.

Design phase

The insights gathered during the research phase have helped the author in drafting the design challenge and moving forward to the ideation. This part will be analyzed in more detail in the chapters dedicated respectively to concept and project, here follows a brief introduction of the various steps taken.

The design phase has involved an initial design challenge's framing, exploiting the methods of both the book "This is service design doing" (2018) and one of the well-known design studio IDEO. After this, the author started an initial brainstorming session and, suddenly after, she tried to cluster and organize ideas in a logical way: to do that both an 'impact-feasibility map' and a 'feasibility timeline' has been used. Once the ideas were organized, the author moved to the concept development: in order to map and position the proposal, after having collected examples of similar projects, she built several positioning maps defining where to put the proposal in comparison to existing examples.

At the same time, the author decided to start a co-creation process with users (that will be analyzed in detail in the Concept chapter), to define with them the offering map and the contents of the final project. The three co-creations allowed a valuable insights collection that helped the authors to redesign the concept offering map upon her first design hypothesis previously drafted. This part represented the first step to begin the design of the final proposal. The following development phase involved several stages: the implementation of the initial project hypothesis, the translation of all the useful information gathered during the research phase into accessible contents for the project, the design of the structure followed by the sketching and wireframing stages, the prototyping with users and the final proposal improvement.

2 Literature review

The topic of service design-driven public sector innovation has been largely discussed in the academic literature, even though there is a huge gap between the theoretical and the practical world. Many authors explored the meaning and the reasons behind the public sector innovation, as well as the effects that the service design intervention has or could have in this complex system. The following literature review aims at presenting existing studies and publications related to the topic and it will be organized into three main parts:

- *the ongoing phenomenon*: how and why service design is linked with the public sector innovation;
- *service design contribution*: which roles service design is playing in public sector innovation;
- *existing challenges*: main limits and barriers of public sector innovation - can service design help to overcome them?

The goal is to understand what the experts have already investigated, trying to build all the academic basis needed to inform the present thesis.

2.1 The ongoing phenomenon

The first chapter presented a general introduction on the public sector and its shifting toward changes and innovation, but *why do some governments decide to turn specifically to the service design discipline to activate this transformation?*

Existing literature proves that in recent years, an increasing number of governments at local, regional and national level, has opened up to the adoption of methods, approaches and tools from the design world.

Existing literature proves that in recent years, an increasing number of governments at local, regional and national level, together with international institutions and public organisations, has opened up to the adoption of methods, approaches and tools from the design world (Bason et al., 2017; Bason, 2010; Camacho, 2016; Mulgan, 2014; The economist, 2013). In this complex and articulated panorama, the term 'design' has been associated with several labels and terms, such as the attributes 'strategic, macro, public, civic, business, human-centered, social' or the nouns 'design thinking, co-design, co-creation' (Meroni & Sangiorgi 2011; Armstrong et al., 2014). Nonetheless, what unites all these concepts in the public context is the fact that they are no longer only referred to the design of physical and tangible outputs, but rather to "a diverse set of approaches to, methods for, and ways of thinking about intentional processes for creating societal change, generally focusing on public policies and services" (Bason et al., 2017).

It is therefore clear that design does not represent either embodies the unique driver for innovation in the public sector innovation landscape, but that the discipline plays an important role among interdisciplinary and bigger groups that bring together people from different backgrounds - policy makers, social scientists, economists, anthropologists, civil servants (Polaine, Løvlie, & Reason, 2013). This distinctive miscellaneous environment activates and triggers a profitable ground for the transformation that current governments seek for.

The focus of the present work is specifically the service design discipline, that is now widely considered as a promising tool to drive change in the public sector because of its democratic and creative ways of working based on a human-centered approach. A large number of public bodies around the world have been and are trying to apply and embed service design principles in order to modernize service delivery, innovate services and policymaking, and eventually change the way they work (Mager, 2016). Indeed, service design helps people to reason differently about the challenges they deal with and how to move away from starting with a solution, focusing more on long term outcomes and effects rather than immediate outputs (Moritz, 2005).

As the Service Design Network's 2012 Final report - aimed at mapping the current situation - found out, today the public sector is already the largest client for service design (Figure2.1), and the demand is growing. Deepening these data, it is also interesting to see

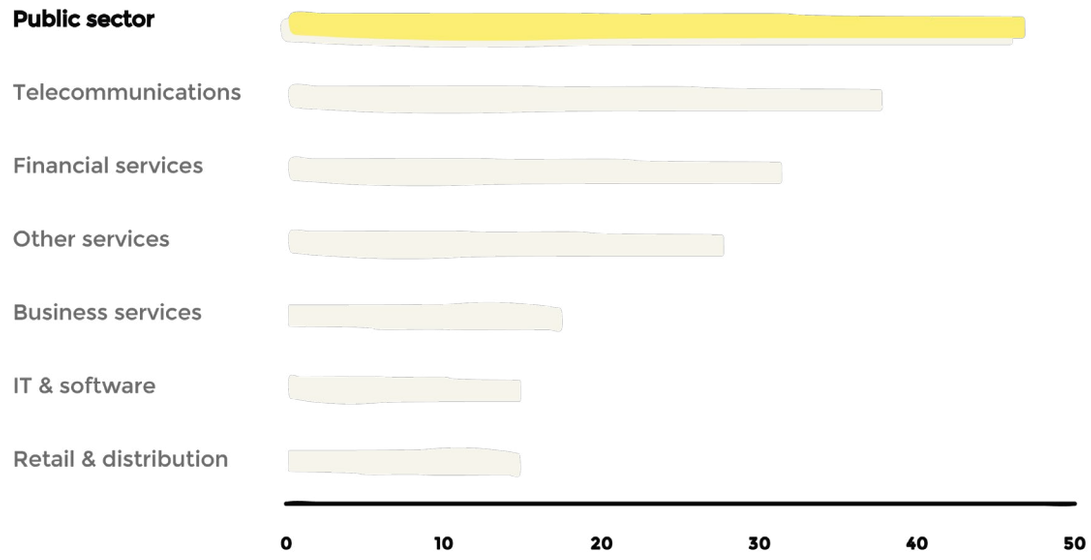


Figure2.1 Service design client sectors. Source: Mager,2016. Graphically readapted by the author.

in which areas of the public sector the service design field is working the most: healthcare occupies the first position, followed by education, communication, youth and transportation tied for fourth (Mager, 2016) (Figure2.2).

In the 2016's 'Service Design Impact Report', thanks to its global approach and the large number of members - around 30000 people -, SDN organization has been able to collect and summarize a lot of information from surveys, interviews and researches, identifying in this way five key areas where service design is contributing in order to help innovation in the public sector. The first one is 'digitalization', as a way to exploit innovative technology to re-invent the relationship between governments and citizens as well as a method to increase the efficiency of public services' delivery. The second area is 'citizens engagement', where, starting from its own approaches and user-centered methodology, service design supports and encourages a new process of direct dialogue between citizens and the public sector. The third is 'training and capacity building', where service design shifts toward the direct training of public servants, in order to teach them all the skills and capabilities they need to improve and innovate the service system by themselves. The fourth one is 'organizational change', since very often organizations and processes are not ready for embracing an innovation path and they need to be revised and changed if a real

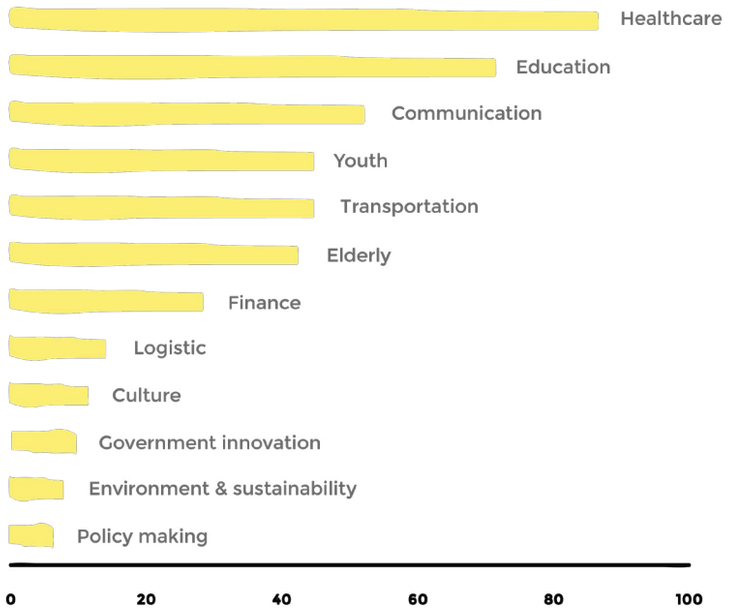


Figure2.2 Areas of developed projects in the public sector. Source: Mager,2016. Graphically readapted by the author.

innovative impact is desired. The fifth and last one is 'cultural change', where service design activates a radical mindset shift to start looking at public issues, relationships and systems in a different way.

It is possible to distinguish two different levels of interaction between the discipline and the public sector, which offer a different contribution to the innovation process: we speak about 'internal collaboration', when design is embedded directly into the government system, in the form of in-house units, dedicated departments or teams, while the 'external collaboration' happens when design capabilities come from the outer environment (Bason et al., 2017; Mager, 2016). More specifically, a distinction can be made between:

- **Embedded designer**: A full-time strategic-level employee responsible for developing organisational design capacity, as well as for specific service redesign programs;
- **Internal agency**: A service design unit (normally multidisciplinary) works with other parts of the organisation on a project-by-project basis;
- **External agency**: Consultancy from an independent design practice on a project-by-project basis (Mager, 2016).

In the case of external design agencies, we can refer to the PPP (public-private partnernship) model, namely an usually long-term collaboration between one or multiple government departments and a private company. Public-private partnership are structured to provide a specific public asset or a set of services (Deloitte, 2019). The present academic scene presents a lively debate about which of the two dimensions of interaction is most effective. In many cases, having internal collaborators that have deep knowledge about dynamics and existing ongoing processes, activates innovation in a faster and easier way (Carstensen & Bason, 2012; Kimbell, 2015). In other cases, it is important for public organizations to have external opinion and help, both to adopt a new approach and also to see problems and solutions from new perspectives (Whicher, Swiatek, & Cawood, 2013).

Accordingly to OECD (2017) understanding where the teams are located within the public organization is relevant to evaluate the kind and amount of influence they play and their dexterity to work towards specific goals within the contextual limits they have. On the one hand, many of them are "centrally based, reflecting the cross-cutting nature of innovation as an activity, but also the leadership and support they enjoy to carry out their actions; organisations close to executive power might thus be the most effective at delivering results" (OECD, 207). This may also reflect some governments' attitude toward innovation itself: some countries have always had an inclination towards change, which has driven these contexts to shape their structure accordingly over the years. In this case, it is possible to refer to pioneer examples who embrace innovation-focus teams and departments since a long time, some of which belongs to the core analysis of this thesis - United Kingdom, Finland, Singapore (Manzini & Staszowski, 2013; Stokes, Baeck, & Baker, 2017). On the other hand, "independence and distance from the executive power might provide innovation teams with greater freedom and organisational flexibility but their voice might not be heard: while removal from executive power might enable them to be more creative and radical, they could face greater challenges in demonstrating their impact" (OECD, 2017). Although external groups help more in the adoption of different points of view, they may find difficult to effectively communicate with governments' departments and gaining an effective impact toward innovation could represent a greater challenge for them. Although the available analysis and researches have not come to a final agreement on which is the more profitable scenario of interaction to drive innovation, they found that proximity to government and executive leadership affects innovation teams' mission and mandate (Puttick, Baeck, & Colligan, 2014).

In order to understand the ground of challenges that contemporary governments are facing, when we deal with social issues, we need

to remember that usually, they represent what the experts named ‘wicked problems’ (Rittel & Webber, 1973). These are not ‘simple’ problems: rather, they are complex challenges directly or indirectly linked with many other little issues, that make their resolution difficult, if not impossible. They require the adoption of different methods and solutions because they are not usually solvable with a standard ‘problem-solving’ process (Kolko, 2012; Schaminée, 2018; Polaine, Løvlie, & Reason, 2013).

This concept was first presented in 1973 by Rittel and Weber, who described ‘wicked problems’ through a decalogue of characteristics. Then, in 2009, Martin revised the previous theory, summarizing the ten peculiarities in a shorter list of four points that characterized this phenomenon: causal relationships are unclear and dynamic; the problem does not fit into a known category; attempts at problem-solving changes the problem; no stopping rule (OECD, 2017). The existence of this kind of challenges is not uniquely linked to the public sector, but the description fits most of the small and big problems that governments face nowadays. In 2008, Korsten mapped within a system of axes four different types of problems, accordingly to the level of knowledge and consensus which characterizes them. Thus - as the following diagram shows (Figure2.3) -, in the four quadrants it is possible to make a distinction between 1) simple problems, 2) ethical issues, 3) scientific issues and 4) wicked problems (Korsten, 2008). Simple problems are well-known by a large number of people who also share a consensus on their entity and the importance of solving them; ethical issues involve a spread knowledge about them, but the impossibility of reaching a consensus on the solution (i.e. the existing debate about vaccines); thereafter, the third category - scientific issues -, regards those challenges that, despite the endorsed agreement on how to solve them, needs the gathering of a lot of scientific knowledge to be solved; lastly, wicked problems lack every possible type of awareness or understanding, nor consensus that can somehow help their resolution. It is important to point out that the adoption of design approaches is not logical either useful if we refer to the first three groups of problems: instead, in the last case, design can markedly contribute to the resolution of wicked issues (Schaminée, 2018). In fact, design practice and, particularly, service design - thanks to its methods, tools and approaches - can lessen and ‘soften’ wicked problems, thanks to the focus on empathy, the use of abductive inference and the large usage of prototyping techniques (Kolko, 2012).

When we deal with social issues, we need to remember that usually, they represent what the experts named **‘wicked problems’**. They require the adoption of **different methods and solutions** because they are not usually solvable with a standard ‘problem-solving’ process

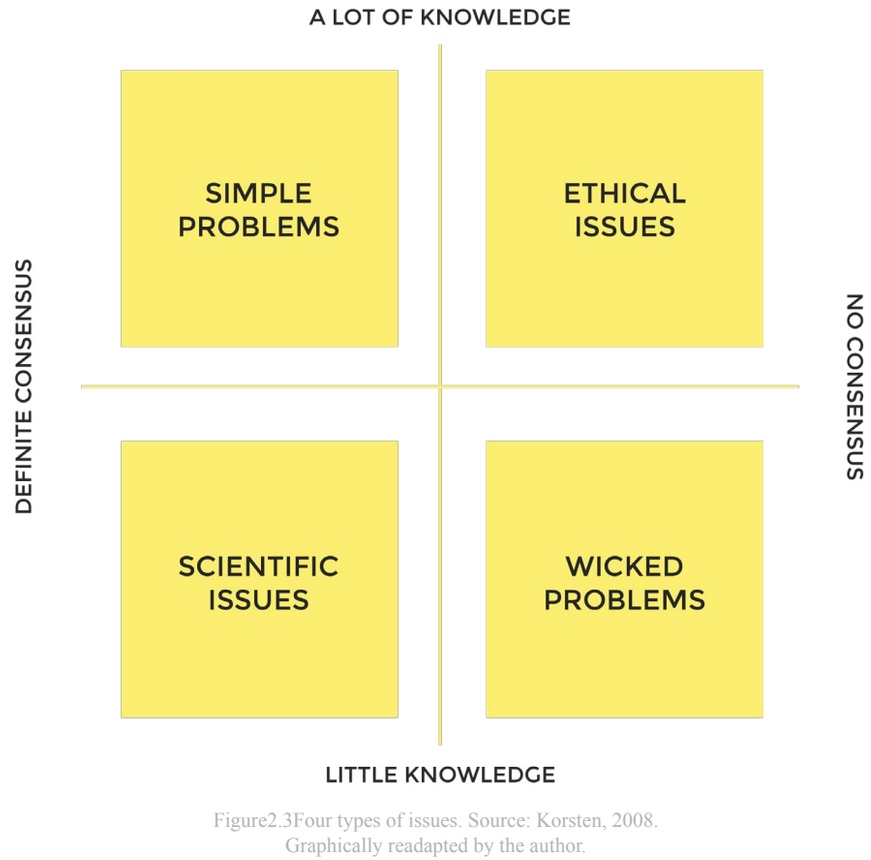


Figure2.3Four types of issues. Source: Korsten, 2008.
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Existing literature provides numerous findings that present the main reasons why the discipline is linked to the public sector innovation. First of all, seeking for innovation, service design is one of the main topic currently connected to this term: it is relatively new and is continuously changing and evolving, something that allows it to bring always newness into companies and organizations (Kershaw, Dahl, & Roberts, 2017). Moreover - as stated in the introduction - more and more governments are trying to better meet citizens’ needs: consequently, thanks to its main focus on users, service design has largely become the principal ‘weapon’ to face and answer their request. Additionally, another important aspect that triggers public sector interest is the discovery of examples coming from other pioneer countries. Existing researches prove how important is to show current practices and working examples in the field, in order to increase the awareness on what service design

The keystone is that, precisely because service designers do not belong strictly to the public sector, they are able to bring new values and rethink standard approaches of dealing with problems

do and is able to deliver in terms of innovation (Mager, 2016; León, Simmonds, & Roman, 2012). Service designers, by their side, are always looking for new and intriguing challenges. For this reason, they are increasingly interested in taking up projects for the public field: both because they see a lot of potential in such a large segment of the market and also because this represents a unique opportunity to reach a very large audience. Moreover, the public sector represents the perfect ground for experimentations and prototyping of new ideas. Today's figures also prove that many governments are struggling today to meet the major challenges - 'wicked problems' - described in the previous paragraphs. Still, in this complex environment, it is also important to reiterate that the discipline is not able to solve all these problems alone, as a kind of superhero (Polaine, Løvlie, & Reason, 2013).

Nonetheless, the keystone is that, precisely because service designers do not belong strictly to the public sector, they are able to bring new values and rethink standard approaches of dealing with problems (León, Simmonds, & Roman, 2012). In this regard, Whicher, Swiatek & Cawood provided an exhaustive analysis about the benefits of adopting a service design approach. First of all, many of the advantages that the discipline brings into an innovation path are strictly connected to its main peculiarity of being truly focused on users' needs. Many times this characteristic is reflected into their active involvement in the process, that "gives multifaceted benefits at each stage of service life-cycle" (Whicher, Swiatek, & Cawood, 2013). These gains can be clustered into three main categories that follow also the principal design phases accordingly to the analysis of Steen, Manschot & Koning (2011) and are summarised in the table below (Table1): 1) benefits for the service design project; 2) benefits for users; and 3) benefits for the involved companies and organizations. Additionally, they are also organized by their potential level of improvement for the creative process (in terms of idea generation), the service itself (that represents the final outcome of the process), project management (strategy and business) and long-term effects (that usually impact society).

BENEFITS FOR THE SERVICE DESIGN PROJECT	BENEFITS FOR THE SERVICE'S CUSTOMERS OR USERS	BENEFITS FOR THE ORGANISATION(S)
IMPROVING THE CREATIVE PROCESS		
/ Better ideas e.g. from customers or users; with high originality and user value / Better knowledge about customers' or users' needs e.g. changing existing views or validating ideas or concepts / Better idea generation, e.g. by bringing together customers, users and employees		/ Improved creativity / Improved focus on customers or users, e.g. better dissemination of findings about customers' or users' needs / Better cooperation between different people or organisations and across disciplines
IMPROVING THE SERVICE		
/ Higher quality of service definition / More successful innovations, e.g. reduced product failure risk	/ Better fit between service and customers' or users' needs, and better service experience / Higher quality of service / More differentiated service	
IMPROVING PROJECT MANAGEMENT		
/ Better decision making, e.g. quality and speed / Lower development costs / Reduced development time or time-to-market / Continuous improvements		
IMPROVING LONGER-TERM EFFECTS		
	/ Higher satisfaction of customers or users / Higher loyalty of customers or users / Educating users	/ More successful innovations, e.g. rapid diffusion / Improved innovation practices, processes and capabilities / More support and enthusiasm for innovation and change / Better relations between service provider and customers / Better public relations

Table2.1 Benefits of a service design approach. Source: Steen, Manschot, & Koning, 2011. Graphically readapted by the author.

Moreover, many public bodies have already recognized the potential of service design. For instance, the European Commission stated that the discipline represents a "key driver of service innovation, social innovation and user-centred innovation"(Whicher, Swiatek, & Cawood, 2013). In the 2013 report 'Design for Public Good' (SEE platform), the authors show a range of three different levels for applying service design and design thinking, offering a useful tool to define a roadmap toward service design-driven innovation (Figure2.4). In the first phase, design teams collaborate together with the public sector in a project-based way and design thinking is not an integrant part of the organization; at the second step, civil servants not only collaborate with designers, but they are also able to handle design thinking tools, methodologies and approaches by themselves; in the last advanced stage, designers and

policymakers work together, sharing the same approaches and using freely design thinking methodologies (SEE platform, 2013).

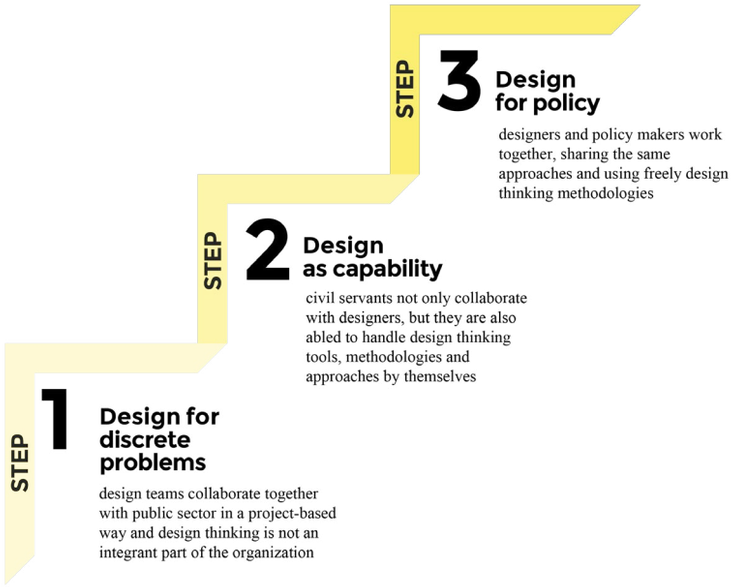


Figure2.4 Public Sector Design Ladder. Source: SEE, 2013. Graphically readapted by the author.

Likening the discipline to other innovative approaches, it is possible to see how, despite the common features, service design embodies the best option when compared with the others. The underlying table provides an overview of several innovation approaches accordingly to their objectives, outcomes, the ground of competition, the nature of their orientation, strategy and the kind of innovation they can bring (Table2). Service design's goal is to think about all the possible connections and design all the touchpoints of services, 'lean production' aims at avoiding wastage in the process without affecting the final outcome, 'co-production' wants to actively involve users directly during the services' drafting, 'systems thinking' seeks to implement single parts of a system to consequently improve it all and the 'nudge method' activates small change that triggers mindset shifts. Similarly, service design, co-production and system thinking, race on the customers' experience level, whereas lean and nudge on the cost one. But, while service design has a strategic approach, lean, systems thinking and nudge are more operations-centered. What actually makes service design so unique and makes it stand out among other methods of innovation is the fact that the discipline is the only one capable of triggering radical innovation, thanks to a creative involvement of services' stakeholders during the process.

	Service Design	Lean	Co-production	Systems Thinking	Nudge
Aim	To create new services where all touchpoints and interactions have been designed.	To reduce waste in the system while preserving value.	To engage service users in the delivery of services	To improve and optimise the service system	To make small changes that encourage behaviour change
Where Does it happen?	Interface with user or customer.	Productions and operations	Operations	Service management	Middle management
Compete on cost, experience or quality?	Experience & quality	Cost & quality	Cost & experience	Experience & quality	Cost & quality
Most focussed on service user or provider?	User	Provider	User	User	User
Strategy or operations focused?	Strategy	Operations	Both	Operations	Operations
Delivers radical innovation?	Yes	No	No	No	No

Table2.2 Innovation Methods Table. Source: Whicher, Swiatek, & Cawood, 2013. Graphically readapted by the author.

2.2 Service design contribution

'Understand, empathize, create new thinking, test and iterate' are the necessary steps to reach a satisfying solution.

Roles matter in the public sector more than in the private one (Holden et al., 2017). In fact, being accustomed to a role-based approach, the public sector needs to maintain this structure in order not to create confusion. For this reason, it is fundamental to understand which role the service design discipline plays in public sector innovation. In general, the role of service design experts is constantly undergoing changes, since the first examples of its applications have been seen in the 2000s (Valtonen, 2005). Discipline has an increasingly important part to play in the public sector since the economic system, the problems of population ageing and the very structure of public services are creating ever greater challenges for contemporary governments (Vuontisjärvi, 2015). This second section of the literature review will present some relevant analyses carried out, trying not just to present the different roles, but also to show the mechanisms they activate or could trigger. Christian Bason has largely investigated the impact that the design practice could have on government innovation. In particular, in his doctoral thesis "Leading Public Design: How managers engage with design to transform public governance" published in 2017, he offers an interesting analysis on the influence and consequences that design approaches have in the public sphere "how they change the roles of public managers, how they help managers generate new ideas and solutions – and whether, as some have suggested, they might signal the rise of new governance models or paradigms" (Bason et al., 2017).

1. The whole analysis has led the author to three main areas of findings: the design activities in the public sector are mainly focus in "exploring the problem space" (thanks to the use of several tools and methods that combine together design and ethnography), "generating alternative scenarios" (where it comes into play the capability of designers of bringing creativity, visualizing ideas and building innovative concepts) and "enacting new practices" (involving users into testing and prototyping activities aimed at implementing the solutions);
2. there is a pattern of six common stances that involves civil servants when they shift toward the adoption of design approaches -"questioning assumptions, leveraging empathy, stewarding divergence, navigating the unknown, making the future concrete and insisting on public value". Bason reflects on how these six behaviors can be paired together into three groups that basically coincide with the previously mentioned design activities (Figure2.5). "It appears that particular design approaches influence managers' engagements and that certain management attitudes and behaviors at least in part determine how significant the use of design approaches turn out to be";
3. the adoption of design approaches can shape the advent of a new generation of governance models that could possibly be more "relational, networked, interactive and reflective".

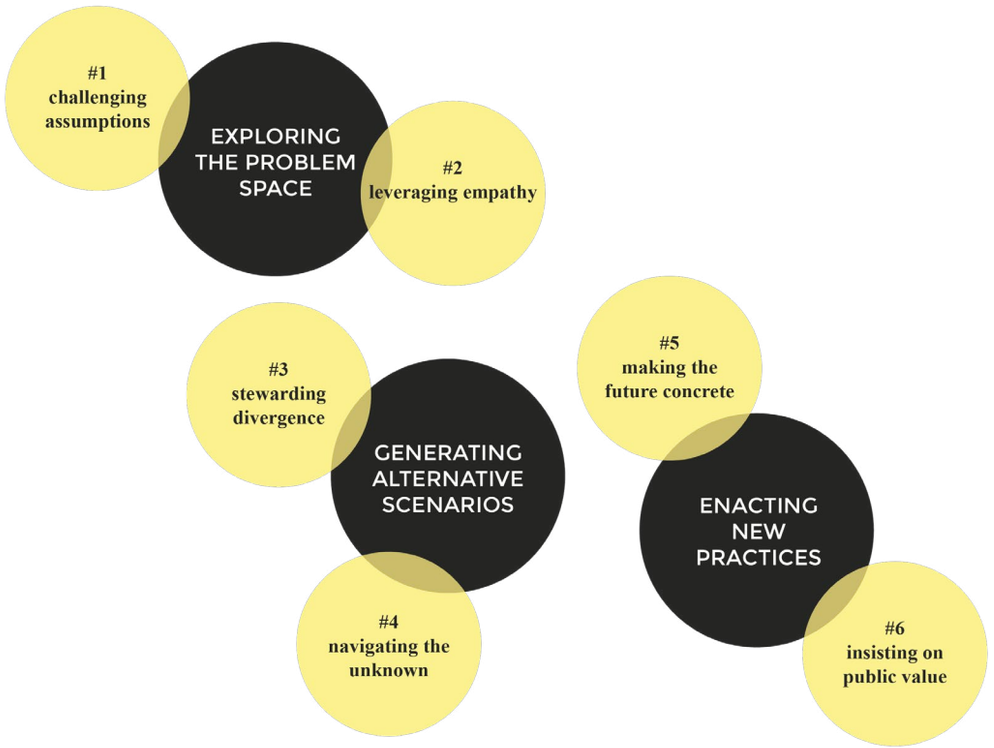


Figure2.5 Management engagement with design. Source: Bason et al., 2017. Graphically readapted by the author.

Similarly, André Schaminée in his book "Design with and within public Organizations" (2018) suggests a framework for innovation organized in four main phases that highlights the connection between the public sphere and the design one, with a particular focus on the role that the discipline can play (Figure2.6). The whole process evolves from problems toward unique or multiple solutions, moving between the two dimensions of the concrete and the abstract. 'Understand, empathize, create new thinking, test and iterate' are the necessary steps to reach a satisfying solution and require designers respectively to:

- **(re)phrase the research questions** that lead the whole journey;
- **carry out accurate and diverse researches** focus primarily on users - taking into consideration also the public organization's values;
- **reframe issues and rethink challenge**s in order to reach new ideas;
- **prototype proposal and reiterate solutions** to better meet users' needs.

These are the main parts service designers are asked to take when dealing with public sector innovation (Schaminée, 2018).

Service designers can become **facilitators, innovators, capacitybuilders, strategists, researchers, entrepreneurs, co-creators.**

In addition, accordingly to Rosenqvist (2017), service designers are increasingly involved in reframing and improving public sector offer, renewing old processes of policy-making (Camacho, 2016), modifying methodologies and approaches of democracy itself (Bason, 2010) and encourage the citizens active participation in societal issues, both in small and large scale transformation. Accordingly to the service designer Martina Rossi, the role of service designers is changing from 'design thinking' orientation toward a more practical 'design doing' approach (Stickdorn & Schneider, 2015; Stickdorn et al., 2018). Thus, once the public sector field is defined and all the context peculiarities are clear, it is possible to identify three main assets in which the unique characteristics of the service design make the difference: facilitating, co-designing and innovating. These three activities match the principal roles of the discipline and embody also the additional value and expertise that it brings to the public sector innovation (Rossi, 2016).

A broader and more detailed view of these three categories is given by the Tan's seven roles analysis (Tan, 2009; Tan, 2012); it presents a clear description of seven possible roles that service designers can take up together with some possible applications (Table3). They can become **facilitator, innovator, capacity builder, strategist, researcher, entrepreneur, co-creator.** A designer-facilitator translates different methodologies and approaches into a shared language among different stakeholders. This is done in order to support and improve collaboration in heterogeneous groups. Closely to the previous category, the designer can work as a communicator, bridging the existing gaps between different disciplines. He/she becomes a capacity builder when starts transfer design knowledge, methods and tools to the other field(s). In this way is possible to embed service design directly in the public sector. Designer-strategist behaves as a connection between design, planning and policy, and helps the redefinition of strategic plans toward public sector delivery. The researcher is one of the most articulated roles of service designers: in this case, all the expertise on users and systems' analysis together with known methods, are used to work out data together with other actors in the system. Designers acting as entrepreneurs, try to attain their proposal in an end-to-end development process, looking also for possible commercial outlets. Finally, designers who play the role of co-creators, establish a close relationship with the public sector that is not just about designing for it, but also involving civil servants in a participatory way to deliver new solutions (Yee, Tan, & Meredith, 2009).

Accordingly to SDN's Impact report (2016), when strictly applied to the public sector innovation, the role of service designer directly changes into "how governments operate to deal with public problems and create public legitimacy" (Mager, 2016). In this case, designers reshape problem-solving classic approaches going through five activities that can be associated with the more recent framework of Schaminée (2018) shown below (Figure2.6). The role of service designers is to spread and teach new ways to understand contexts and users, imagine future scenarios and envision possible innovative ideas, synthesize and make proposals concrete, experiment possible innovations, operationalize/scale methods and solutions to obtain new dynamics (Mager, 2016).

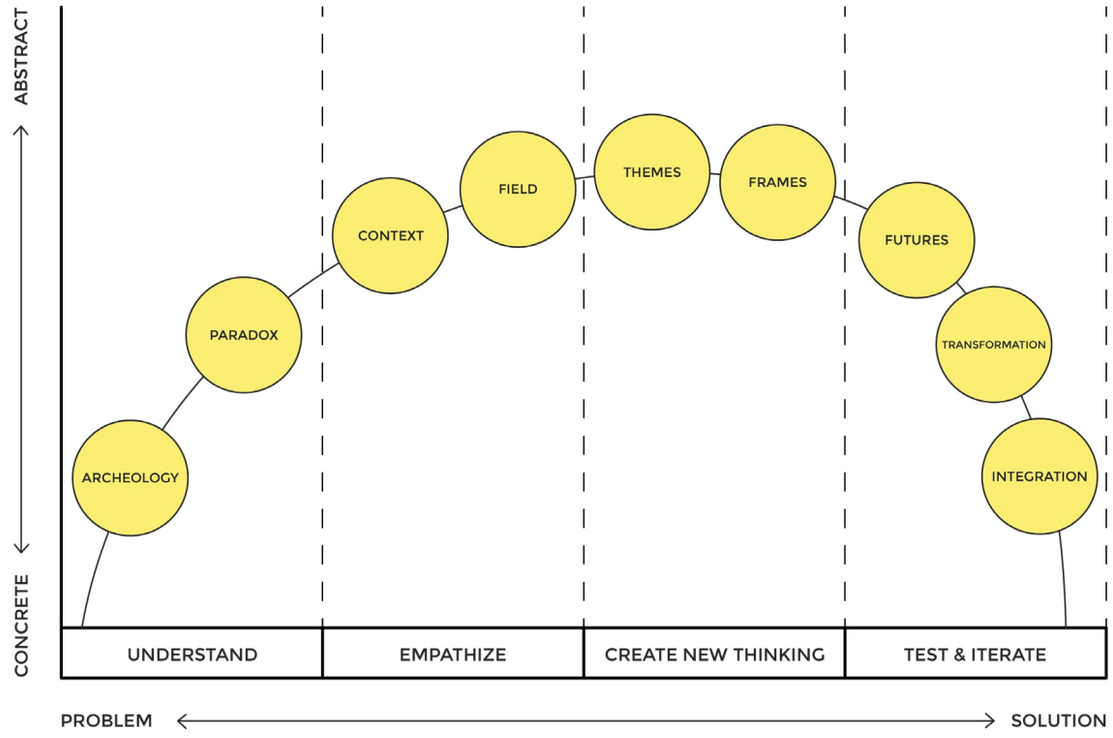


Figure2.6 The nine steps to frame innovation. Source: Schaminée, 2018.
Graphically readapted by the author.

Roles	Characteristics	Examples of activities
Designer as **Facilitator**	» Joining up different thinking, philosophy and approach from different parts of the stakeholder groups. » Enabling better collaboration, synergy and participation of people. » Mobilising and energising thinking of others	» Facilitating reflective practice among the stakeholders through formal (for example in workshops) and informal means (for example in conversations). » Translating conversations into visuals (for example graphic facilitation).
Designer as **Communicator**	» Using visuals to initiate conversations around issues, gain feedback for iterations and ideas. » Using communication devices to bring together disparate stakeholder groups. » Closely linked to the facilitation role.	» Examples of tools used include storytelling, diagrams and prototypes. » Illustrating relationships, emotions, networks, abstract, systems, prototypes and strategy through visual means.
Designer as **Capability builder**	» Transferring design processes and methods to enhance their own processes. » Acting as a 'conduit' in the knowledge transfer process.	» An adoption of design processes and methods into business processes.
Designer as **Strategist**	» Involved in designing and planning action and policy to achieve a major or overall aim.	» Acting as the project champion and lobbying support for the project. » Helping create and visualise strategy.
Designer as **Researcher**	» Doing research with stakeholders and potential stakeholders of the product or service. » Project outcome are usually recommendations, improvements, ideas and opportunities translated from design-led research, rather than a design artefacts. » Drawing research methods from architecture, developmentstudies, anthropology, social sciences, marketing, business etc.	» Using a range of methods such as questionnaires, surveys, vox pops, observations, interviews, personas, context mapping, journey mapping, cultural probes, stakeholder mapping and workshops.
Designer as and **Entrepreneur**	» Designer involved in end-to-end process of developing and rolling out an idea that can function profitably or sustainably.	» Looking toward commercialising the idea. » Looking for ways to develop ideas into a sustainable enterprise model.
Designer as **Co-creator**	» Relationship with users is to both 'design with' and 'design for.' » Co-design's approach is about: o The participation of people; o A development process; o The creation of ownership; and o Being outcomes-based	» Involving user groups throughout the project to co-create solutions. » Using a range of participatory tools such as cultural probes.

Table2.3 Seven roles of service designer. Source: Tan, 2009. Graphically readapted by the author.

2.3 Existing challenges

As already mentioned in the introduction of this thesis, the public sector is closely linked to its reference context. The same applies to the limits and barriers that slow down - and sometimes block - innovation. Nevertheless, today's existing searches define a series of recurrent patterns when dealing with this topic. Although there are different views and opinions, these barriers usually involve:

- problems of budgets and the absence of clear future plans;
- lack of capabilities in dealing with any kind of transformation;
- a little number of stimulus that promotes innovation;
- different levels of constraints;
- over-dependence on present innovation approaches;
- reticence to face failure;
- risks reluctance culture;
- delivery pressures and administrative burdens (Albury, 2005).

Primarily, the shift from green-field to breakthrough innovation (see Chapter1), represents the first cause of some big challenges for current governments. In fact, developing radically new solutions implies the questioning of values rooted in society and moving from supporting existing alternatives to challenge them. Moreover, while innovating, the public sector should also provide continuity in the service it delivers and sometimes keeping these two separate assets requires a big organizational effort by the public organization (OECD, 2017). Analyzing the recent trends in public sector innovation, OECD provides a clear mapping of the main barriers that Governments face when dealing with innovation along the so-called 'innovation lifecycle' that are summarized in the figure below (Figure2.7).

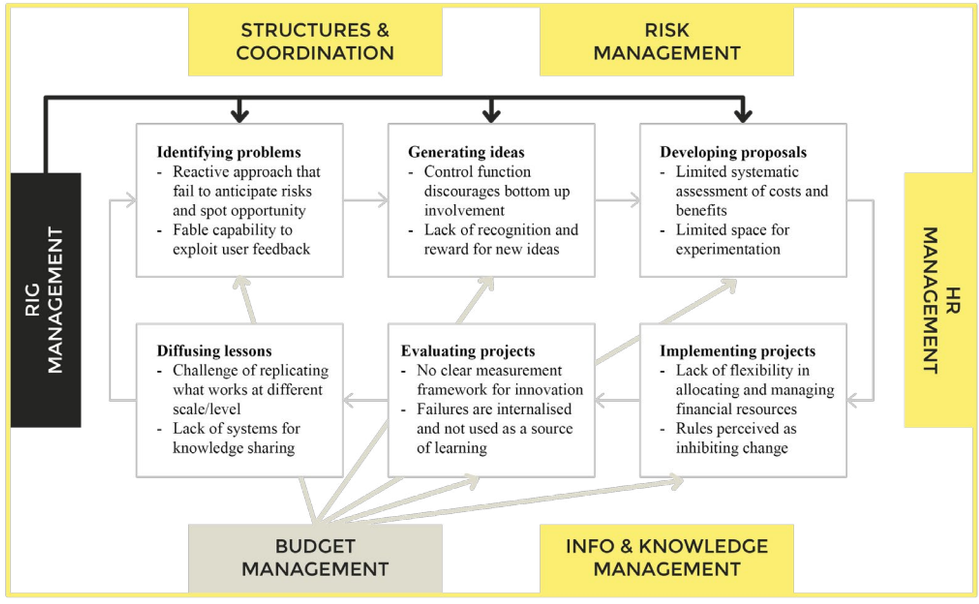


Figure2.7 Barriers to innovation across its lifecycle and related policy tools. Source : OECD elaboration. Graphically readapted by the author

"Standard processes and old approaches are no longer suitable to face the growing number of issues and 'wicked problems' that characterized the public sector."
- André Schaminée

Limits and barriers toward public sector innovation usually involve budgents issues, lack of capabilities and stimulus.

Recurrently, rules and processes are presented as one among the main obstacles to innovation -particularly in the public sector - and are usually associated to the terms **"red tape" and bureaucracy** (NESTA, 2012; OECD, 2017). The first relates to that set of bureaucratic proceedings "that are seen as unnecessary, duplicative, or wasteful, thus contributing to delays and creating a sense of frustration" (Schultz, 2004). While "bureaucracy" actually represents both internal organizations' norms, and also the attitude they activate and trigger. It comes from certain values that different societies want to keep alive such as "rational decision making, integrity, effectiveness, efficiency, transparency, accountability, fairness" (OECD, 2017; Peters, 2003). From this initial distinction, it is already clear how nowadays there is a common misunderstanding of the concept of bureaucracy, that is usually perceived in a negative way. In fact, there are not enough empirical studies or researches that prove how effectively the aforementioned set of rules inhibits innovation. On the contrary, characteristics and values typical of bureaucracy still enjoy a broad consensus both from the government and from citizens (OECD, 2017). What actually represents a barrier to change is bureaucracy dysfunction, which may occur when rules are outmoded or too rigidly enforced. Moreover, bureaucracy is also interpreted by some experts as one among three different ways to organize the public sector, together with market and relationships. At the beginning of the 20th century, Max Weber predicted the future dominance of bureaucracy above the others, due to its strong ability to organize complex systems. Thus, envisaging cutting red tape out of modern society, would represent a fault (Muir & Parker, 2014). Despite everything, some aspects of bureaucracy might actually interfere with innovation: 1) continuance approaches against risk acceptance, 2) specialization versus departments collaborations, 3) hierarchy versus shared responsibility and 4) expertise against multidisciplinary skills (OECD, 2017).

Another recurring concept among limits and barriers of public sector innovation is '**complexity**' that has been largely treated by scholars, particularly in terms of theories. For instance, in 2008, Klijn explained the complexity theory as "the idea that the whole (the system) is more than the sum of its parts (the individual agents) while at the same time developments of the whole stem from the (interaction of the) parts. Complexity theories stress that systems tend to develop non-linearly and are subject to various feedback mechanisms. They are also dominated by self-organisation and usually co-evolve with other systems". Some peculiarities of complexity strictly linked to the structure of present societies are: - connectivity and interdependence: in complex systems as the public one, one actor could trigger an unexpected reaction on others; - evolution: still in a networked way, the system is able to adapt and change; - self-organization: not everybody acts in societies only following his designed role; - emergence: the possibility that the interaction between single parts of this complex system, creates new structures; - feedback processes: non-linearity of feedback process in society (Muir & Parker, 2014). Many times, from the civil servants' perspective, there are some particular aspects that inhibit the development of new proposals and mandate standardized rather than innovative solutions. These barriers are for example "**cost-based budgeting and departmental structures, to audit and accountability processes, as well as a lack of career rewards**" (Hallsworth, 2011). Additionally, there is a common resistance to undertake paths of change, and a small number of elements aimed at fostering innovation than not to. The same barriers can sometimes also represent the drivers that push innovation. Still starting for the perspective of public servants, León, Simmonds and Roman presented in 2012 an analysis on this topic, organizing these drivers into internal, external and political factors (Table4).

- The internal ones are those that exist within the limits of the public organisation itself. They can involve issues among the different departments or the public sector staff, hostile behaviors, internal fights, difficult coordination, lack of continual enthusiasm, resistance to the adoption of new technologies or managerial methodologies and the absence of adequate plans. Furthermore, existing studies have found that the reluctance to start working in different ways and change the personal approach is among the most spread reasons that slow down innovation in the public sector. The whole amount of internal constraints can be clustered into "human resources-related factors, including education and training schemes to public servants, availability of incentives to innovate, and good management and leadership and bureaucracy and organisational structures and design" (León, Simmonds, & Roman, 2012).
- The second category of drivers and barriers regards the external ones, the ones that belong to the surrounding environment. They can involve periods of crisis, increasing demand for better services delivery by citizens and companies, distrust toward the public administration, scepticism and public opposition and the absence of innovators in the ecosystem. However, a large number of civil servants who collaborated to the collection of these data interprets the external environment mostly as a stimulus to innovate, rather than a constraint.
- Finally, the third group is one of the political barriers, those ones that concern policies and, more generally, political decisions and orientation. They can also include budgeting issues or lack of funds and resources, as well as barriers coming from new rules or different

Many times, from the civil servants' perspective, there are some particular aspects that inhibit the development of new proposals and mandate standardized rather than innovative solutions. These barriers are for example **"cost-based budgeting and departmental structures, to audit and accountability processes, as well as a lack of career rewards"**

political parties. Modern researches in the USA present also as potential drivers/barriers elections, political board renovations and pressures coming from the same politicians.

Internal drivers and barriers	
Human resources-related factors	Education and training of public servants
	Availability of incentive schemes for motivating public servants
	Leadership and good management
	Other*
Bureaucracy and organisational structures and design	Internal organisational processes
	Performance management, including monitoring and evaluation practices
	Internal innovation culture

External drivers and barriers
International good practices and knowledge transfer
International rankings
National awards
Co-creation / service user participation / collaboration between public-private sectors
Citizens and businesses demands

Political drivers and barriers
Budget reductions/restrictions
Availability of funding/financial resources
EU policy decisions (i.e. EU funds) and requirements at EU level
Political support
(More flexible) Laws and regulations

Table2.4 Internal, external and political drivers and barriers to Public Sector Innovation. Source: León, Simmonds, & Roman, 2012. Graphically readapted by the author.

2.4 Findings

First steps for a bigger service design-driven public sector innovation have already been taken, and the literature panorama is a clear proof of that. Among the whole amount of information gathered, it has been possible to recognize common patterns and group relevances together into eleven macro areas:

- facts about the ongoing phenomenon;
- role(s) of service design;
- geographic context;
- design context;
- reasons behind the collaboration between service design and public sector;
- the existing gap between theory and practice;
- requirements for an effective change;
- additional information about the phenomenon of the service design-driven public sector innovation;
- primary limits and barriers for innovation and service design approaching this field;
- opportunities - for the PS, for SD and both the two.

These findings have been summarized by the author in the following affinity map (Figure 2.8), both to organize them and to be able to compare and associate information coming both from the literature and from the interviews. However, despite the significant amount of current studies about the topic - accordingly to the analyzed literature -, existing academic resources still present some gaps:

- despite the lack of a shared agreement, the reasons why the public sector is pushed toward innovation are clear and there is a satisfactory number of explanations about the topic. Instead, the motivations that spur service design towards the public sector are less clear and present literature has dealt with this subject little;
- current researches present a concise analysis about the different roles that service design plays in public sector innovation. Theorists and designers have successfully taken part in building a clear picture of the current landscape. What is missed from the reviewed literature is a similarly complete analysis of the practical side that presents the concrete impact of these studied roles in the 'real world';
- finally, while the topic of limits and barriers of the public

sector innovation has been largely investigated, there is a need of deepening the research about the potential or concrete contribution that service design can give to overcome them. Also in this case, as in the previous point, there is a lack of consistent proves coming from the practical side. Moreover, one question still remains unanswered: the barriers that service design faces approaching the public sector field, are the same ones that slow down the innovation cycle? And, if not, which are the limits and barriers of service design dealing with the public sector?

The objective of the following chapters will be to fill these gaps, trying to focus particularly on opinion and useful feedbacks coming from the practice world.

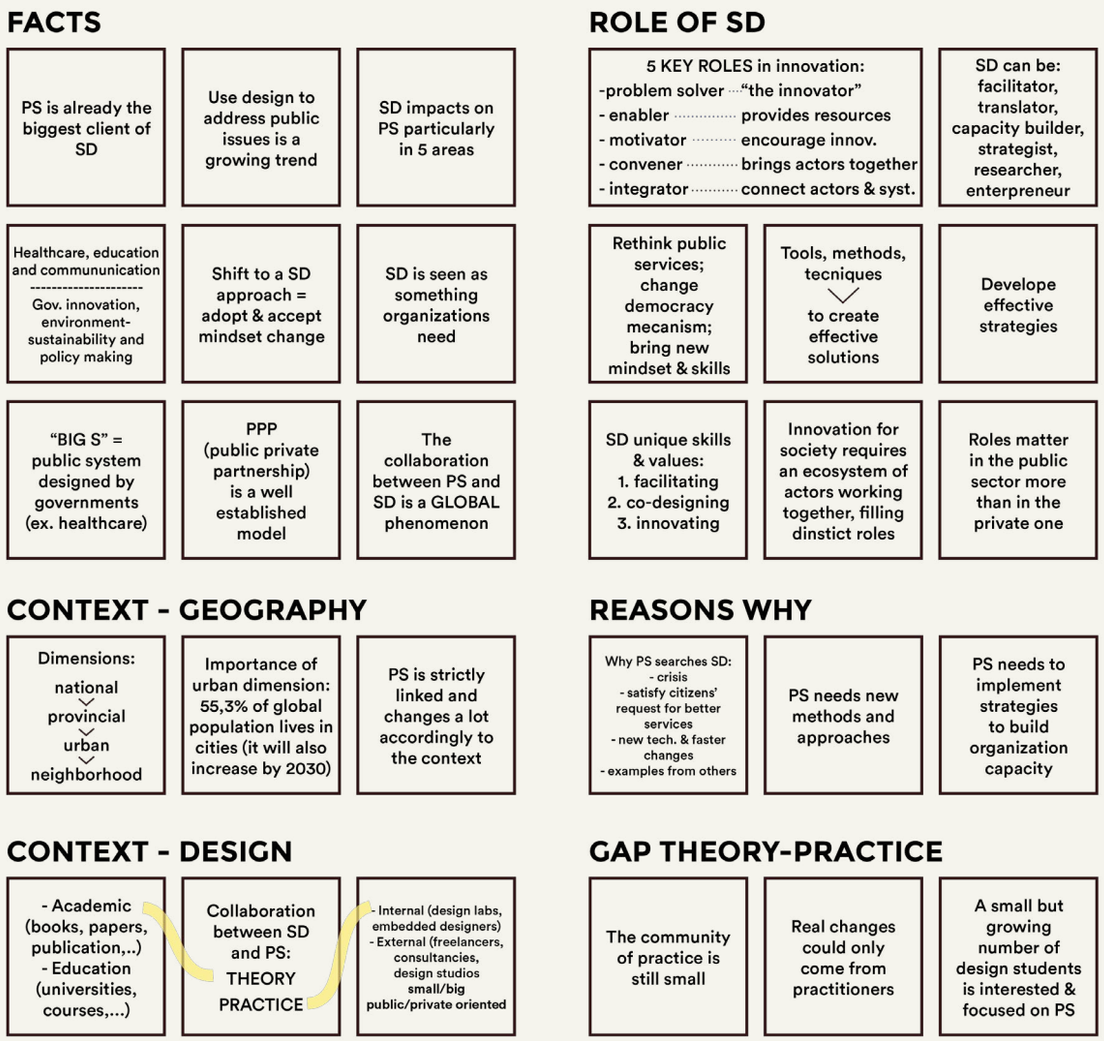


Figure2.9 Affinity map: literature (part 1). Source: the author.

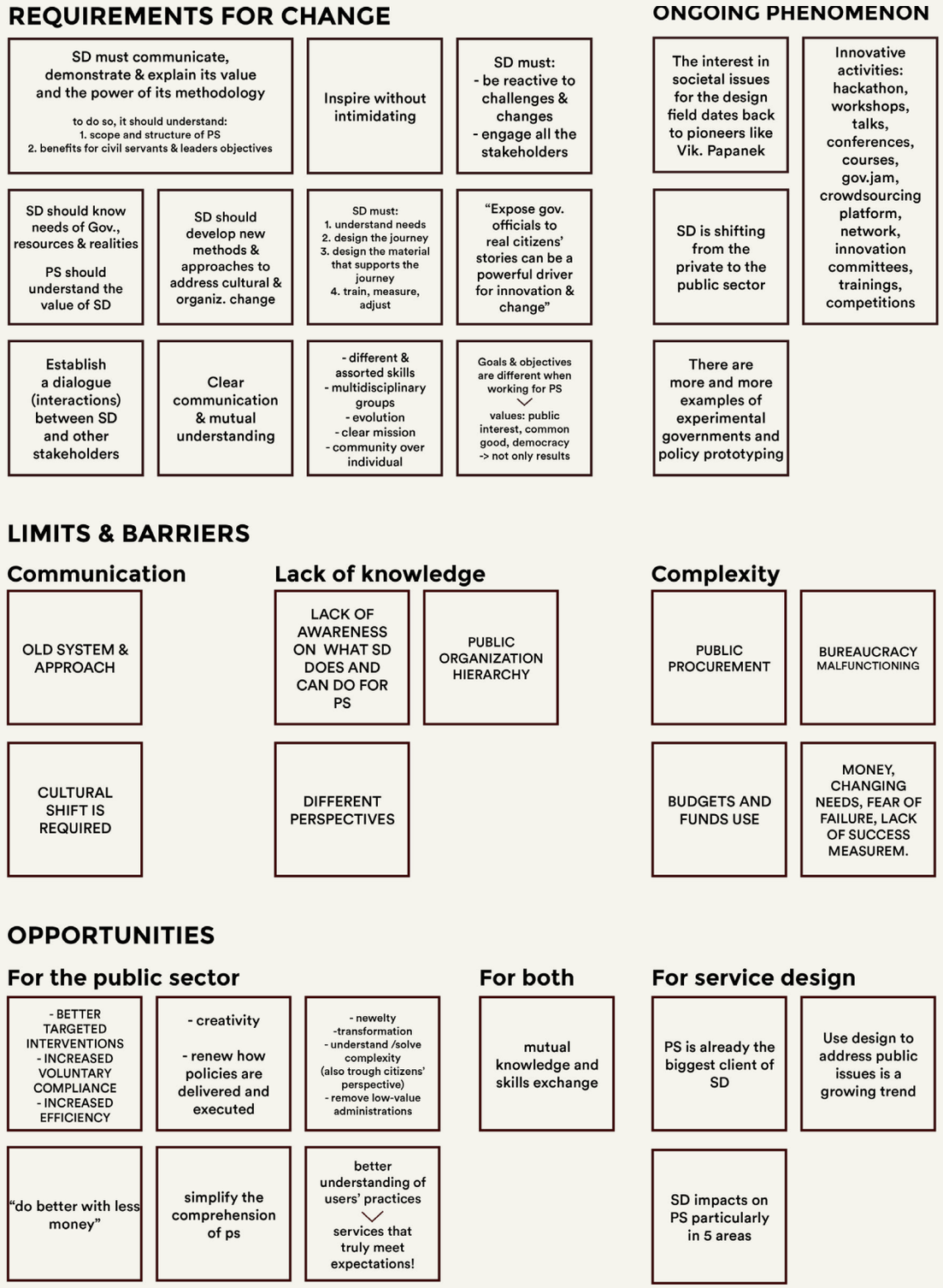
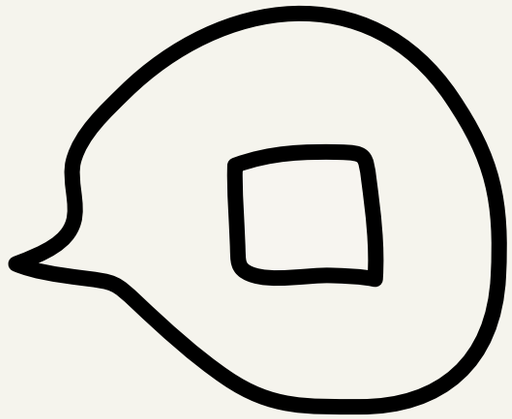


Figure2.9 Affinity map: literature (part 2). Source: the author.

3 Interviews

The interviews helped the author to gain a broader view of the topic: thanks to the experience and stories shared by the experts, it was also possible to learn about inspiring examples that had not yet been discovered during the research.

In particular, it was interesting to see the same topic from different points of view.



3.1 Introduction

The service design experts' interviews have been a crucial moment for the advancement of the present thesis. The author could expand her knowledge from the analysis of the existing literature, to gain a more precise view of the current practical world and get also inspired by the expertise and experience of the interviewees.

According to IDEO (2015), experts have systems-level views, they know about recent innovations and have opinions on the topic. For this reason, this stage of the research embodied such an important milestone for the whole project. As mentioned in Chapter1, the author carried on fourteen semi-structured interviews with experts coming from the practice side, academic world and people with a mixed background.

In order to satisfy the purpose of the interviews (see 1.4 Methodology), the author designed two different models (one for practitioners and the other for academics), and the questions have been structured as follow:

Practitioners:

1. **EXPERTS' EXPERIENCE:** Which is your experience as a service designer within the field of the public sector?

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2. **LIMITS & BARRIERS:** Which are the main limits and barriers design faces approaching this field?

---

3. **COLLABORATION MECHANISM:** How is the connection between service design and public sector providers usually established?

---

4. **ROLES OF SERVICE DESIGN:** Which roles is service design playing in public sector innovation?

---

5. **SERVICE DESIGN EVOLUTION:** Design in the past as always worked for private clients, whose requests were often connected to tangible outputs. Where does this need of expanding to other fields – such as the public one – come from?

---

6. **OPPORTUNITIES FOR THE PUBLIC SECTOR:** Why the public sector needs service design in your opinion? What are the main advantages of combining service design discipline with the public field?

---

7. **OPPORTUNITIES FOR SERVICE DESIGN:** How can service design also benefit from this collaboration?

---

8. **(DIFFERENCE EUROPE-ASIA - additional question, addressed only for experts familiar with both realities:** Do you believe is the public sector innovation happening differently in Europe and Asia?**)**

Academics:

1. **EXPERTS' EXPERIENCE:** Which is your experience as a researcher/ scholar/ teacher within the field of the public sector?

---

2. **ACADEMIC GAP:** Existing literature has largely deal with the topic of the public sector innovation. Do you think that are there still any gaps and/ or missing analyses from the academic side?

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3. **SERVICE DESIGN EVOLUTION:** Design in the past as always worked for private clients, whose requests were often connected to tangible outputs. Where does this need of expanding to other fields – such as the public one – come from?

---

4. **SERVICE DESIGN POSITION:** Many governments are trying to innovate their public sector to meet users' requests and needs better. At the same time, countries as Italy are living a period of significant distrust and crisis toward public administration. How could service design deal with this situation, in your opinion?

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5. **ROLES OF SERVICE DESIGN:** Which roles is service design playing in public sector innovation?

---

6. **LIMITS & BARRIERS:** Which are the main limits and barriers design faces approaching this field?

---

7. **OPPORTUNITIES FOR THE PUBLIC SECTOR:** Why the public sector needs service design in your opinion? What are the main advantages of combining service design discipline with the public field?

---

8. **OPPORTUNITIES FOR SERVICE DESIGN:** How can service design also benefit from this collaboration?

---

9. **(DIFFERENCE EUROPE-ASIA - additional question, addressed only for experts familiar with both realities:** Do you believe is the public sector innovation happening differently in Europe and Asia?**)**

Due to the experts' location, it has been impossible to do all the interviews face to face. Except for people in China, all other respondents were scattered among Singapore, UK, Italy, Belgium and Finland. For this reason, the author spoke face to face only with five interviewees in Shanghai. As state in the first chapter, the remaining conversations took place via Skype. From the total number of people interviewed in China, four were in Shanghai and one in Beijing. Instead, for what concerns the skype interviews three people were in Singapore, one in London, one in Dundee (Scotland), two in Milan, one in Brussels and the last one in Helsinki.

It has been possible to group the respondents according to their level of knowledge of the subject: in fact, all coming from very different contexts and realities, the level of experience and/or involvement in public sector innovation was different. Therefore, the respondents were grouped into three types: experts in public sector innovation, service designers with little experience in public sector innovation, and service designers who are starting to work with the public sector.

The following table presents and summarizes more information about who were the respondents, their company or referring institutions and the specific background (academic, practitioner or mixed background; experts in public sector innovation, little experience in the field, starting now public sector projects) and where and when the interviews were carried out (Table3.1)

name	company/ institution	backaground	interview location	date
Zhong Fang	Tsinghua University (Beijing)	Academic; starting now public sector projects	Tongji University, Shanghai	29.10.2018
Cathy Huang	CBi - China Bridge (Shanghai)	Practitioner; little experience in the public sector field	CBi studio, Shanghai	22.01.2019
François Jégou	SDS Strategic Design Scenarios (Brussels)	Mixed background; expert of public sector innovation	Skype	29.01.2019
Martina Rossi	Politecnico di Milano (Milano)	Mixed background; little experience in the PS field	Skype	08.02.2019
Marco Steinberg	Snowcone & Haystack (Helsinki)	Practitioner; expert of public sector innovation	Skype	08.02.2019
Mats Zhang	BIGmind (Shanghai)	Practitioner; starting now public sector projects	BIGmind studio, Shanghai	26.02.2019
Valeria Adani	Idean UK (London)	Practitioner; little experience in the public sector field	Skype	26.02.2019
Daniela Selloni	Politecnico di Milano (Milano)	Mixed background; expert of public sector innovation	Skype	27.02.2019
Mike Press	Open Change (Dundee)	Mixed background; expert of public sector innovation	Skype	12.03.2019
Karin Aue	Chemistry (Singapore)	Practitioner; expert of public sector innovation	Skype	11.04.2019
Jung-Joo Lee	SDL Service Design Lab (Singapore)	Mixed background; expert of public sector innovation	Skype	12.04.2019
Gabriele Tempesta	SUYI (Shanghai)	Practitioner; starting now public sector projects	SUYI studio, Shanghai	17.04.2019
Shawn Lee	Monocoque (Singapore)	Practitioner; little experience in the public sector field	Skype	18.04.2019
Paola Trapani	Tongji University (Shanghai)	Mixed background; little experience in the PS field	Tongji University, Shanghai	17.05.2019

Table3.1 Interviews summary. Source: the author.

"There are few service design projects linked to the public sector innovation at national level: most of them are at the city level."
- Daniela Selloni, Politecnico di Milano

"There is a very fundamental problem that is: the education system from the two perspectives are not alligned."
- Marco Steinberg, SNOWCONE & HAYSTACK

"If we consider "What does public sector use service design for?", in my opinion the discipline is useful to "streamline" and try to put users' at the center, starting from their needs. Something that in the public field – more than in the private one – didn't yet enter the way of working.
- Martina Rossi, Politecnico di Milano

"I think that another big barrier is the cultural and mindset barrier: people are always much more conformable with the things that they know, rather than the things they don't know."
- Marco Steinberg, SNOWCONE & HAYSTACK

"The society is changing at high pace and government should change to reconnect with it."
-François Jégou, SDS

"Cities are the innovation hub: from small to bigger reality."
-Cathy Huang, CBi

"In China, governments and design companies are working a lot together to deliver citizens almost all the facilities they could desired."
- Zhong Fang, Tsinghua University

3.2 Interviews summary

Following the structure of the questions it has been possible to create a summary of the conducted interviews. Investigating the experts' experience toward the topic of the public sector innovation and combining this point to their background, the author discovered that, of the fourteen interviewees four respondents said they are starting now working with the public sector (two practitioners, one academic and one with mixed background), four people have little experience with the public sector (three practitioners and one with mixed background) and six people are experts (two practitioners and four with mixed background). Analyzing these data, the author discovered that the four service designers who are starting now dealing with public sector projects are settled in Shanghai (three of them) and in Milan (one of them), while experts are mainly linked with the cities of Helsinki and Singapore. The kind of projects interviewees sustained to be linked to, drastically changes from country to country, something that shows the peculiarity of the public sector structure and offers. Thus, this relevance, confirms from a practical point of view, the strict connection between the public sector and its context of reference. Nevertheless, despite the difference, most of the respondents said that service design-driven innovation in the public sector is a phenomenon that is mainly linked to the urban and local dimension. Indeed, it is rare to find functioning innovation plans at a national level.

Despite the different backgrounds, nationalities and experience of respondents, answers regarding the limits and barriers that service design needs to overcome in order to approach the field of the public sector, were profoundly similar. In particular, almost every respondent (twelve out of fourteen people) mentioned a general complexity and the lack of knowledge as the two main barriers for service design. The first point was linked to the system structure, the various governments' departments, the multitude of actors involved and the links that occur among them. The lack of knowledge instead regarded the existing weak education system between the two fields (political science toward service design and vice versa), the little awareness and understanding particularly from the perspective of the public sector regarding the design discipline and finally the absence of a common language and terminology system.

Other recurrent topics that interviewed experts presented to the author were:

- **mindset differences between the two fields;**
- **old system and approach of the public sector;**
- **lack of mutual understanding;**
- **hierarchical system and slow bureaucracy;**
- **problems linked to budgeting mechanism;**
- **old public procurement system.**

Despite the different backgrounds, nationalities and experience of respondents, answers regarding the limits and barriers that service design needs to overcome in order to approach the field of the public sector, were profoundly similar.

This last point of the public procurement is linked to the following question: in fact, open calls by the government are the way in which the collaboration between service design providers and the public sector usually start. It is difficult – if not impossible in some context- for service designers to directly suggest an idea to the public administration. Instead, the public sector usually launches a call for projects to ask different companies to participate in proposing ideas. Public procurements are additionally a way to avoid corruption and being transparent in the use of public money, in order to exploit them in the best way. But, what came out from the experts' stories, is that the mechanism behind procurements is obsolete and this makes the whole public calls' journey slow and not efficient. Moreover, civil servants lack the knowledge to procure services and governments misses the right channels and social networks to spread the calls. This brings governments to procure similar companies and studios they already have worked with before.

Contrary to the point concerning limits and barriers, the responses related to the role of service design have been very different from each other, something that could be probably linked to the different kind of projects respondents conducted or dealt with. Combining the various opinion the author was still able to find common patterns among answers. Service design is, accordingly to experts, currently involved in facilitating both the public services delivery and also the relationship among different departments, in sharing and spreading innovative approaches and methodologies something that is strictly linked to the last point of training the civil servants to allow the adoption of a new cultural and organizational mindset. In fact, the big challenge (and chance) that service design is trying to address is making public sector all over the world moving from a stating problem-solving approach, to a more dynamic and iterative way of thinking, suitable to deal with present issues. Moreover, another cited point was the fact that design can also help showcasing good and pioneer examples, to inspire other realities to embrace an innovation path as well.

The service design shift toward the public sector is connected to the nature of the discipline itself. In fact, being multidisciplinary and user-centered, this shift was, accordingly to interviewees, something expected. In fact, the discipline is willing to accept always new challenges and different kind of projects and the social sphere is something that is automatically connected to service design. In terms of opportunities, service design gains from this collaboration several advantages. First of all, practitioners learn how to manage and deal with complexity, something that helps them grow professionally and

get ready for bigger challenging projects. Moreover, designers have the perfect opportunity to get involved in different kind of projects, overcoming limits and common standards of requests from the private sectors. Designers can then reach a bigger and social impact, gaining also huge visibility and importance in the current panorama. Finally, working with the public sector could activate a mechanism in which the awareness toward the collaboration opportunities, can let the requests for new projects increase and create more job opportunities for young designers.

The public sector instead gains user-oriented systems that can be cost-effective in the long-term vision and, at the same time, helps governments to rebuild the lost trust of citizens toward public administrations. Moreover, civil servants can undertake a new creative path and learn new skills and capabilities, understanding how to deal with complex public challenges.

3.3 Findings

The interviews helped the author to gain a broader view of the topic: thanks to the experience and stories shared by the experts, it was also possible to learn about inspiring examples that had not yet been discovered during the research. In particular, it was interesting to see the same topic from different points of view (depending on the experience levels of the respondents and their background). The experiences shared in the fourteen interviews double proved the vastness and the thousand faces that the public sector can have depending on the context of reference. In fact, the projects presented by the various experts showed both a very different nature and also very diverse impacts and results.

On the contrary, concerning the limits and barriers that the discipline must overcome in order to undertake projects related to the public sector, they were found to be deeply similar despite the different backgrounds - of experience, culture and geography - of the respondents. Common patterns can be easily found also with a summary reading of the interviews. As in the literature, the author clustered the whole amount of limits and barriers in three macro areas: problems of communication, lack of knowledge and the complexity linked to the public sector sphere. Among these, the lack of knowledge resulted in being the most critical problem for the respondents, interpreted as a mutual issue that interests both the service design discipline and also the public sector field. We can then refer to a ‘mutual lack of knowledge’ that can involve:

- a weak education system;
- little awareness and understanding about the other's field;
- the absence of a shared language & terminology system (linked to the other macro area related to the communication issue).

Another interesting topic uncovered during the interviews is about how the collaboration between service design and public sector is usually established: the discussions with the experts allowed the author the opportunity to get to know better the public procurements, how they are issued and what are the main troubles linked with them. This unveiled a strong need to somehow deal with this issue in order to smooth the path toward innovation.

Speaking with experts also represented a chance to analyze the ongoing evolution of the service design, together with the reasons that are encouraging the discipline to explore continuously new context and challenges. Moreover, having experience from the practical side, it has been possible to understand the several opportunities that the two fields can gain working together.

Finally, the interviews also highlighted the importance of the urban 'dimensions' and the key role that cities are playing in driving the current public sector innovation worldwide. Therefore, modern cities are working as actual 'hub' of experiments and innovative proposal: usually they test potential ideas that can be then scaled to a larger reality such as the national one. In fact, as some respondents pointed out, it is currently easier to start from small changes moving toward bigger impacts, rather than try to succeed using an opposite strategy.

All these findings – summarized in the following affinity maps (Figure3.1 & figure3.2) – combined with the results coming from the literature analysis, helped the author to finally draw a complete map of the ongoing phenomenon that will be fully presented in the next chapter.

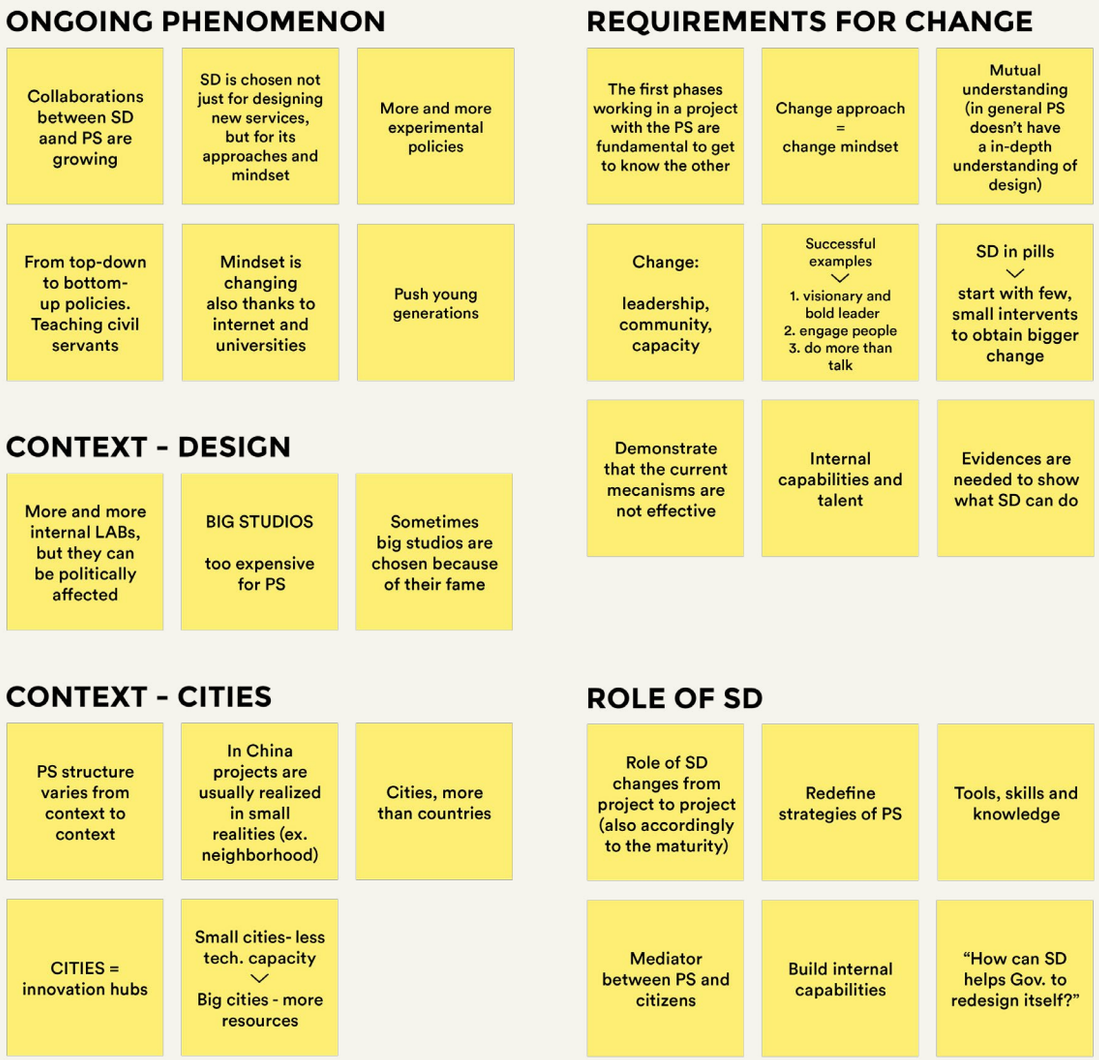
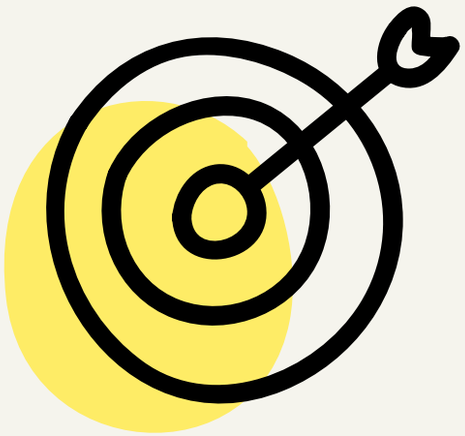


Figure3.1 Affinity map: interviews (part 1). Source: the author.

Figure3.2 Affinity map: interviews (part 2). Source: the author.

4 Research synthesis

In order to explain such a complex topic as the service design-driven public sector innovation, it is necessary to set clear directions for analysis. Moreover, its understanding is inevitably linked to the different contexts of reference, to the motivations that lead the parties to collaborate and finally to the actual way in which all this happens in practice. This chapter embodies the last part of the research phase and will present to readers the 'SD (Service Design) and PS (Public Sector) collaboration framework', built upon the key question *"Where, why and how is service design collaborating with the public sector?"*.



The framework aims not only at being a research visualization, but also a potentially useful tool for future studies on the same topic and a resource to support potential projects development.

4.1 Introduction

This chapter embodies the last part of the research phase and will present to readers the **'SD (Service Design) and PS (Public Sector) collaboration framework'** developed as a result of the complete analysis. The framework aims not only at being a visualization and a final summary of the research, but also a potentially useful tool for future studies on the same topic and a resource to eventually support projects development. Built upon the central question of *"Where, why and how is service design collaborating with the public sector?"* the whole framework is structured on three different layers that alternate:

- **analysis dimensions;**
- **driver questions;**
- **key findings.**

The following diagram can be used as a guiding tool to navigate the framework: it shows the subdivision of topics and the interaction between the various levels (Figure4.1). The different backgrounds highlight the three layers and make it easier to read the whole scheme. The visualization method that the author decided to adopt is the one of the "Sunburst Diagram", generally used to map hierarchical data and the relationship that does exist between inner and outer circles (Ferdio, 2017).

The framework' levels can be differently used accordingly to the aim of the research/project. The full view that combines together analysis dimensions, driver questions and author's key findings represent a dynamic tool for experts, students and civil servants: it can be exploited to gain a first general overview about the topic of the service-design driven innovation that brings together academic research, experts opinion, case studies and additional findings. The aim, in this case, is to be a practical instrument to serve as a support and 'database' of basic information, both for service design and for public sector field (Figure4.1).

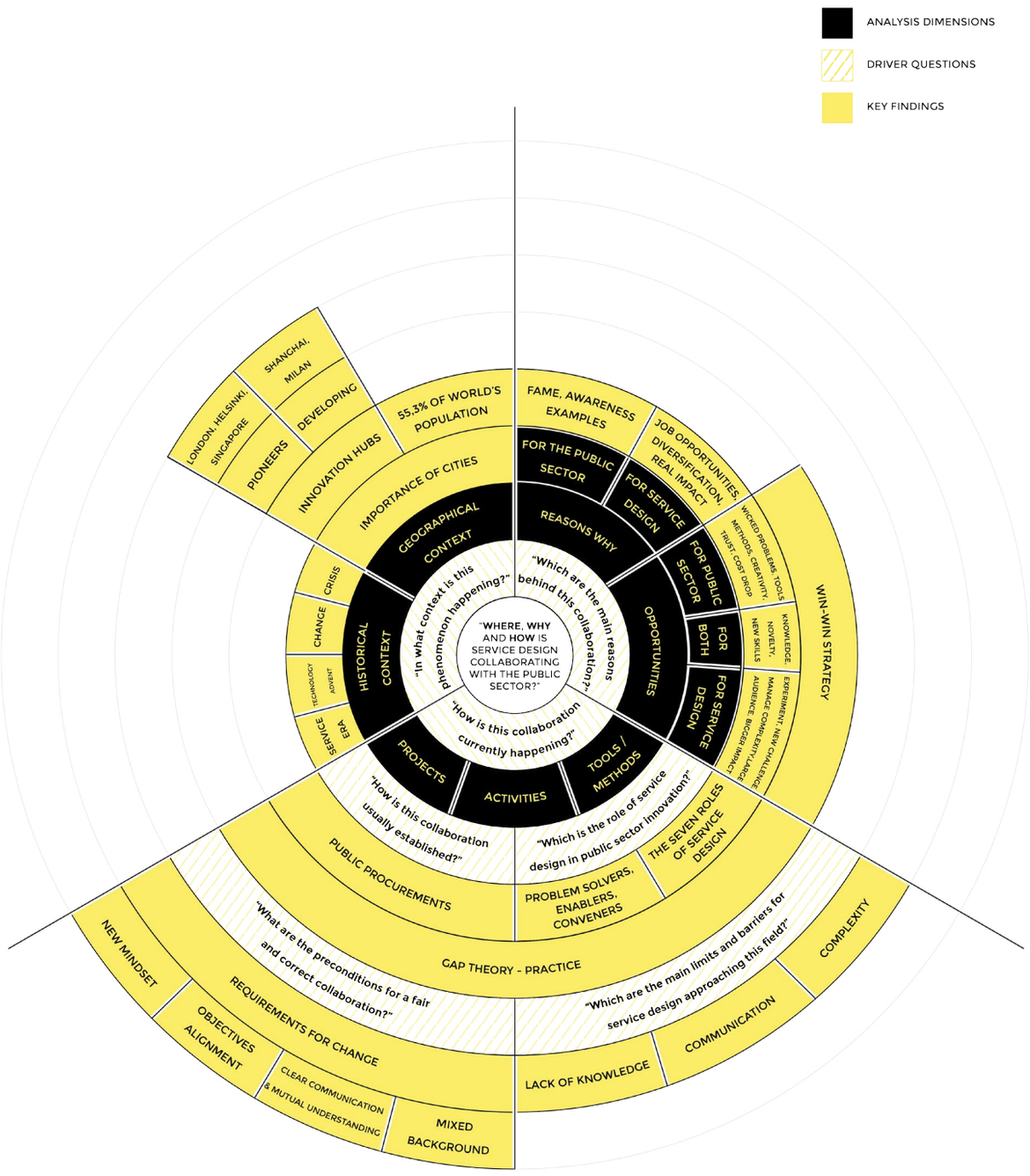


Figure4.1 SD and PS collaboration framework. Source: the author.

Figure4.2 SD and PS collaboration framework: analysis dimensions and drive questions. Source: the author.

The combination of the first two layers alone (analysis dimensions and driver question) can be rather used as a starting point and a guideline for new researches, where the blank areas can be the ones that users discover by themselves, which can be potentially different from the ones of the author herself. This brings to the 'SD and PS collaboration framework' a customizable aspect, that makes it not only a resource but also an in-progress tool, where the user can actively participate in its development and implementation (Figure4.2).

Figure4.3 SD and PS collaboration framework: analysis dimensions. Source: the author.

The last scenario, in which only the first level is maintained, is instead a simple guideline that suggests to users the fundamental dimensions to be taken into account when dealing with the topic of the service design-driven public sector innovation, both from an academic or a practice perspective (Figure4.3).

4.2 Analysis - “Where, why and how is service design collaborating with the public sector?”

In order to explain such a complex topic as the service design-driven public sector innovation, it is necessary to set clear directions for analysis. Moreover, its understanding is inevitably linked to the different contexts of reference, to the motivations that lead the parties to collaborate and finally to the actual way in which all this happens in practice. For these reasons, the structure of this framework is organized around three macro dimensions of analysis: the where, the why and the how.

The fourth chapter will go one by one through all of them, explaining all the different levels of the framework. The author will also present additional pieces of research: the first part will talk about the current historical background behind innovation and the importance of the urban dimension; in the second part the author will explain more in details the motivations and the opportunities behind this collaboration, explaining the concept of the “win-win strategy” applied to this topic; finally, in the third section, there will be a case studies analysis organized by projects, activities and tools/methods that are involving service designers and civil servants, an additional reflection of the roles of service design and the gap between theory and practice that still do exist.

The first step in the comprehension of any concept is primarily to understand the context in which it develops or to which it is linked. When we talk about public sector innovation, we cannot ignore the need to analyse the current context in depth.

4.2.1 WHERE - “Where is this phenomenon happening?”

The first step in the comprehension of any concept is primarily to understand the context in which it develops or to which it is linked. The same applies to the subject of interest of this thesis: when we talk about public sector innovation, we cannot ignore the need to analyse the current context in depth (Figure4.4). First of all, it is necessary to make a premise that introduces what the historical moment in which this phenomenon takes place is. Today, we are talking about what is defined as the ‘Service Revolution’, that is namely the continuation of what was the Industrial Revolution in the twentieth century. The Present is witnessing the overwhelming emergence of a service-based economy, as, in a world saturated with physical objects, attempts are being made to redesign and rethink user experiences rather than the final physical product (Tassi, 2019). Nowadays, we are additionally living in a world of quick changes and transformation, narrowed by the advent of new technologies that are radically shifting the reality we were used to. Innovative apps, augmented reality, artificial intelligence, are just some among the multitude of technological protagonists of this ‘story’.

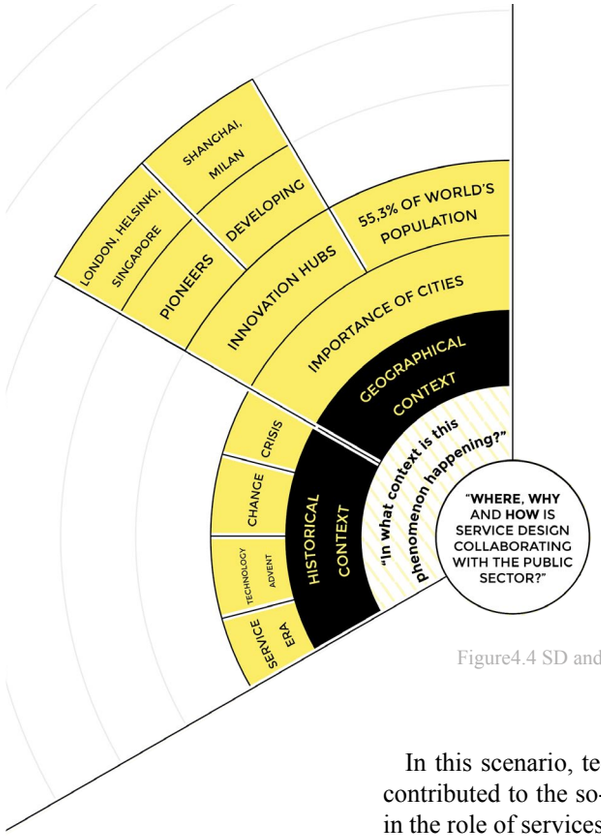


Figure4.4 SD and PS collaboration framework: ‘WHERE’ dimension.
Source: the author.

In this scenario, technological evolution has therefore significantly contributed to the so-called ‘servitization’, i.e. an exponential growth in the role of services in everyday life. On the one hand, it is no longer possible to draw a clear line between what is considered a ‘product’ and what is instead a service: the two universes are increasingly inevitably connected, and this has contributed to eradicating the distinctive cornerstones of the society resulting from the Industrial Revolution. On the other hand, this phenomenon has literally overwhelmed both the public and private sectors, forcing the two worlds to adapt to the changes taking place.

Obviously, the ‘slimness’ of most companies has meant that this has not represented a big issue for the private sector. The same cannot be said of the public one. Therefore, this reality in continuous development, make classic models and standard structures not anymore suitable to face present challenges. Slow processes, paper-based procedures, old methodologies, and so on, are all obsolete elements that are not working in today’s scenarios. Administrations are trying to change and improve their current offer to go hand in hand with the developing technologies, also to take advantages from their vast potential in the public field. Governments all over the world are trying to understand how they can best deal with the advent of technologies to better face the future requests, trying to anticipate scenarios and possible situations and provide solutions also for hidden public needs.

The crisis is another actor to be considered in the Present ecosystem. If we think about the past, we can notice that, somehow, we are living, again and again, similar situations since a long time: many historical events seem to be a kind of cycle. For example, we know that many countries – no matter how big or powerful they were – have faced

periods of crisis which have often been overcome thanks to changes. Nowadays, governments are living a new period of crisis, not merely economic in nature. To fight against all of this, a lot of public administrations are putting their trust in the power of innovation, and they are trying to change the public sector as a first step. Moreover, this state of crisis has also affected and still affects citizens: more and more countries are experiencing a period of total distrust on the part of urban communities towards the public sector. In this case, the innovation required must also be directed towards bridging this gap and rebuild the public trust and confidence in the public administration. Another key facet of the context is, of course, the geographic one. In particular, when dealing with public sector innovation is not possible to ignore the actual importance of cities.

As previously mentioned, the public sector can have a national, provincial and local (city) dimension, but, due to context peculiarities, is usually very hard to make large scale innovation plans. For this reason, the urban dimension embodies the perfect space for test and innovation prototyping before stepping into a larger scale action. Cities represent then the experimental unit for more significant changes, given the importance that the urban sphere has acquired in the last decades. Moreover, accordingly to the 2018 United Nation' report, "in 2018, an estimated 55.3 per cent of the world's population lived in urban settlements. By 2030, urban areas are projected to house 60 per cent of people globally, and one in every three people will live in cities with at least half a million inhabitants" (United Nations Department of Economic and Social Affairs, 2018). The realisation that cities contain more than half of the world's population has triggered fears and perplexity along with the urgency of having to prepare to meet the growing demands of the urban community of tomorrow's cities (Sudjic, 2016). Analysing trends, urbanisation patterns and citizens needs is fundamental to face the coming transformation and to respect of the 11th UN Sustainable Development Goal, "to make cities and human settlements inclusive, safe, resilient and sustainable", in order to deliver a better world to tomorrow' generations (United Nations, 2018).

In 2018, an estimated **55.3%** of the world's population lived in urban settlements. By 2030, **urban areas are projected to house 60% of people globally**, and one in every three people will live in cities with at least half a million inhabitants.

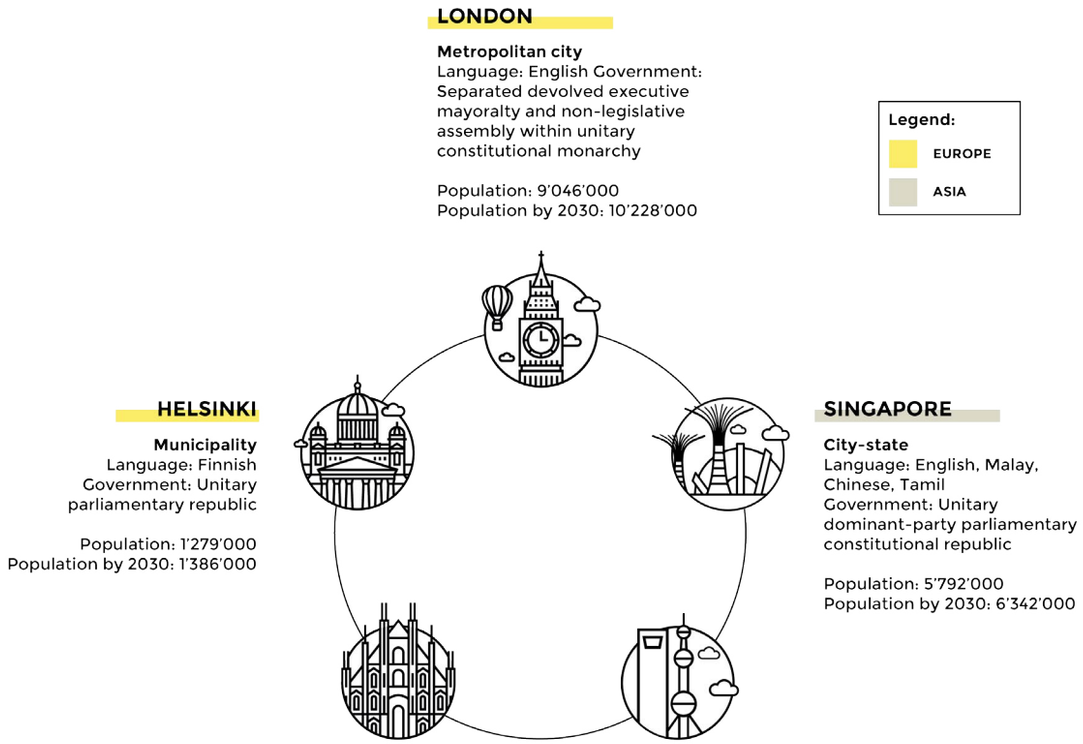


Figure4.5 Cities overview. Source: the author. Data from: United Nations, 2018.

Most people can agree that cities are places where large numbers of people live and work; they are hubs of government, commerce and transportation. This is the reason why innovating the public sector is the first primary step towards making urban realities more sustainable and more human-centred. As already mentioned, in order to delimit the perimeter of the research and define some reference contexts, the author has directed the analysis, part of the interviews and the research of the case studies, towards five cities in particular, three of them European (London, Milan and Helsinki) and two Asian (Singapore and Shanghai) (Figure4.5).

Despite they may appear radically different, these five global cities are linked by common important aspects. All of them are the result of the last decades globalization trend and show in different and unique ways, the fruits of an innovation Era. Not for nothing, they all appear in the 50 most high-tech cities global ranking, published online by Business Insider (Leskin, 2019). Moreover, they have a strong international nature, one of the key aspects that significantly encouraged these realities to grow in the 21st Century. For this reason, it is possible to give them with the attribute of "global". Global cities

Despite they may appear radically different, these five global cities are linked by common important aspects.

represent nowadays important commercial and economic joints, being simultaneously competitors, collaborators, but also connectors (Hu, 2017). They enjoy the most advanced services and technologies and their competitiveness is not only economy-based, but is linked with innovation, tolerance, sustainability, infrastructure and, of course, also governance. They represent big centers of human interaction and important nodes for cultural and economic exchanges.

Another interesting aspect that allows an equal comparison among these five realities, is the fact that, due to the phenomenon of the globalization, cities become more similar since they follow analogous plans and strategies to foster success and innovation. This phenomenon encouraged in the past years the birth of the so-called 'networked society', where cities are not anymore an isolated unit, but they are incorporated into a larger system, becoming what experts call 'informational cities'(Mainka, 2017). This concept refer to the urban realities not in terms of physical boundaries, but rather it interprets modern cities as a dense network of knowledge where citizens play a key role of translators who transform information into useful knowledge and vice versa. London, Milan, Helsinki, Singapore and Shanghai can be defined as 5 out of the total amount of 31 "informational cities" around the Globe. Additionally, accordingly to the Hofstede's "Countries comparison" model, China, Finland, Italy, Singapore and United Kingdom, are all countries that are currently adopting a pragmatic approach, encouraging modern education as a way to prepare for the future ('Compare countries', 2017). In the five cities, the creative industry is growing considerably, particularly in the last years and, while cities as London and Milan, have an already well-known and established fame, the other three are starting now to occupy higher position in global rankings (Metropolis, 2018; 'The 16 Best Design Cities Around the World | Architectural Digest', 2017).

Investigating the reality of the public sector innovation and, even more specifically, the service design-driven one, it has been possible to make a distinction between pioneer realities and cities where the phenomenon is still under development. This was achieved by comparing research results, case studies and information from interviews. In addition, an analysis of external service design agencies that currently or previously collaborate with the public sector, has shown that their presence is mainly concentrated in London, Helsinki and Singapore, that are also the only locations (out of the five that the author analyzed) where there are studios completely focused in addressing public sector projects (two in London and Helsinki and one in Singapore). The following figure summarizes this analysis (Figure4.6). In conclusion, London, Helsinki and Singapore are examples of pioneer cities, where the service design is currently working with the public sector toward an innovation process and the collaboration is already underway, while Milan and Shanghai, embody those contexts where the phenomenon is still developing, but the interest in the topic is growing.

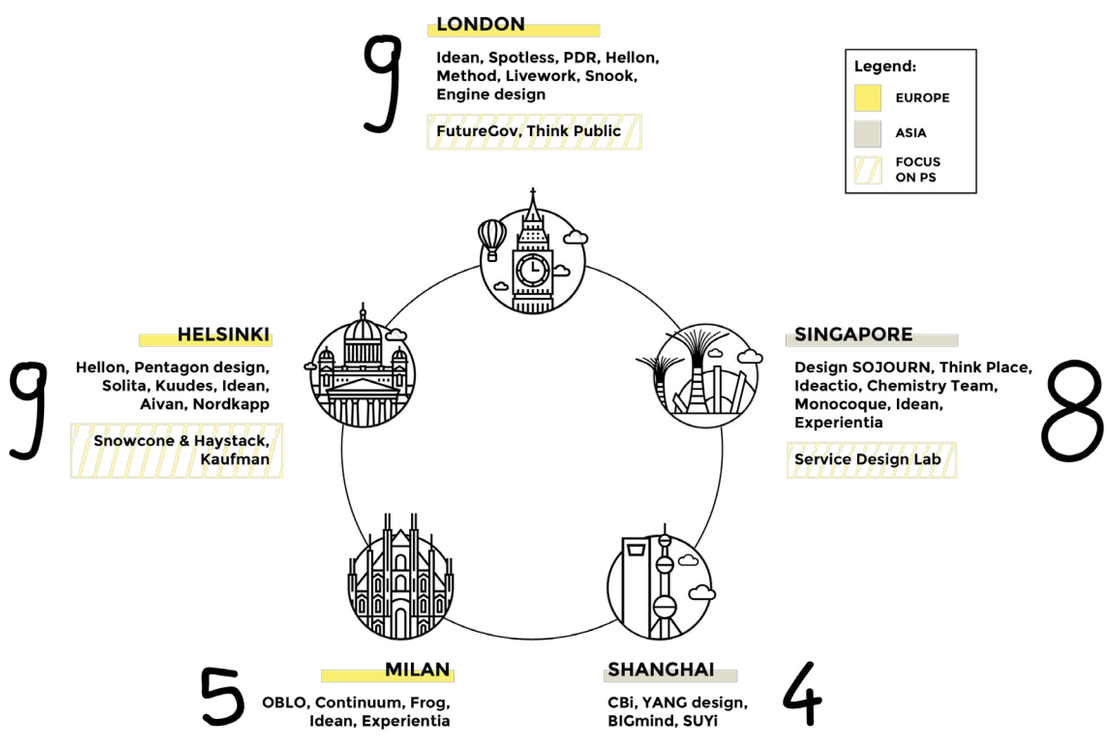


Figure4.6 Design agencies involved in projects with/for the public sector. Source: the author.

4.2.2 WHY - “Which are the main reasons behind this collaboration?”

The understanding of the ‘why’ dimension could be split into two parts: the first one is the comprehension of the reasons behind the collaboration between service design and the public sector, while the second one is about the opportunities for the two fields when working together (Figure4.7). Although these two categories may seem similar, if not coincident, often in this area the drivers that push the two fields towards each other do not always take into account the potential opportunities hidden behind a possible collaboration.

As we have seen governments all over the world are encouraged to innovate their public sector mainly to overcome a specific period of crisis, to answer the increasing citizens’ request for better services and to face the advent of new technologies and faster changes. *But, why do they decide to do that with service design?*

The reasons for the public sector’s decision to turn to service design can be summarised in three points:

- **Fame**: service design is becoming a well-known discipline. More and more successful projects (both in the private and in the public sectors) embed inside the team service designers and the discipline itself is strictly linked to the concept of ‘innovation’. Innovative methods and approaches, new skills, different ways of dealing with problems and looking for solutions, a new focus on users, etc. Then, when it comes to innovation, service design is one of the first concepts that the public sector comes across.
- **Awareness**: if we refer to those pioneer realities where the public sector innovation is an established concept, the act of looking for service design capabilities is due to an existing awareness about the skills and advantages that the discipline can bring in the public sphere.
- **Examples**: many countries decide to refer to service design to undertake an innovation path after getting to know about existing successful examples coming from other contexts. In fact, in the public sector more than in the private one, countries are continuously monitoring the others’ job and achievements, often replicating successful examples. For this reason, is fundamental both to share good practices, but also explain the right way to ‘translate’ projects in different realities - as the expert François Jégou pointed out during the interview.

On the other hand, according to literature and interviews’ findings, the motivations that encourage service design to seek collaborations with the public sector are:

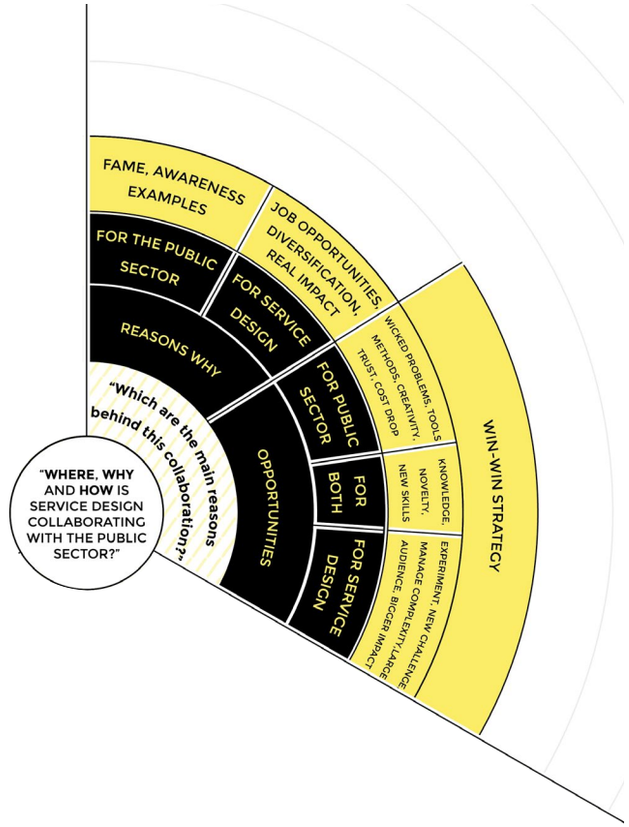


Figure4.7 SD and PS collaboration framework: ‘WHY’ dimension.
Source: the author.

- **Job opportunities**: the growing awareness of the potential hidden behind this successful collaboration, combined with the urgency for change that is pushing the public sector towards innovation, are creating many jobs positions, both within governments and also in external agencies. For this reason, designers are pushed to look for innovative and available jobs and, consequently, to work with the public field.
- **Projects diversification**: service designers are always looking for new and different challenges. For this reason, collaborating with the public sector represents the best chance they have to start diverse kind of projects and actually do something different.
- **Real impact**: service design is a human-based discipline. So the maximum aspiration that many designers from this gill aspire to, can only be to work for a real and deep impact that actually improves people’s lives. The public sector innovation embodies the best scenario for designers who aspire to all of this.

As we have already seen in the previous chapters, the opportunities that can arise from this collaboration are many. With the intention summarizing them, citing only the most important, it is possible to say that:

- the public sector has the opportunity to easily deal and solve

If we consider the collaboration between the service design discipline and the public sector, **the whole system is based on a 'win-win strategy'.**

wicked problems, acquire new methods, skills and approach, adopt a different creative approach, rebuild citizens' trust and gain a cost-reduction in the long-term vision;

- service design finds in the public sector a suitable field for experimentation and innovation, and has the opportunity to start challenging projects, learn how to deal with complexity, reach a large audience and have a bigger impact;
- from a mutual perspective, they both gain new knowledge, learn different skills and capabilities and have the change to embrace a diverse degree of novelty in their paths.

The findings coming from the research phase, show how, if we consider the collaboration between the service design discipline and the public sector, the whole system is based on a 'win-win strategy'. "In game theory, a win-win game is a game which is designed in a way that all participants can profit from it in one way or the other. (…) In the real world, a win-win strategy is often found in diplomacy and business, often in the form of a contract or written agreement. It's a deal where both sides win" (Galpin, 2017). And the opportunities analysis is a clear proof of that.

4.2.3 HOW - "How is this collaboration currently happening?"

Answering to "How is this collaboration currently happing?" has been the most complex part. Indeed, the way this phenomenon is going on is structured upon several layers and other driver questions (Figure4.8): first of all, it is essential to analyze existing **projects, activities and useful resources that are supporting** or are somehow linked to the service design-driven public sector innovation. The author then proposes a series of case studies clustered in the three categories mentioned above (projects, activities and tools/methods).

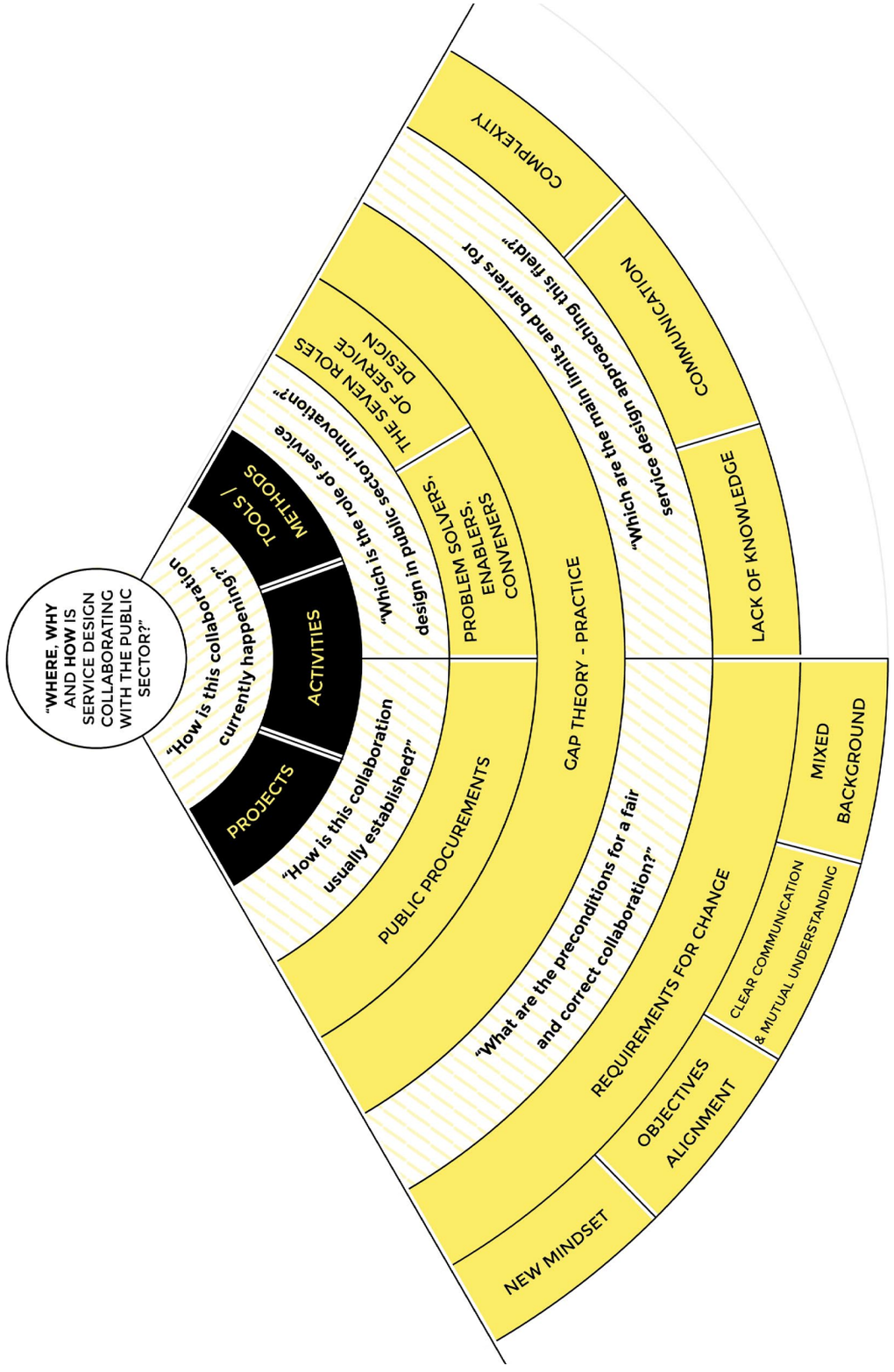


Figure4.8 SD and PS collaboration framework: 'HOW' dimension. Source: the author.

The Real Caregiving Journey

Figure4.9 Current infusion therapy in a Chinese hospital. Source: https://cbichinabridge.com/real-caregiving-journey.

CBi worked for the field of healthcare to define future scenarios and possible innovative strategies for the caregiving system inside Chinese hospitals. The company applied service design methods to discover unknown and unmet needs and improve medication delivery process for nurses at scale (CBi, 2015).

"With an estimated 2.5 billion outpatient infusions every year, one minor or significant improvement can generate real impact" (retrieved from: https://cbichinabridge.com/real-caregiving-journey, on July the 3rd 2019).

When 2015.

Where Shanghai, Beijing and Guangzhou (China).

Area of intervention healthcare.

Who CBi studio.

For who The agency didn't work directly for the public sector, but in this case, it was a mediator between the private and the public sector. Indeed, CBi developed the solutions for a well-recognized leader in providing advanced medical devices to hospitals and clinics, linked to the public sector.

Why Infusion therapy is a common practice in Chinese hospitals and, on average, a nurse performs around 50 insertions per day. Therefore, administering infusion therapy is a major part of daily operations in the nursing department. Taking a human-centered approach to study and improve the current caregiving system, represented the key to find answers to some questions:
- "What is the 'next' technology?"
- "What could be the future product-service to enhance a better ecosystem?"
- "Where can we improve the caregiving experience?"

How Believing that a design-driven approach to research would provide a better vision for the future, CBi has been chosen to capture the reality in the out-patient medication delivery process, identify pain points and opportunities areas and suggest innovative proposals for possible scenarios. The service design studio embraced a journey made of three main steps to turn 'unknowns' into knowledge, insights and key opportunities:
- Knowledge Capturing Workshop: the first stage to approach such a complex reality where innovation is required, was to engage key opinion leaders (KOLs) and internal experts in a series of collaborative workshops. - Ethnographic Research: the following step involved the whole team in deep research in order to uncover facts that could be then turned into meaningful and actionable insights. CBi carried out field research in six tier-2 and tier-3 hospitals in Beijing, Shanghai and Guangzhou engaging various stakeholders at different times using diverse methods (SHADOWING, OBSERVATION, INTERVIEWS).
- Synthesis & Insight Mining Workshop: the final step was to analyze and cluster all the data, turning them into future directions.

Impact The final result was solid foundations to encourage innovation initiatives, supported by a variety of documents and graphics common of the service design discipline (journey maps, service blueprints, system maps). This amount of information helped the company to get an alignment on the current state of the art of the medicine delivery process in China, something that allowed them to take responsible decisions for future innovative proposals, putting the needs of nurses and patients at first.

Roles of SD
- enabler and convener.
- facilitator, communicator, strategist, researcher and co-creator.

Position of SD external agency working as a mediator between the private and the public field.

Tools/methods co-creation workshop, field research, insights workshop, affinity maps, journey maps, system maps, service blueprints.

OmaStadi: participatory budgeting game

Figure4.10 OmaStadi: participatory budgeting game.
Source: https://omastadi.hel.fi/?locale=en , https://sidlaurea.com/2018/11/19/lets-play-participatory-budgeting/.

OmaStadi is a problem solving game with the goal of coming up with suggestions for the city's participatory budgeting. The city has allocated 4.4 million euros to be used as the citizens decide, with the idea of developing a more functional Helsinki ('OmaStadi', 2018; 'Let's Play Participatory Budgeting!', 2018).

When Autumn 2018.

Where Helsinki, Finland.

Area of intervention government innovation, citizens engagement, training and capacity building.

Who Hellon.

For who City of Helsinki.

Why OmaStadi is the City of Helsinki's way to provide participatory budgeting services. The city is divided into seven major districts, and each district has been allocated a budget according to its population size. The purpose of OmaStadi is to draw up proposals and make plans that are equal for all and benefit everyone. The ideas are later developed into feasible plans by the residents and experts from the City services. The experts will create cost estimates for the plans. The district's proposals can be voted on by everyone aged 12 or over.

How The game has four stages. A new team starts playing from stage 1 and proceeds according to the instructions. The first step is defining the objectives and the kind of city the team wants to refer to; then the group moves toward the first brainstorming session and in the following phase ideas are refined and change into potential solutions; the last phase is making the proposal ready to be presented, thanks to a brief description, the goals definition and other supporting materials. The game is also suitable for further development of existing ideas. In this case, the team should start from stage 4. One game takes around 45–90 min, depending on the number of players.

Impact The plans formulated through the game will be submitted to the City of Helsinki's OmaStadi service at omastadi.hel.fi. From there, they will first proceed to be evaluated by the city and then to a voting stage open to the public.

Roles of SD
- enabler and convener.
- facilitator, communicator, capacity builder and co-creator.

Position of SD external service design agency.

Tools/methods participatory workshops, gamification.

Patchwork

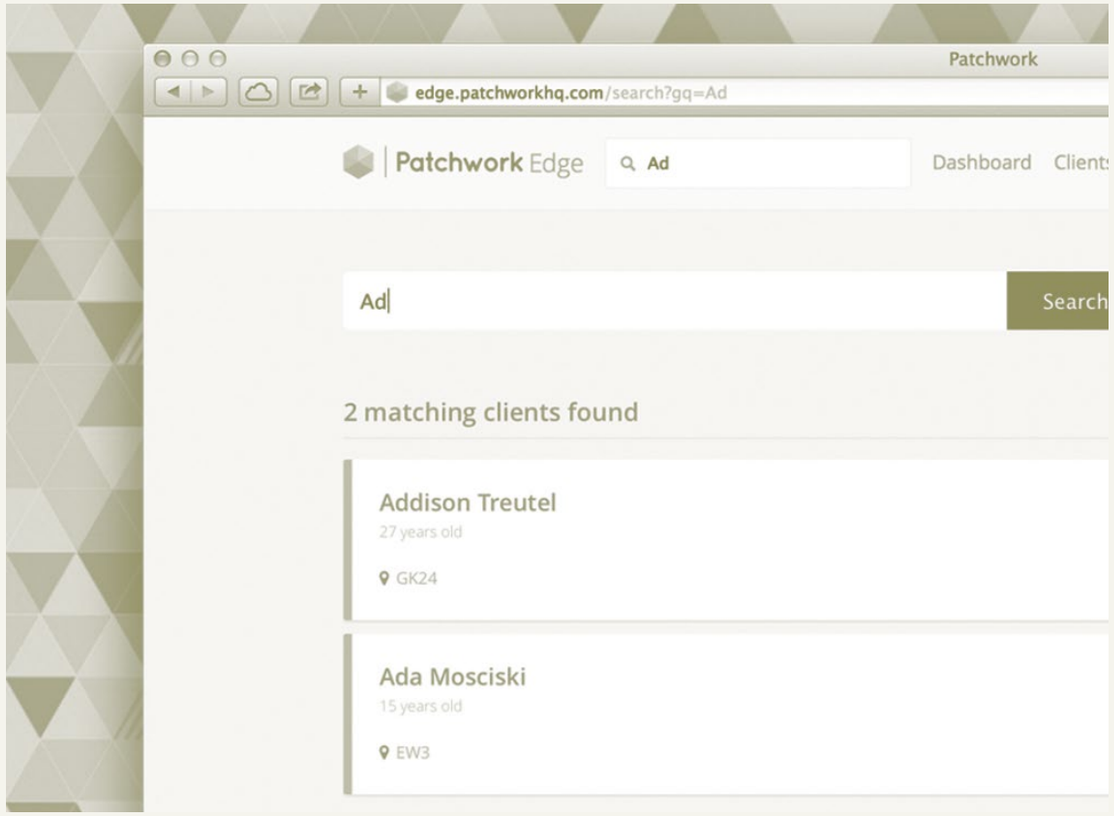


Figure4.11 Patchwork header. Source: https://www.wearefuturegov.com/products/patchwork.

Developed together with practitioners, Patchwork is a simple, secure web tool that connects professionals working with vulnerable people across many agencies. It allows front-line practitioners from different organisations to quickly and simply access the contact details of others working with their clients. In doing so it helps professionals to uncover the hidden network of practitioners around their clients, supporting frontline staff to connect and provide more joined up services (FutureGov, 2014).

When 2014.

Where UK and Australia.

Area of intervention communication, digitalization.

Who FutureGov with the support of NESTA UK.

For who Care workers working with vulnerable people across many public agencies.

Why Care workers spend a significant amount of time trying to contact people at other agencies more than half spend somewhere between one and six hours weekly trying to track their colleagues down. By connecting professionals across multiple organisations, Patchwork helps make life easier for practitioners which means less time spent at their desks and more time spent with their clients. Patchwork leads to better outcomes, too: when care workers understand the full picture of how their clients interact with public services, it's much easier for them to coordinate their efforts before situations escalate and interventions are required.

How In response to a series of child care failures in the UK, design agency FutureGov came up with the idea of a social network for public services. Having identified a lack of shared, co-ordinated communication between government agencies as a key issue, the team brought together children's and social services, teachers, police, health workers, technologists, designers and funders to discuss what could be done. They then built a prototype for a service called Patchwork — a secure web tool that connects professionals from different organisations and allows them to access the contact details of others working with their clients (Kershaw, Dahl, & Roberts, 2017). FutureGov has implemented Patchwork in a number of councils across the UK, as well as in multiple states in Australia. Patchwork has been used to support practitioners working with children, as well as those supporting vulnerable adults and families with complex needs. The service includes Patchwork, the application, and a bespoke change program delivered by FutureGov, which drives a more coordinated support for clients. Functionally, the Patchwork software allows system users (practitioners) to register a profile for themselves and then connect to the profiles of clients they are involved with. Clients can be added into the system manually by users or imported directly by system administrators. Users working with a given client can then invite existing or new users to record that they are also working with the same client. In this manner, a picture is built up of which practitioners are currently working with which clients. This picture, and the profile information it contains, allows practitioners to connect with each other and work together more effectively - either face to face or by any other communications channel.

Impact 1,894 professionals across the UK and Australia are currently supporting 5,375 clients through Patchwork, enabling a higher quality of care, safeguarding of vulnerable clients and increased productivity for frontline staff. 803 agencies networking through Patchwork.

Roles of SD
- problem solver.
- strategist, researcher and entrepreneur.

Position of SD external service design agency.

Tools/methods users research, ethnographic research, co-design, interviews and prototyping.

Casserole

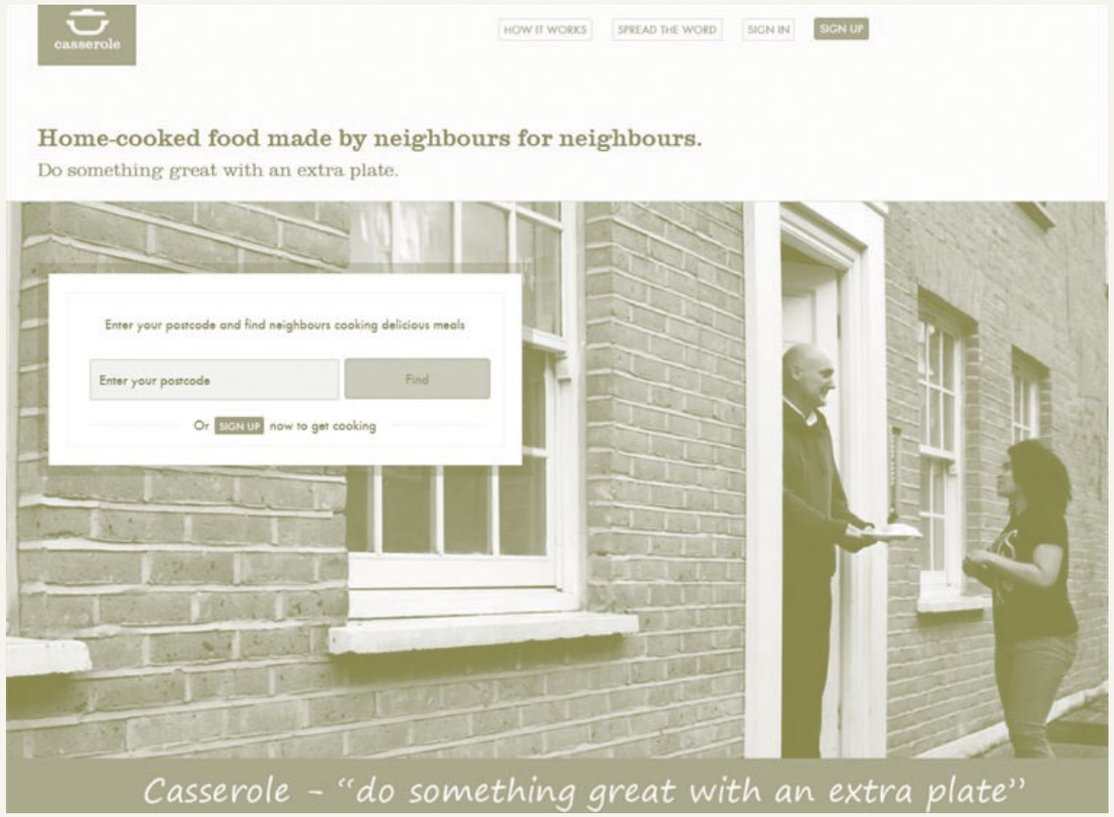


Figure4.12 Casserole homepage. Source: https://www.wearefuturegov.com/products/casserole-club.

Casserole is a micro-volunteering cloud based platform that allows people to sign up as Cooks and to prepare and share an extra plate of food with an older person (Diners) living close to them. Like a local community-led meals on wheels service, Casserole Cooks serve up homemade meals to their neighbours getting more people cooking and eating healthily, and strengthening local neighbourhood networks. Casserole helps tackle social isolation and loneliness among older people by matching Diners with local Cooks and facilitating companionship and even friendships (FutureGov, 2011).

When 2011

Where UK and Australia.

Area of intervention elderly, citizens engagement, digitalization.

Who FutureGov in partnership with Surrey County Council.

Fow who old citizens and community.

Why The prevalence and resulting negative impact of social isolation and loneliness in the UK is well documented. Over 1 million older people say they always or often feel lonely. And we know that loneliness affects our health - it can increase the risk of depression, dementia, heart attacks and raise blood pressure. By 2018, Adult Social Care will face a funding gap of £907 million. And with more than half the population set to be 50+ by 2020, we need services to help fill that gap.

How Casserole has been developed eight months hand in hand with the people who use it; testing ideas quickly through simple technology and service design. At the start, company's set up consisted of little more than a mobile phone, a map and some phone numbers of neighbours interested in cooking for others. Over a two week period, and with some contacts from Reigate and Banstead Council, FutureGov tested the idea to see whether cooking for the neighbour really is as easy as it sounds and that people would be as keen to be involved as we hoped (FutureGov, 2012).

Impact More than 6,000 people across Britain and Australia have signed up to share meals through Casserole Club. Of the older people receiving meals through the service, 70% of them consider their volunteer cooks to be friends and 80% say they wouldn't have as much social contact as they'd like without services like Casserole Club.

Roles of SD
- problem solver, enabler.
- strategist, researcher, entrepreneur, co-creator.

Position of SD external service design agency.

Tools/methods workshops, focus groups, interviews, observation, testing and prototiping.

The Sprint Towards Sustainable Growth

Figure4.13 The Sprint Towards Sustainable Growth. Source: https://www.hellon.com/service-design/hellon-helped-define-next-governments-agenda-finland-utilizing-service-design-approach/.

The Sprint Towards Sustainable Growth was a two-day workshop facilitated for 25 participants from all the ministries in Finland, applying the "transition design" approach. During the sprint, participants within cross-ministerial teams, were inspired by different design methodologies and were guided to develop solutions on pre-identified large-scale social problems. The resulting solutions, the outcomes of the sprint, will contribute towards the Permanent Secretary recommendations for the next government. The work is not affected by political steering of the sitting government (Ranta, 2018).

When January 2018

Where Helsinki, Finland.

Area of intervention government innovation, training and capacity building, cultural change.

Who Hellon, together with State Treasury's D9 digital team.

For who civil servants within cross-ministerial teams.

Why *"Every four years the Finnish government changes and the new government needs advice for the ministries. The problem is that advice usually come from different kind of ministries and they want to have a unified way of creating these advice. So, we applied the design process in creating this strategic recommendations for the new government and we hosted a two-days service design sprint with top leaders of each Ministry, joining together, exploring the needs of the citizens. We created some empathy video where we interviewed citizens about this topic and we went through innovation process in creating five different sense of advice for the new Government. This enabled all the ministries to look in the same direction, so their advice were finally coordinated and unified much better than it was in the previous way."* - Juha Kronqvist, Competence Director & Lead Service Designer (Hellon), during a talk at CBi (December the 6th, 2018).

Figure4.14 Juha Kronqvist during a talk at CBi (2018). Photo by the author.

How The two-day sprint was designed and organized by Hellon team, led by Design Director, Zeynep Falay von Flittner in collaboration with State Treasury's D9 digital team and Jouni Varanka, Chief Senior Specialist at the Prime Minister's Office. The process was influenced by the transition design approach and adjusted to the context as an experiment to explore new ways of working in government organizations.

Impact The feedback from participants in the Sprint Towards Sustainable Growth was mostly extremely positive. According to a feedback survey, participants rated the sprint as a good alternative to the current work group process and most respondents would very much like to participate in a similar sprint in the future as well. The participants considered the "intensive, systematic and interactive approach offered by the sprint to support consensus among different ministries" particularly useful. In addition, bridging perspectives through cross-ministerial debates and the citizen perspective was assessed as highly valuable. The Sprint Towards Sustainable Growth proved, that in two days it is possible to tackle cross-ministerial, complex problems in our society by applying the transition design approach. It was possible to move from problematization towards the desired future status and create preliminary outlines of the features of the needed reforms.

Roles of SD
- enabler and convener.
- communicator, capacity builder and co-creator.

Position of SD external service design agency.

Tools/methods design thinking methodology.

Services Week

Figure4.15 Services Week UK. Source: https://gds.blog.gov.uk/2019/01/24/whats-happening-in-services-week/.

A nationwide, cross-government event that looked at how different public sector' areas can work together to deliver end-to-end, user-focused services adopting service design methods and approaches. More than 20 government organisations including the Department for Education, the Department for Work and Pensions (DWP), the Department of Transport and the Public Health England run a series of workshops, talks and training events across the UK (Jordan, 2019).

When from 28 January to 1 February 2019.

Where Several cities across UK.

Area of intervention training and capacity building, cultural change.

Who More than 20 government organisations with the support of GDS (Government Digital Service).

For who The events were open to civil servants and people working for the public sector.

Why Stimulate cross-disciplinary collaboration among different government departments adopting human-centered approach to deliver better final services.

"We're taking part in Services Week to promote user-centred design and to help civil servants across government learn how they can improve forms. Forms matter. A badly designed form can prevent people from accessing the government services they need, potentially in times of high emotional or financial strain." - Laura Billings, content lead (GDS), retrieved from https://gds.blog.gov.uk/2019/01/24/whats-happening-in-services-week/.

"At DVSA we are excited to join in with Services Week to identify areas of commonality with other public-sector service design groups and learn new approaches that can raise our capability. We will be running a lunch and learn session to share our approach to leveraging the full value of quantitative and qualitative data for better user outcomes. We bring the separate disciplines of performance analytics and user research together in an innovative approach which is delivering benefits throughout the service lifecycle. We'll show why it is important to work together, share examples of our work and provide hints and tips on how you can develop an effective cross disciplinary partnership." - Nichole Browne, senior user researcher (DVSA in Nottingham), retrieved from https://gds.blog.gov.uk/2019/01/24/whats-happening-in-services-week/.

"Our Sheffield Digital Studio aims to challenge the current situation in the prisons and probation space. We're looking at things like ageing technology and equipment, legacy databases and poor service provision which make people's lives - at work as well as behind bars - even more difficult." - John Fitzpatrick, senior digital service manager (Ministry of Justice Digital and Technology in Sheffield), retrieved from https://gds.blog.gov.uk/2019/01/24/whats-happening-in-services-week/.

How The whole event was structured upon a calendar of activities for the week that also involved several trainings about service design run by GDS. Moreover, many experts have been called to share their stories highlighting the importance of spreading successful examples to encourage innovation.

Impact Initiatives allowed several government departments to get to know service design and its methods and approaches, giving them a first overview on their potential and possible applications.

Position of SD
- enabler, convener.
- facilitator, communicator, capacity builder.

Tools/methods collaborative workshops, trainings.

Service Standard

Figure4.16 GDS Service Standard. Source: https://gds.blog.gov.uk/2019/05/09/welcome-to-the-updated-service-standard/.

The Service Standard is an online manual of fourteen guidelines aimed at helping teams to create and run great public services. It emphasis on inclusion and cross-departmental services, and removes the need for subjecting services to ministerial test. The conditions are the ones that government services must meet in order to pass GDS assessment, and they will come into effect on 1 July 2019. It's the start of a conversation about services that cut across departmental boundaries and work brilliantly no matter which channel you use to access them. And, where relevant, help to solve an underlying policy problem – as well as working on their own terms (Gill, 2019).

When updated version 2019.

Where London, UK.

Area of intervention government innovation, digitalization, training and capacity building, cultural change.

Who GDS - Government Digital Service (London).

For who A tool for central government teams working on public-facing transactions and civil servants working in a local authority.

Why Government runs a lot of services. Developing those services so they meet user needs and are fully accessible takes a lot of work, money and people. The guide is designed to encourage and ensure high performances for new services in the country, exploiting the growth in digital maturity across government. Civil servants are asked to review and come back to their proposals periodically to improve and iterate them.

How the new service standard is the result workshops, conferences and feedbacks' collection around UK. Teams using it go through all the fourteen points that represent a simple guide to reach successful proposals. To support the initiative, GDS also published a Service Manual guidance for civil servants approaching this activity

Impact The guide doesn't aim at creating joined-up services that work seamlessly on all channels overnight since that should be the long-term aim. The real impact it wants to achieve is make teams working on reasonable steps towards the final goals of a service. This useful tool marks an important step in government innovation: service design helps a direct and practical improvement of services provided by the public sector, directly supporting the civil servants to design successful solutions by themselves.

Roles of SD
- enabler.
- capacity builder, strategist.

Position of SD working within UK Government.

OPSI Case Study Platform

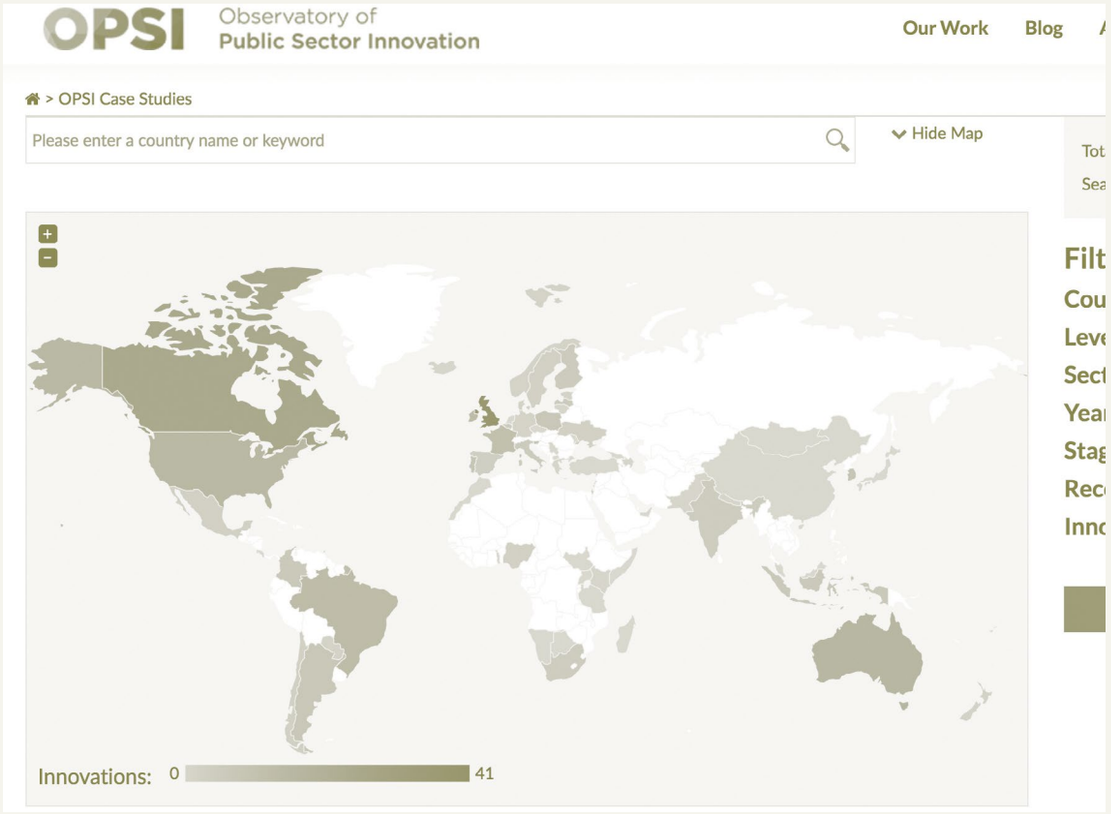


Figure4.17 OPSI case studies map. Source: https://oecd-opsi.org/case_type/opsi/.

A digital space where innovations can be collected and shared to help disseminate and replicate good ideas. OPSI's case study platform collects and makes navigable examples of public sector innovation from around the world. Until now OPSI and its collaborators allowed the world have collected 339 case studies from many different fields and contexts ('OPSI Innovations - Observatory of Public Sector Innovation Observatory of Public Sector Innovation', 2018).

When 2018.

Where online.

Area of intervention government innovation, digitalization.

Who OPSI (Observatory of Public Sector Innovation).

For who designers and any public sector innovator.

Why Innovators around the world are making change within government. OPSI is collecting exemplary case studies to show what innovators are doing internationally, learn their lessons and make contact with those involved to ask questions or collaborate.

How People interested can both browse cases or suggested their own. The platform is made of an interactive map that present 339 case studies that can be also filtered by: country, level of government, sector, year of launch, stage of innovation, recognition or related key words.

Roles of SD

- enabler.
- communicator.

OPSI Toolkit Navigator

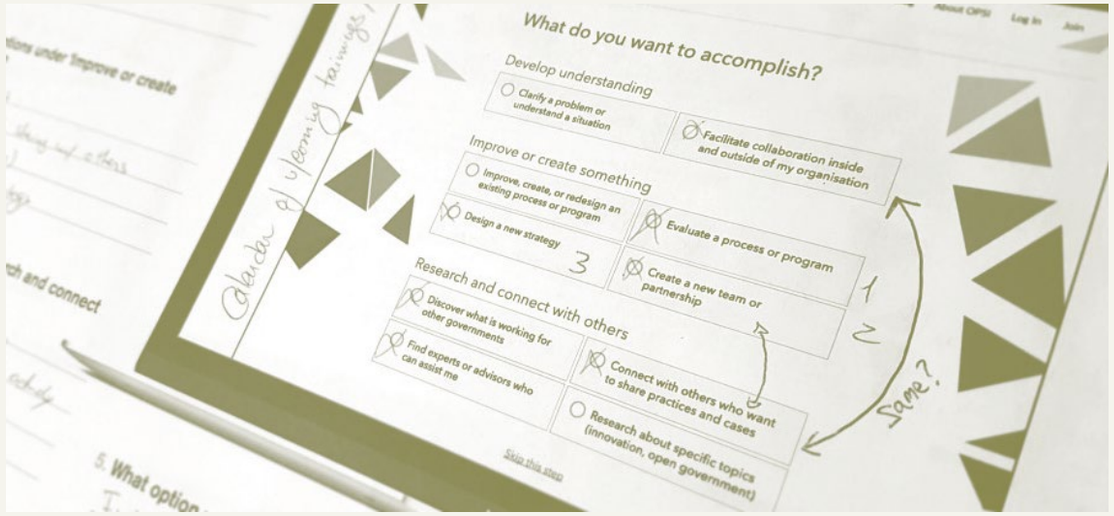


Figure4.18 Prototype of the Toolkit Navigator. Source: https://oecd-opsi.org/toolkit-navigator/.

A compendium of toolkits for public sector innovation and transformation, curated by OPSI and partners around the world. Toolkits are a great way to share innovative methods and practices. A plethora of free innovation toolkits, playbooks and guides exist to help people identify, develop and practice necessary skills and apply new ways of reaching an outcome. OPSI built this Toolkit Navigator, a sort of "meta-toolkit" to help innovators find the ones best suited to you and your situation (OPSI, 2019; OPSI, 2018). The Toolkit Navigator provides a pathway to the hundreds of freely available innovation toolkits created by authors in the public, private, academic and not-for-profit sectors. Based on innovators needs—whether they want to learn something, create something, or connect with others—the resource will guide them to toolkits, people, and information to get started. It contains information about common methodologies used for public sector innovation, as well as links to relevant government case studies involving those methodologies in practice and access to a network of public sector innovators. The toolkit library contains those that were suggested by the innovation community, community reviews, and, where the publisher agrees, the editable source files for you to download and adapt to your own context. The Toolkit Navigator gather together toolkits that come from other sources.

When 2018.

Where online.

Area of intervention training and capacity building, digitalization.

Who OPSI (Observatory of Public Sector Innovation)

For who all kind of innovators (Public sector and service design)

Why It can be difficult to know where to start or which tool or method is suitable for one's unique context. The OPSI Toolkit Navigator provides support for getting started by orienting users around a vast collection of in- novation toolkits to find the ones best suited to their situation and needs.

How The meta-toolkit is in beta form and was developed through an iterative process involving user research and usability testing with public sector staff. Initial research occurred during 2016-2017 and the beta resource was launched in 2018.

Roles of SD Although service designers are not directly involved in this specific project, they provided all the contents for this larger toolkits collection during previous projects. So it is still possible to define them as:
- problem solver and enabler.
- facilitator, communicator, capacity builder, researcher and co-creators.

Position of SD various.

Other info Sources:
- HOMEPAGE https://oecd-opsi.org/toolkit-navigator/
- SERVICE DESIGN : https://oecd-opsi.org/guide/service-design/
-TOOLKIT:https://oecd-opsi.org/search-toolkits/?_sft_toolkit-type=tool-toolset&_sft_discipline-or-practice=service-design

The OPSI Case Study Platform and Toolkit Navigator are linked, and connected to OPSI's growing innovation community. For example, it is possible to locate an interesting case study that was submitted through the OPSI and MBRCGI Call for Innovations process, identify the toolkits that were used in the development of that innovation, and reach out directly to the specific innovators who worked on the project (OPSI, 2019).

Service designers are the main **'problem solvers'** of the system, the ones who actually come up with new proposals and disruptive solutions using methods and approaches that are strictly connected to the discipline.

4.3 Conclusions

The case studies analysis raises two additional key points: understanding the way this collaboration is established and the specific role that service design is playing. The interviews, in particular, have represented a pivotal resource to fully understand the mechanism behind this relationship and how it is usually established. It's rare to see service design providers freely suggesting new ideas to the public sector: instead, the collaboration usually starts from governments' open calls for projects via an articulated 'procurement system'. Namely, public procurements are the way governments and state-owned companies buy goods, services and works (OECD, 2017). Due to the fact that public money and citizens' taxes sustain this system, procurements are expected to be efficient in order to ensure the best services' delivery to the community. Their main aim is to provide an additional level of transparency in the governments' affairs, also giving a real proof of the use of public money to avoid corruption.

Unfortunately, the majority of procurements systems is facing nowadays many issues, particularly because the whole process has become too slow to meet an increasing number of fast changes and public requests. Moreover, reporting the words of Marco Steinberg (see Chapter3), *"The problem is that most of the times they [civil servants] don't know what they are doing. They will procure design services maybe not in the best way; they will judge a company capacities, just based on prices and nothing else. They don't have the social networks to spread the news about this procurements, so companies that could really help the government don't even know that the government is looking for the service. They tend to have the same company to focus on providing services to the government who may not always be the best one"*. So there are basically four main issues linked to the procurements system:

- **obsolescence**: the system of public procurements uses old methods, approaches and channels. It is linked to a lot of paper-works, regulations and norms that makes the entire process slow and ineffective.
- **lack of expertise**: many governments are facing the need for teaching civil servants on how to prepare and lead a procurement system. Indeed, there is a serious lack of experience on how to manage in the right way this mechanism.
- **product-based purchase**: the whole journey toward the realization and consequent submission of public procurements is structure on a product-purchase strategy. This means that the public sector is not used to buy services and related initiatives. Public procurements are designed to purchase final items and already-known solutions rather than ongoing or even future projects.
- **wrong channels**: once the procurement is ready, it needs to be spread to reach as many participants as possible, in order to find the best one for the specific request. The problem is that many governments lack the right channel to share the procurements, or the available channels do not reach all the potential companies. Many times service design studios don't even know about the existence of new public calls and, for this reason, the public sector usually ends up choosing known companies it has previously collaborated with.

At the same time, addressing in the correct way procurements represents a crucial step to speed up public sector innovation. A significant redesign of the current structure can succeed in addressing more innovative solutions as well as solving problems and citizens requests more efficiently (Georghiou, Edler, Uyarra, & Yeow, 2014). Additionally, a review of the current approach can give space to new companies and service design studios that could bring an additional sense of innovation within governments.

For what concerns the role of service design, the author will refer to two different academic sources analyzed in the previous Chapters of this thesis (see Chapter 1 & 2). Firstly, going back to the public sector innovation ecosystem designed by the Deloitte Center for Government Insights, it is possible to link the role of service designers with three out of the five presented by the study (see Chapter1). In fact, service designers are the main **'problem solvers'** of the system, the ones who actually come up with new proposals and disruptive solutions using methods and approaches that are strictly connected to the discipline. As we have seen in the previous case studies analysis, service designers work also as **'enablers'** and **'conveners'**. Firstly, they organize training and sharing sessions, workshops and they design toolkit and/or incubators and innovation hubs, providing all the necessary resources to support innovation. And, additionally, they bring actors of the innovation ecosystem together during conferences, hackathons, jams, events, in physical spaces (such as co-working), but also in digital contexts (such as crowdsourcing platforms or other websites) (Holden et al., 2017).

But, looking more specifically at the actual tasks service designers usually carry out, it is more appropriate to refer to the 'Seven roles of service designers framework', developed by Tan between 2009 and 2012. Accordingly to the study, as the author wrote in the literature review, designers can be facilitator, innovator, capacity builder, strategist, researcher, entrepreneur or co-creator, combining together also two or more different roles. The **facilitator** is in charge of translating design knowledge, methods and approaches into an accessible language to create a shared communication. Similarly, the **communicator**

Designers can be facilitator, innovator, capacity builder, strategist, researcher, entrepreneur or co-creator, combining together also two or more different roles.

is the one who works for creating a connection in multidisciplinary teams between people from different backgrounds. He/she becomes a **capacity builder** when starts transfer design knowledge, methods and tools to the other field(s), something that makes possible to embed service design directly in the public sector. Service designers who act as **strategists**, work in a meeting position between design, planning and policy and collaborate to redefine strategic plans toward public sector delivery. The **researcher** is one of the most articulated roles of service designers: in this case, all the expertise on users and systems' analysis together with known methods, are used to work out data together with other actors in the system. **Entrepreneurs** are in charge of developing an end-to-end development process for the innovative proposals, looking also at the business side of the system. Finally, **co-creators**' role is to establish a strong connection with the public sector, that is not just about designing for it, but also involving civil servants in a participatory way to deliver new solutions (Yee, Tan, & Meredith, 2009).

The results of these analyses show that, **despite the recognized potential that service design could have in public sector innovation, there is still a gap between existing theory and practice.** The academic panorama offers a lot of studies and reflections upon the topic, together with many frameworks to better understand the phenomenon and the connected mechanisms. There are also several available resources both online and offline, aimed at supporting public sector innovation. **On the other hand, the practitioner community is growing but is still small.** Projects and practical examples, are few and also concentrated in those specific contexts that are part of the 'pioneer realities' the author described in the 'where' dimension. The awareness of this difference pushed the author to seek for the answer to the other two questions:

- *"What are the preconditions for a fair and effective collaboration?"*
- *"Which are the main limits and barriers for service design approaching this field?"*

The answer to the first point needs to be searched in some necessary requirements that allow changes. Combining the academic resources and the interviews, the author found four main patterns of conditions needed for change:

- the necessity of adopting a *new mindset*, both from the public sector and service design perspective. Indeed, it is fundamental to change their own ways of thinking and to approach problems in order to get a thriving collaboration environment.
- since objectives and values might be profoundly different if we think about the two diverse sides, it is essential to reach an approved and shared *alignment* when working together in a team or collaborating for a specific delivery.
- of course, one of the key requirements for a successful collaboration is the establishment of clear *communication and mutual understanding*, that - as we will see in answer to the following point - is exactly what is currently missed in many contexts.
- finally, change and innovation usually happen when different cultures, skills and knowledge converge to collaborate. For this reason is essential to create an environment of *mixed backgrounds*, to ensure a collaboration between different minds and perspectives and obtain disruptive solutions for innovation.

Other factors that contribute to the existence of the gap between theoretical and practical world are embedded inside the main limits and barriers that thwart the collaboration between service design and public sector. The author had the chance to come up and summarize the main obstacles that make the journey to innovation really hard, grouping them in three main areas:

- lack of knowledge
- problems of communication
- complexity

The first set of barriers is structured upon the topic of '**knowledge**', concept that can embrace many different meanings when linked to this specific application field. For instance, it can be related to mutual and little understanding of each other's job. In fact, the public sector doesn't really know what service design is about, what are its methods, approach, processes or either which are the discipline's principles. And, from the opposite side, service designers have very little knowledge about government structure and functioning. They don't know how the public administration works, which are the internal and external dynamics or even how to deal with it. This brings us to one of the first wall that design often needs to step over: the big gap in the education system. This gap makes the collaboration between the two actors difficult and slow, particularly in the early stages. Public organizations and citizens shouldn't be the only one learning about design methods: designers should try more often to study and understand public sector processes, procurements, and bureaucracy.

"(...) most design students have very little knowledge about what working in and for governments is like, what is the language of government, what is the logic and the role of government. And, likewise, very few people who go to schools of government, have any exposion to innovation processes, to design, to ethnography, engagement.. all the things that the design students will have. There is a very fundamental problem that is the fact that education systems, from the two perspectives, are not aligned."

- Marco Steinberg, SNOWCONE & HAYSTACK.

Getting to know the other field from zero is something that requires time and that usually takes up precious moments from the project phase. As a matter of fact, it is important to understand that the education of public managers towards design and design thinking is a gradual procedure. The first level of education they should deal with is the development of a certain "design awareness", that puts the design on the manager's radar or in other words: *why public managers should buy something that they know nothing about?*

While at the same time, it's also important to introduce designers and public managers alike to a shared "language and terminology". This is another consequent—but not less important—issue that slow down the spread of this collaboration. The two fields use very specific e diverse words and key terms that can make the communication before and also during projects really hard, causing even misunderstandings along the way. The creation of a common language is fundamental in order to coordinate and measure innovation. Without a shared system of meaning and terms innovation gets lost at the beginning of its journey.

So, the knowledge issue is the first big barrier, that can involve:

- **a weak education system**
- **lack of mutual awareness and understanding**
- **the lack of a shared language & terminology system**

Despite the multiple interpretations that it could have, the issue in the communication between service design and the public sector is mainly a matter of different approaches and mindsets, together with the lack of adequate tools that connect the two worlds. This problem works actually on multiple layers and is strictly linked to the lack of mutual knowledge of the two fields. We could identify three specific moments in which this represents a huge barrier for the collaboration between service design and the public sector:

- **the "before"**, when the two fields have still to start to work together
- **the "beginning"**, when the collaboration is at the dawn of the whole journey
- **the "follow up"** when the outcomes of a successful collaboration should be communicated to the larger public

The "before"

In this phase, the lack of a suitable and updated communication system makes hard to establish an efficient connection between service design and public sector. This drastically limits the spreading of collaboration initiatives between the two parts: without communicating, they cannot get to know each other's mutual and diverse methods, approaches and practices. Moreover, open calls for projects and public procurement, are usually hidden behind the great wall of bureaucracy and they are not advertised on the right channels. This not only makes it difficult for service designer but even to other public sector organizations that might be interested in participating or realizing a similar project. Additionally, different mindsets and approaches make the communication even harder, an issue that affects both this phase and the following one. During the "before", these differences make both fields truly sceptical about the other and about the possibility of working together. While, when the collaboration is already launched, thinking differently is something that slows down the whole process and requires a long—and sometimes even difficult—period of alignment, to start being on the same wavelength.

The "beginning"

When civil servants and service designers start working together the communication barrier comes back again, making it hard to efficiently cooperating—particularly in the early stages. As we said, they need to understand, accept and adopt a different approach, trying to shift toward a new mindset. Communication is also a matter of speaking and expressing own thoughts, ideas and opinions, particularly if we consider a collaboration between multiple actors. This aspect is one of the main pain points of the entire "relationship" between service

design and public sector: the communication in the early phases is obstructed by the absence of a unified language. The two fields use a lot of complex words and terms, taking it for granted to be understood by the other.

The "follow up"

Even after a successful case of collaboration between the two fields, communication can still be an issue. Communicating effectively on a national and international level the successful or unsuccessful experiences is of fundamental importance to generate awareness and knowledge, and thus incentivate collaboration and a further development of innovative initiatives. Since this innovation field is pretty recent (at least analysis and studies on the subject are) the proliferation and diffusion of best practices is a fundamental step in the development of a better reciprocal understandings of these two different actors and this phenomenon (i.e. PSI) that brings them together. Unfortunately communication level of the public sector is often not that developed and with the digitalization of the main means of communication the public sector organization are struggling to keep up the pace.

The complexity of the public sector is somewhat a stereotype regardless of the nation and culture we are referring to. Taking as an example the Italian procurement system we can understand why it is one of the greatest barriers towards innovation. The public tenders where big services are put into play are structured in a way that usually allows only large companies to participate. Thus, the system usually cuts automatically out those emerging realities and start-ups that often focus mainly on the product and not on the administrative modalities. Participating in public procurement is an administratively important and demanding process and small startups with brilliant ideas or more advanced skills usually lack the expertise to relate with. One of the ways public managers try to "fool" the procurement system is to convince larger traditional contractors to co-opt smaller companies bringing good ideas into a contract with the public administration. However, a downside of this type of action is in the kind of relationship which born out of it. Moreover, another secondary issue linked to the public tenders system is that the public sector doesn't usually have the right channels to spread and promote them, so companies that can truly help the government don't even know that government is looking for the service. When dealing with the public sector, an additional aspect of complexity is its structure itself: the internal hierarchy is that complicated that also for civil servants is really hard to get how the different interactions happen. In public sector innovation projects, this represents a serious and big issue: in fact—particularly for new companies that approach the public field for the first time—, understanding diverse mechanisms and different peculiarities of every single department it's something that takes a lot of time and requires a big effort.

Additionally, for this kind of projects, groups are usually aimed at being multidisciplinary, involving people from the main areas of a public body: this makes the complexity even worse since the internal structure is continuously changing, as well as people in charge. Sometimes projects all of a sudden loose team members or the representative part of a certain department, something that obliges the project manager to readapt the agenda and/or find replacements.

Last but not least, a very huge barrier for the public sector innovation is money. If in one hand - as we have seen - money can trigger the innovation process, it's also true that they mainly represent a limit when dealing with the public sector. In fact, many governments, ignoring the value that design processes can bring in the system or the importance of innovation, are reluctant to address public funds towards innovation or design. In this way, the budget is very badly used and money for this kind of activities is always little. Other public institutions see service design as another additional expense and they avoid to collaborate with the discipline or to launch new open calls for projects.

Last but not least, a very huge barrier for the public sector innovation is money. If in one hand - as we have seen - money can trigger the innovation process, it's also true that they mainly represent a limit when dealing with the public sector.

So, the complexity is the second barrier towards the public sector innovation, that includes:

- **issues with bureaucracy and public procurements' system**
- **complicated hierarchy**
- **a very big problem with money and budgets management**

In conclusion, despite the author identified three main clusters, we can state that all the issues are somehow interconnected. Knowledge, communication and complexity can be thus seen as a system where each element is pretty hard to isolate from the other. Here lies the inner difficulty with which those approaching public sector innovation have to deal with: you can't expect to solve just one problem, but you need to be prepared to face a complex cluster of obstacles.

In particular, the analysis of the last dimension - the 'how'- represented a pivotal point for this thesis. Looking at existing examples, the author had the chance to understand what service design is practically doing to support the public sector innovation.

Gathering all the findings together and designing the **'SD and PS collaboration framework'** allowed the author to pull the sums of the search and identify possible design challenges to move forward to the design phase. In particular, the analysis of the last dimension - the 'how'- represented a pivotal point for this thesis. Looking at existing examples, the author had the chance to understand what service design is practically doing to support the public sector innovation. Despite the presence of few successful projects - that proves one more time the gap between theory and practice -, service design is moving forward toward the organization of interesting activities. There are more and more hackathons, workshops, training and other events that actively involve both civil servants, designers and other key actors of the system, with the main aim of educating and preparing the ground for innovation. Moreover, the increasing number of tools and methods is, accordingly to the author, a clear sign of the growing necessity of education in this field. Having open source resources to consult for learning is probably the most effective way to have immediate access to information even though, at the moment, they are mainly addressed to the public sector for the learning of service design principles and not vice-versa.

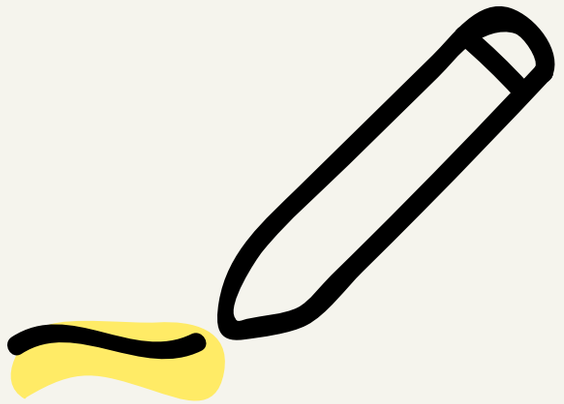
This is directly linked to the findings related to the analysis of service designers' roles: indeed, the design experts work more and more as enablers and conveners of the system, namely people in charge of providing all the necessary tools and resources for innovation and the ones who bring different actors together to collaborate (and many times they involved also themselves in this mechanism). Moreover, service designers increasingly play the role of facilitators, communicators and capacity builders. This trend embodies the growing need to translate and communicate the knowledge, approaches and methods of service design, so as to level out the differences between actors with different backgrounds. For the same reason, the designer also proposes himself as a co-creator, an action that allows even more to bring together in projects and initiatives different opinions and points of view in order to achieve a more effective innovation.

At the same time, this stage of the research, has brought to light a number of small and bigger issues that need to be solved in order to encourage more collaborations between service design and public sector. **The analysis of the existing limits and barriers represented for the author the most important stage before starting the actual project part.**

Design phase

5 Ideation

Gathering together all the results from the various stages of the research allowed the author to compose the picture of the situation and identify existing problems and opportunities. To arrive at the final concept, the author exploited several methods and tools from the service design field, readapting them accordingly to the specific topic and context. This phase took place in six main stages and the fifth chapter will analyze all of them in details.



5.1 Introduction

Gathering together all the results from the various stages of the research allowed the author to compose the picture of the situation and identify existing problems and opportunities. In particular, the author decided to focus on the existing gap between theory and practice trying to dive deeper into the causes of this issue. Comparing and combining findings from the literature analysis and the experts' interviews – as we have seen in the previous chapter – it was possible to link this gap to the main limits and barriers that obstacle the collaboration between service design and the public sector. Out of the identified three groups (lack of knowledge, problems of communication and complexity), the author chose to work on the first one following both the value that education could have to encourage the mindset shift required for innovation and the interviews findings. In fact, eleven out of fourteen interviewed people said this is the main barrier for public sector innovation

Choosing the direction allowed the author to draft the problem statement to guide the whole concept phase as follow:

"Service design driven activities and projects in the public sector are increasing, and data from various researches prove that the phenomenon is growing.

Nevertheless, **there is still a gap between the theoretical and the practical world**: the practitioner community is growing, but it's still small, and the reasons that cause this gap should be searched in the main limits and barriers that service design faces approaching the public sector field. **One of the main issues is the lack of knowledge** that can involve a weak education system, little awareness and understanding about the other's field and the absence of a shared language and terminology system".

5.2 Process

To arrive at the final concept, the author exploited several methods and tools from the service design field, readapting them accordingly to the specific topic and context.

This phase took place in six main stages:

- **Framing design challenges**: the author collected all the relevant findings from the research phase linked to the problem statement, structuring them accordingly to the design DOING "Developing key insights" method (Stickdorn et al., 2018). Afterwards, she used the IDEO "How might we" to turn the found issues into design opportunities.
- **Ideas generation**: after having identified different scenarios in which the lack of knowledge can represent a problem, the author moved toward the brainstorming phase, aimed at generating as many ideas as possible, using the IBM's "Big Ideas Vignettes" method (IBM, 2018).
- **Ideas selection**: starting from the ideas of the initial brainstorming, the author tried to select the best ones accordingly to different parameters. Firstly, she grouped them into tangible and intangible solutions, based on the mere nature of the proposals. Then, using a re-arranged version of the IBM's "Prioritization grid" (IBM, 2018), the ideas have been first prioritized by their impact and feasibility and later by impact and long or short term realization. In addition, they were also organized according to whether they were addressed both to service design and the public sector, or uniquely to service design.
- **Concept development**: the two selected ideas were first developed and later merged, to obtain the definitive concept. The author defined the first version of the proposal's vision, mission and goals, together with the stakeholders' map, exploiting the "Service Design Toolkit" (Namahn, Yellow Window, 2011). Moreover, she linked the different actors both to the reference context under analysis (the five cities presented in Chapter4) and the innovation roles presented by Deloitte (Holden et al., 2017), cited in Chapter1.
- **Case studies analysis**: at this point, it was essential to compare with existing examples of similar projects, both to seek inspiration and to position the proposal among existing cases. To do that, the author identified six key assessment parameters, visualized for each project using the Kiviat Diagram evaluation tool. This first part helped the author to get a general overview of other projects and successful cases, not necessarily limited to the topic of the service design-driven public sector innovation. The seven examples have been then mapped inside three different positioning map accordingly to different analysis parameters. The number of channels used, the width of the context, the

To arrive at the final concept, the author exploited **several methods and tools from the service design field,** readapting them accordingly to the specific topic and context.

contents variety and the level of users' involvement. This last attribute, in particular, was pivotal to decide where to position the proposal.

- **Co-creation sessions**: to make the project participatory from the beginning, the author chose to set a series of three co-creations with potential end users. The objectives were firstly to understand users' needs, habits and desires linked to the learning process and the specific education about the public sector innovation. Secondly the co-creation sessions aimed at designing together the project' offering map and the draft of the contents' structure, starting from the author's design hypothesis.

5.2.1 Framing design challenges

As stated in the methodology part, the first part of the concept development has been the summary of main findings to use them as an actionable format for the following ideas generation. Research results, already clustered employing the tool of the affinity diagrams, have been combined and selected accordingly to their pertinence with the problem statement. Insights have been generated starting from existing patterns among collected data, following the Service Design DOING guidelines (Stickdorn et al., 2018).

Insights sentences can be structured in several ways, and the most suitable one depends on the kind of data gathered and the aim of the project itself. Accordingly to the stage of the thesis, the author decided to frame the insights following the "aim/need/outcome" style, aimed at looking for possible design challenges that might open new opportunities areas. The insights have been designed accordingly to the following structure (Figure5.1):

ONE WAY TO FRAME AN **INSIGHT** IS
WITH THIS TEMPLATE:

..... *(persona, character, role)*

..... *(activity, action, situation)*

because

..... *(aim, need, outcome)*

but

..... *(restriction, obstacle, friction).*

Figure5.1 Developing Key Insights framework. Graphically readapted from "This is service design DOING", by Stickdorn et al., 2018, p.60.

The first line focused on presenting facts and relevance both from service design and public sector' perspective. The 'because' part has been framed following the identified opportunities coming from the collaboration between the two fields, while the 'but' was linked to existing issues connected to the lack of knowledge. The resulting insights are summarized in the Figure5.2:

Figure5.2 Insights. Source: the author.

The insights statement highlighted the problem areas that represent existing barriers for end-users. The following step has been reframing the insights into "How might we" question, in order to shift from problem to design opportunities. To do that, the author followed the IDEO method (2018) that suggested the following structure to frame the different sentences: **problem > design question > ultimate impact > possible solutions > limits and constraints**. This method is beneficial to explore more the problem/opportunities space and suggest many different answers to solve the same challenge. "A properly framed 'How Might We' doesn't suggest a particular solution, but gives you

the perfect frame for innovative thinking" (IDEO, 2014). Following the given structure, the author linked the five points to the previously designed insights:

1. **Problem**: the existing gap between theory and practice, coming from the lack of mutual knowledge between service design and public sector field.
2. **Design question**: How might we fill the lack of knowledge?
3. **Ultimate impact**: make the public sector and service design know each other in-depth to make the collaboration smooth and easy.
4. **Possible solutions**: TEACH, SHARE, COLLABORATE, MAKE IT INTERESTING, STUDY.
5. **Limits and constraints**: Complexity, lack of interest, challenging to bring all the stakeholders together, not valuable, money.

After having drafted these five points, it has been possible to phrase several "How might we" questions, including:

"How might we inspire more collaborations through better knowledge?"

"How might we create new activities/ initiatives to inspire new future collaborations?"

"How might we use universities to push the collaboration between service design and the public sector?"

"How might we use education to trigger new collaborations between service design and the public sector?"

"How might we use education to set the ground for future collaboration?"

Until arriving at the final version that worked as a driver for all the subsequent developments:

"How might we trigger/ support/ encourage future collaborations between SD (Service Design) and PS (Public Sector), filling the lack of knowledge?"

5.2.2 Ideas generation

The issue of the lack of knowledge has been analyzed accordingly to the collaboration timeline, identifying two specific moments in which this problem can potentially represent a barrier toward an effective collaboration:

- **the "before"**, when the two fields have still to start working together and, sometimes, the partnership doesn't even start since they don't know each other nor the opportunities behind the partnership.
- **the "beginning"**, when the collaboration is at the dawn of the whole journey and the lack of mutual knowledge could make the first phases of the cooperation slow and complicated.

These two phases may involve different actors and, as a consequence, also several scenarios: civil servants and professional designers, in the practitioner dimension, but also students who are willing to get involved and learn, linked to the university educational system. Going back to the research findings and the problem statement, the author decided to focus on the first phase, also referring to the 'weak education system' mentioned in the introduction. To explore more in-depth the concept of education itself she used the tool of the Mind map, organizing the thoughts accordingly to five parameters – where, who, what, why and how (Figure5.3).

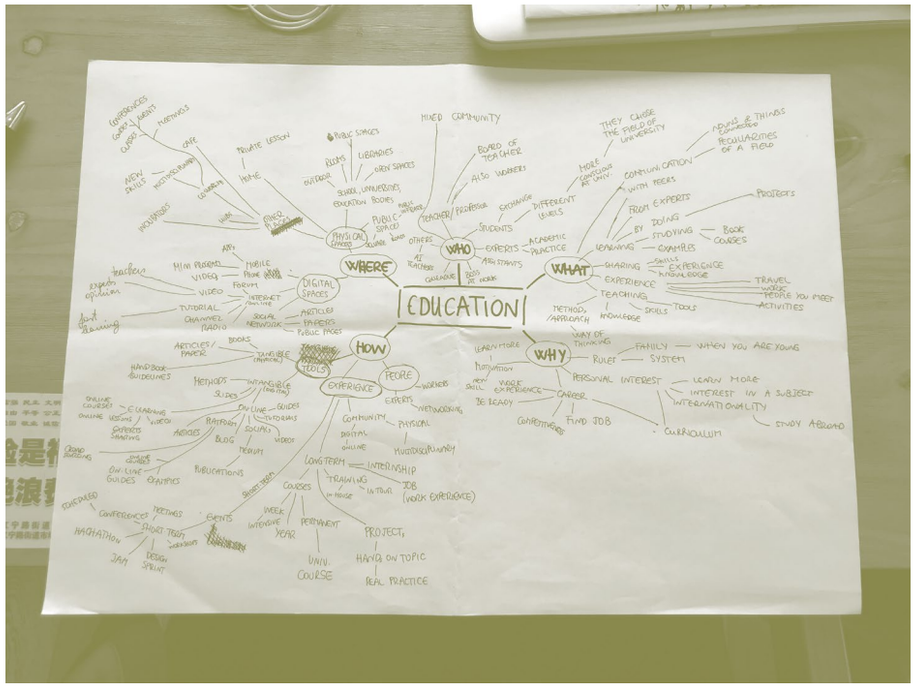


Figure5.3 Education Mind map. Source: the author.

Exploring the different meanings and shapes that the concept of education could have in the present represented a pivotal point to set the ground for the generation of creative ideas.

Exploring the different meanings and shapes that the concept of education could have in the present represented a pivotal point to set the ground for the generation of creative ideas. Suddenly after, the author started the brainstorming session following IBM's method "Big Ideas Vignettes" (2018). The process is made of four basic stages:

- **Set up the prompt**: define an initial statement, pain point or user story. In this case the prompt was the designed "How might we" question.
- **Generate ideas, not features**: start with the experience the users are going to have with the solution, before defining the features.
- **Diverge**: think big without putting too many boundaries in the process. The brainstorming should be open and wide to think out of the box and activate imagination.
- **Cluster, title, & discuss**: look for similarities, identify groups and combine ideas. Converge the brainstorming in advance ideas for the following phases (IBM, 2018).

Of all the ideas generated, the author has carried out those that she considered having a higher potential - always taking into account the starting problem - shown in the following diagram (Figure5.4).

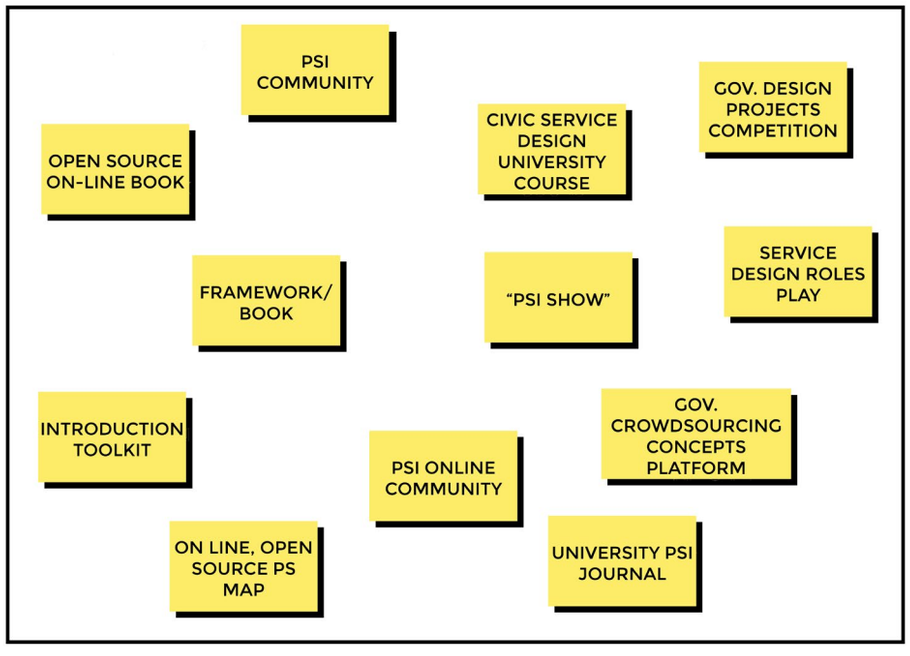


Figure5.4 Ideas brainstorming. Source: the author.

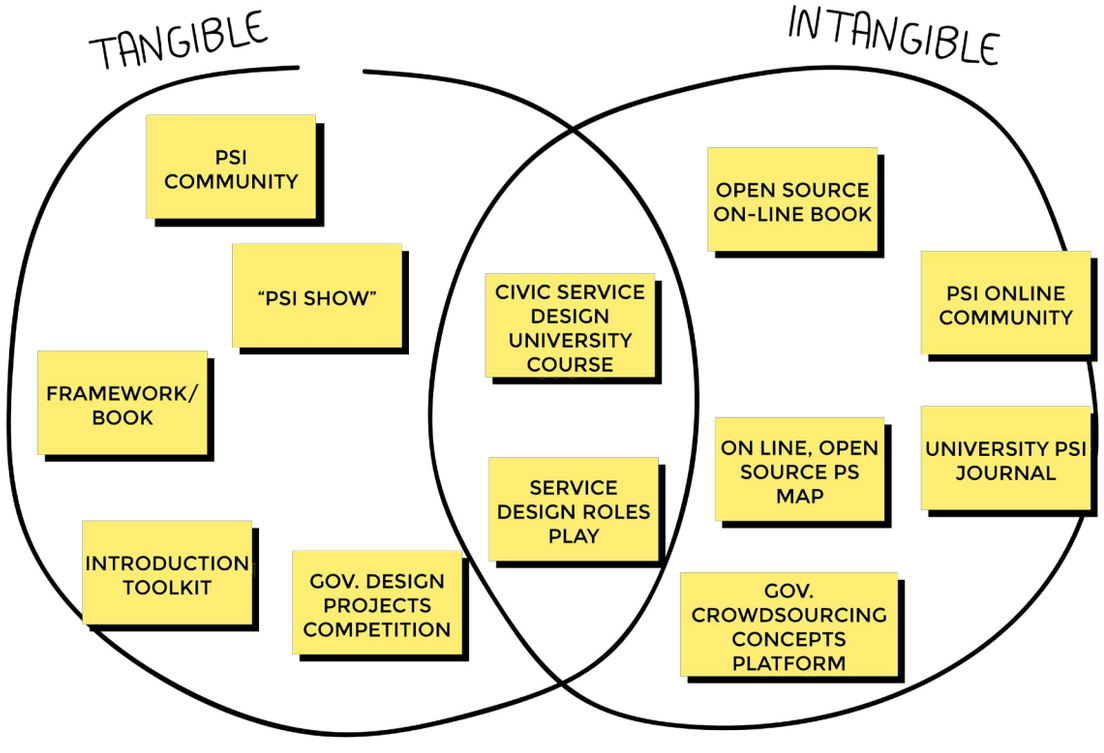


Figure5.5 Tangibility diagram. Source: the author.

5.2.3 Ideas selection

As mentioned in the methodology part, the author worked out an ideas selection phase using several methods and tools. First, she organized the ideas according to whether they were tangible or intangible, meaning more product-oriented or digital/experienced based proposals (Figure5.5). This first division helped the author in understanding better the nature of the ideas, and she was then able to combine the similar ones.

The author kept the eight best proposals, namely:

- "Civic service design" university course: a new course that could be added in the university program and could bring together both students from service design and political sciences field to start the education path from the university.
- Real PS projects for students in the university: the public sector could commission real civic challenges or projects to students, in order to actively involve the young generation and gain more creativity from their 'fresh minds'.
- PSI community: an active design community aimed at increasing interest and knowledge about the topic of public sector innovation, leveraging on the university as an innovation incubator.
- Digital, open source and collaborative PSI maps: a digital and accessible tool that could help service designers to understand and efficiently deal with the public sector structure, different actors involved in the system and relationships between them.
- PSI online community: a digital platform to gather together

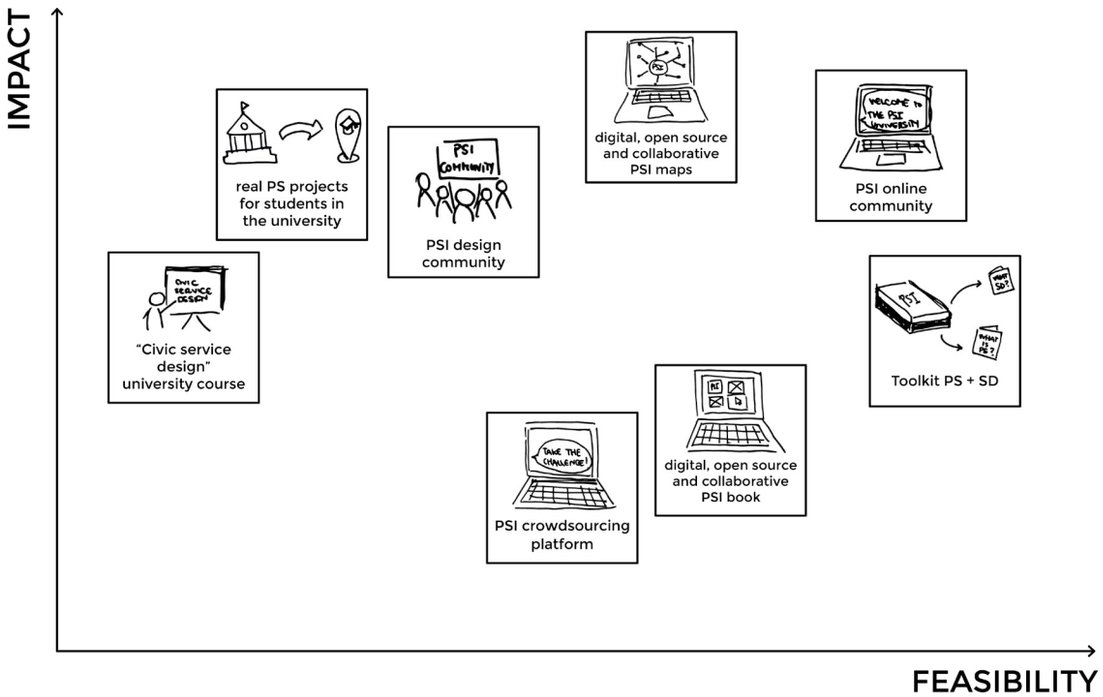


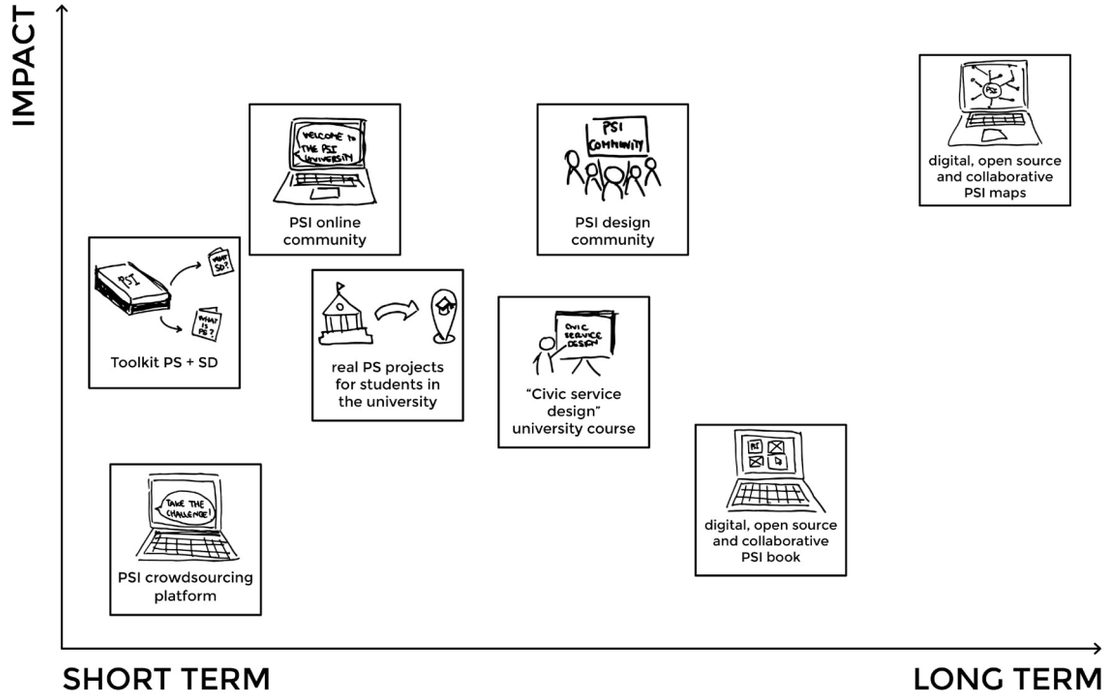
Figure5.6 Prioritization grid: impact-feasibility. Source: the author.

all the service designers interested in the topic of the public sector innovation, to share stories, projects and engaging experiences.

- Toolkit PS + SD: a guideline addressed to the two fields to explain basic knowledge, methods and approaches of the other's ambit.
- Digital, open source and collaborative PSI book: an online book opened to all the service design community to freely write parts, and contribute with stories and own experiences.
- PSI crowdsourcing platform: a digital space where civil servants can share directly public procurements and open call for projects, to reach directly and in a fast way the service design community.

These eight proposals have been later mapped in an impact-feasibility "Prioritization grid" (IBM, 2018). The 'impact' axis is linked to the importance and relevance that the proposal might have for users, on a scale that goes from low to high. The 'feasibility' is instead connected to the viability for the designer, on a range that goes from challenging to easy to be realized (Figure5.6).

The author decided to re-arrange a little bit the initial tool, changing the feasibility axis into a short/long term workability. This little change highlighted the feasibility of proposals according to a timeline. Moreover, the author pointed out the ideas addressed to both fields (service design and public sector) and the ones focused just on the service design community (Figure5.7).



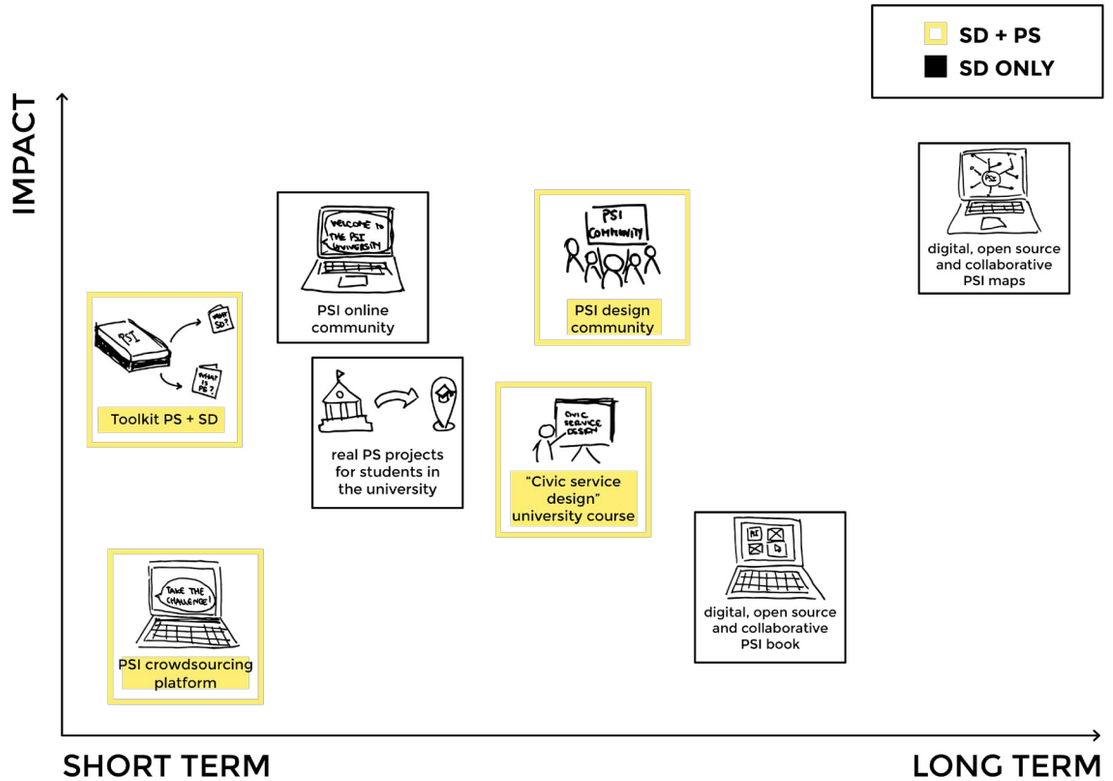


Figure5.7 Prioritization grid: impact-short/long term feasibility. Source: the author.

Among all the proposals, the author chose to work on the ones with a high potential impact on users, feasible in the short-middle term and addressed to both service design and public sector field (Figure5.8). These parameters have made the author selected two out of the eight initial ideas, namely **the toolkit and the PSI community**, that have been combined together to obtain the definitive concept that will be presented in the following paragraph.

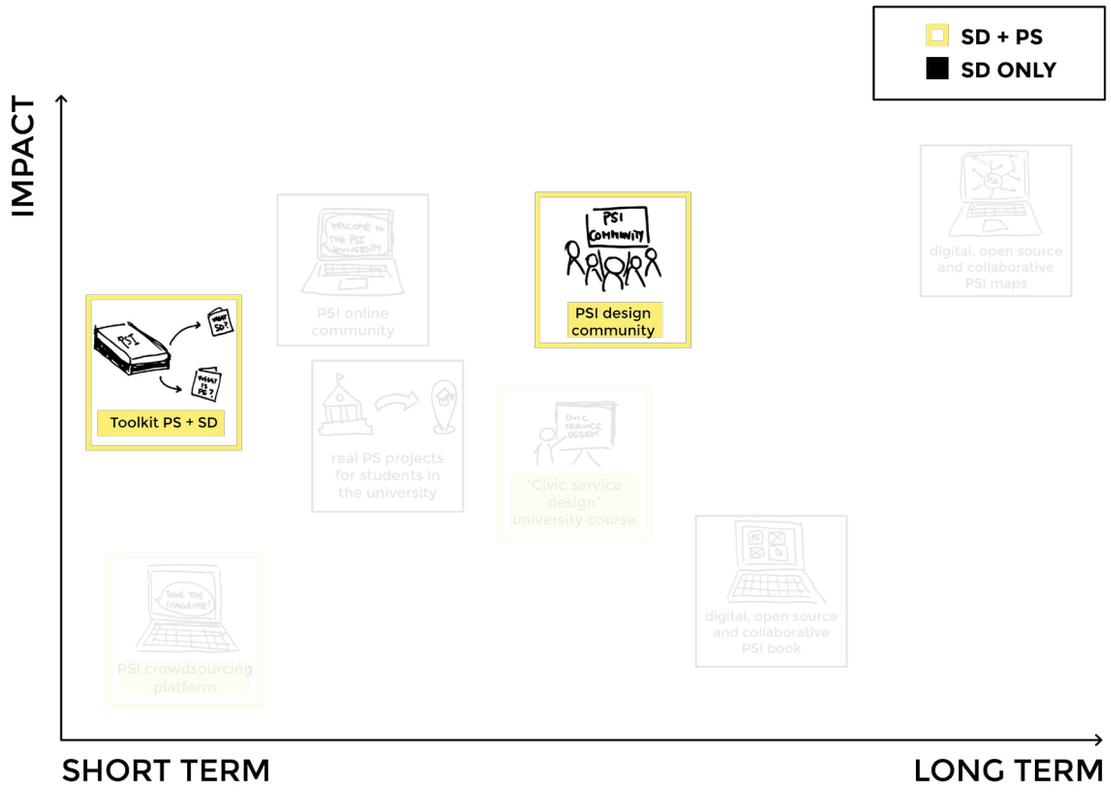


Figure5.8 – Prioritization grid: selected proposals. Source: the author.

The '**community of practice**' is "a community of **learners who are in the process of learning about the same thing.** This can be both a planned group or a spontaneously formed group around a shared interest or passion"

5.2.4 Concept development

After the ideas prioritization and selection, the principles of the two selected proposals have been combined to obtain the final concept. The actual pivotal reasoning to reach a satisfying project synthesis has been thinking on how to turn the framework developed at the end of the research phase (see Chapter4) into a practical design proposal.

In addition, the author linked the previous idea of the 'PSI design community' to the insight of building a '**community of practice**' around the topic of the public sector innovation, bringing together designers, civil servants and students. The community of practice is namely - as defined by Wenger in 2015 – "**a community of learners who are in the process of learning about the same thing. This can be both a planned group or a spontaneously formed group around a shared interest or passion**" (Mysimpleshow, 2017; Borgatti, n.d.). It is structured upon three fundamental aspects:

- **mutual engagement**: the number of interactions that link the group' members defining the community' culture and practices. There are three key aspects that enhance the engagement: enabling elements, diversity - complementarity and distributed cognition -, multiplexity.
- **joint enterprise**: the shared domain, namely the topic or subject of interest that is shared by the group that binds people together toward a common goal.
- **shared repertoire**: the developing repository of tools, strategies, ideas and skills that embodies the direct outcome of a community of practice (Borgatti, n.d.).

Linking the three aspects to this thesis, it has been possible to match the community to the targeted users (service design experts and students and civil servants) and their possible relationships, the joint enterprise to the topic of the public sector innovation and the shared enterprise to the whole amount of projects, activities, tools and methods that sustain the service design-driven public sector innovation (see Chapter4).

Thus, to suggest an effective design solution, the author developed the idea of a multichannel publishing addressed to the service design community and the public sector field to fill the lack of mutual knowledge between the two fields. The logic behind the proposal is to activate all the research done for the present dissertation and the framework itself by using several channels and touchpoints to successfully reach the end users. Indeed, creating a 'multichannel publishing' means delivering a publication to readers in several ways at the same time since "People look for information in different places. Because people prefer different methods of receiving information, it's important to publish your content to several prints and digital publishing channels

to reach a wider audience." (Vasont Systems, 2014). This, of course, doesn't mean to change the contents provided: only the way they are delivered and their appearance/form change. Moreover, the author identified in this solution the best way to provide a participatory and modern education system, suitable for all the different type of users. In addition, the vision and ultimate goal of the project is the interpretation of 'knowledge' as a unique and powerful weapon to inspire action: indeed, providing knowledge could be in this way the solution to inspire new projects and future collaborations – exactly in line with the drafted problem statement.

The proposals' objectives could be summarized in five points:

1. Involve actors in a participatory learning system to improve and speed up the mutual understanding.
2. Increase the reciprocal awareness.
3. Sharing languages, methods, approaches.
4. Create/ raise interest among the topic of the public sector innovation
5. Enhance the "community of practice" around the topic of public sector innovation.

Once defined the main peculiarities of the proposal, the author dived deeper into the definition of the target audience (Figure5.9). To do that, she identified:

- A **core target group**, made of service designers starting now public sector projects, students of service design interested in the topic, innovative civil servants and the author/designer of the publishing;
- **Direct stakeholders**: service design and public sector' experts in public sector innovation, who can share their knowledge, experiences and projects;
- **Indirect stakeholders**: research centers and universities, publishing companies, no-profit design organization, that can promote and sustain the project.

In addition, the author linked the target users to the cities taken under analysis. Specifically, service designers who are starting projects with/ for the public sector and service design students interested in the topic are linked to the developing contexts of Milan and Shanghai; innovative civil servants together with the experts in public sector

innovation are rather connected to the pioneer realities of Helsinki, London and Singapore.
Speaking instead about roles, the stakeholders have been linked to the innovation ecosystem presented by Deloitte in 2017, accordingly to which we can identify:

- Possible future '**problem solvers**' (namely innovators who could solve public challenges) as **service designers who are starting now projects with/for the public sector**, service design students and innovative civil servants;
- Innovation '**enablers**' (who provides necessary resources for innovation) are represented by **public sector innovation experts** coming both from the service design and public sector field;
- Potential '**conveners**' (in charge of bringing all the actors together) whose role could be played by **research centers and universities and no-profit organizations**;
- And finally the '**integrator**' (who creates an ecosystem to make innovation possible) as **the author/designer** of the multichannel publishing itself.

In order to support the potential innovators of the future, the author has specifically decided to address the project primarily to students, service designers who are starting projects with/for the public sector and innovative civil servants.

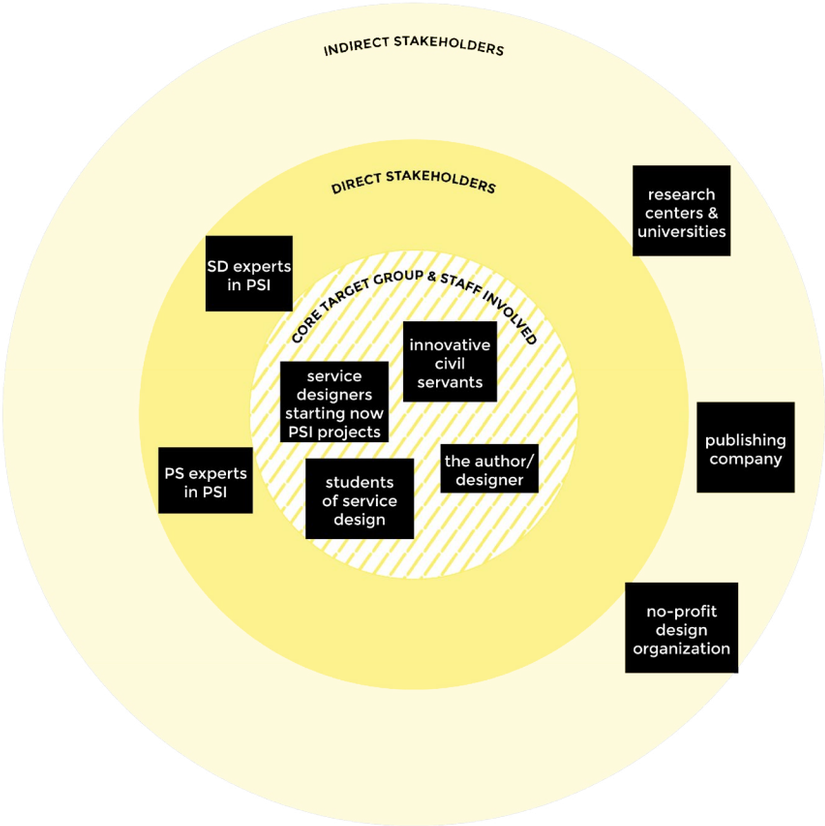


Figure5.9 Stakeholders map. Source: the author.

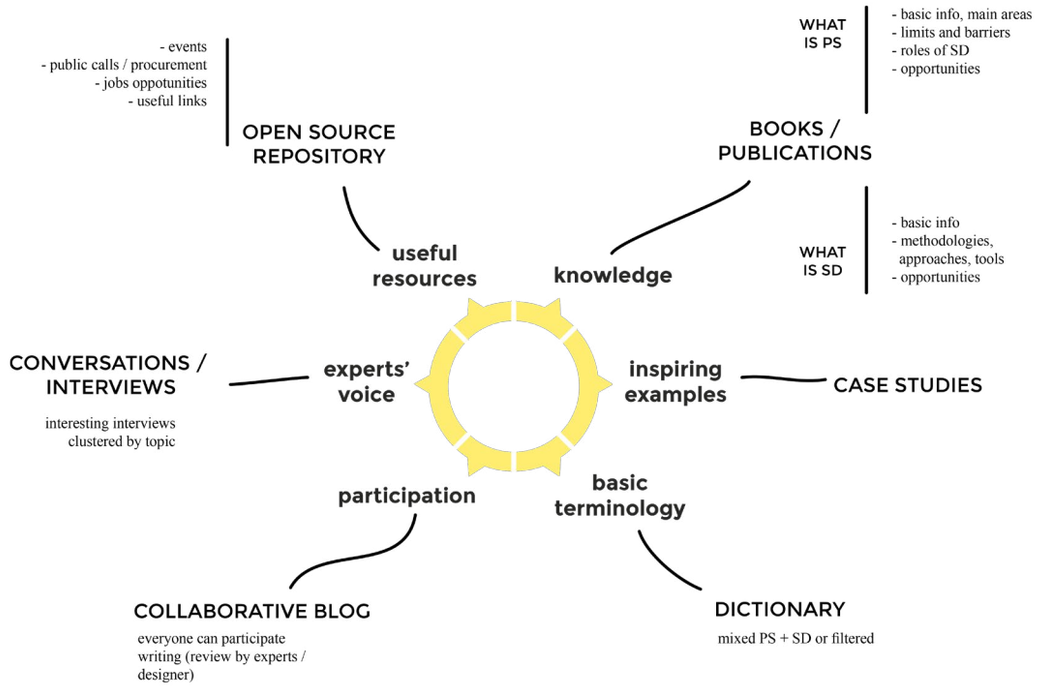


Figure5.10 Concept offering map. Source: the author.

Speaking about the design proposal the author defined an initial hypothesis of contents to embed in the multichannel publishing, exploiting the tool of the Offering map. This method is suitable to support both the development of the general idea and the specific design solutions embedded in the proposal, and can be used both in the implementation phase and in the final visualization to explain a specific project (Tassi, 2009). The author decided to organize the general project' offer into six main areas: knowledge, inspiring examples, basic terminology, participation experts' voice and useful resources.

As shown in the map (Figure5.10), the 'knowledge' part was translated following the previous concept of the toolkit: indeed, **the author thought about a publication made of two main parts, one addressed to civil servants and the other to the design community.** This represents the core of the project that could provide the general information to 'break the ice' of the education path. Together with this initial stage of knowledge, the author thought about including in the publishing also a case studies repository related to the collaboration between service design and public sector ('inspiring examples') and a dictionary of useful terms ('basic terminology') aimed at supporting the creation of a shared language. Other two key distinctive points were the experts' experiences, linked to the publishing in the form of transcribed interviews divided by topic, and 'useful resources', such as events and activities calendars, public calls, job opportunities and links. The sixth part was the 'users' participation' meant at actively involving users in the publishing through an open collaborative blog.

In addition to defining the macro areas of the project's offer, the author also identified a number of possible channels for sharing content, first and foremost a digital platform that would act as the main hub of the publication (Figure5.11).

The author thought about a publication made of two main parts, one addressed to civil servants and the other to the design community.

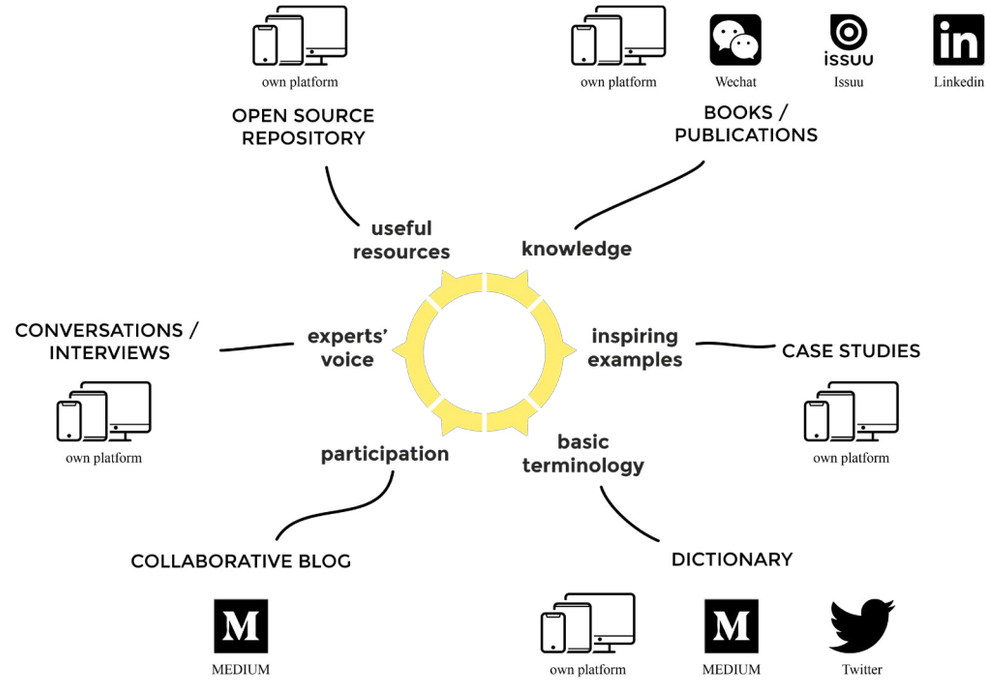


Figure5.11 Concept offering map with channels. Source: the author.

5.2.5 Case studies analysis

Once the overall concept was developed, it was fundamental to seek inspiration from similar projects and to position the proposal among existing cases. For this reason, the author analyzed seven relevant examples, trying to evaluate and compare them accordingly to six key peculiarities that she identified as relevant for the project:

- **Varied**: diversity of contents embedded inside the publication (ex. videos, interviews, podcast,etc.).
- **Participatory**: involvement of the user in the publishing and its process.
- **Multichannel**: diversity of channels used to share the publication.
- **Global**: the contextual vastness of the target audience.
- **Educative**: educative orientation of the publishing.
- **Easy to use**: how much the publishing is easy to navigate (if online), to read, to explore, etc.

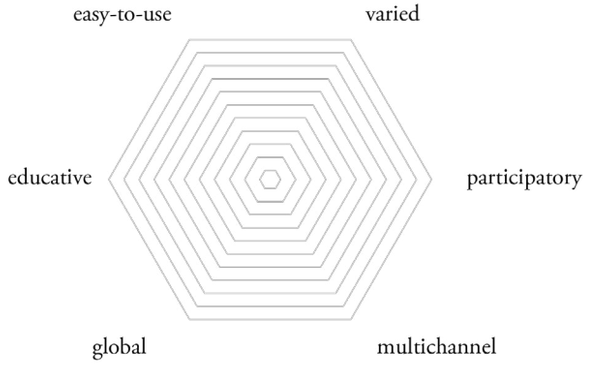


Figure5.12 Kiviat diagram. Source: the author.

Starting from these parameters, the author designed a Kiviat diagram, aimed at visualizing the cases' evaluation giving a score to each aspect in a scale from one to ten (Figure5.12). The tool - also known as radar chart, web chart, spider chart or star chart – is a graphic way to show different data into a bi-dimensional graph of several variables represented on axes that start from the same center. It is typically used to evaluate and compare ('Radar Diagram', 2017). The author has chosen each one of the seven examples for a specific reason or distinctive peculiarity, and just one of them is specifically focused on the topic of public sector innovation.

This is service design thinking

Figure5.13 This is service design thinking. Source: http://thisisservicedesignthinking.com/#.

"This is Service Design thinking introduces an inter-disciplinary approach to designing services in a manner accessible to beginners and students, it broadens the knowledge and can act as a resource for experienced design professionals" ('This is Service Design Thinking', 2010).

Year 2010-2011

Main target service designers, design teachers, design students, innovative companies

Aim introduction to service design, useful references and case studies.

Offline channels
- printed book (theory, methodologies, case studies)
- conferences (experts intervents, talks, case studies sharing)
- workshops (lessons, methods & tools sharing)

Digital channels
- own website (articles, tools, icons, online resources)
- VIMEO (video and presentations)
- Facebook (articles, online community)
- Issuu (digital book, articles pieces)
- Linkedin (group discussion, video, articles)

Evaluation

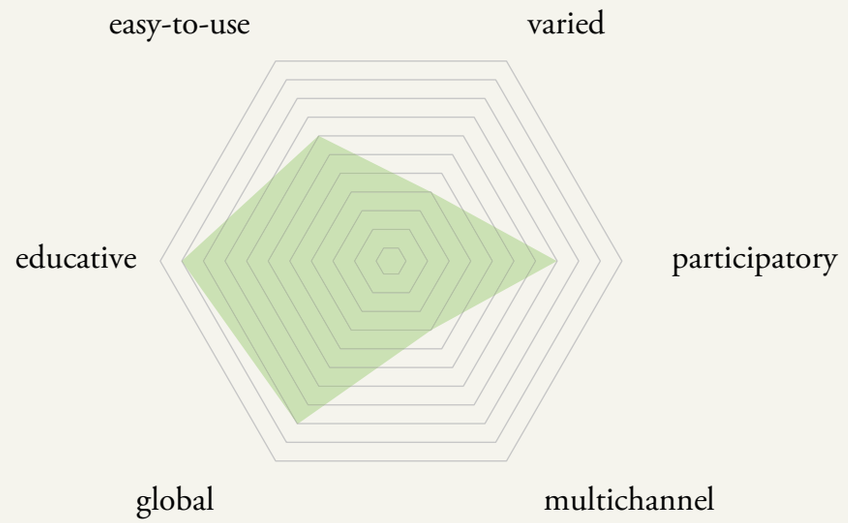


Figure5.14 This is service design thinking evaluation. Source: the author.

This is service design doing

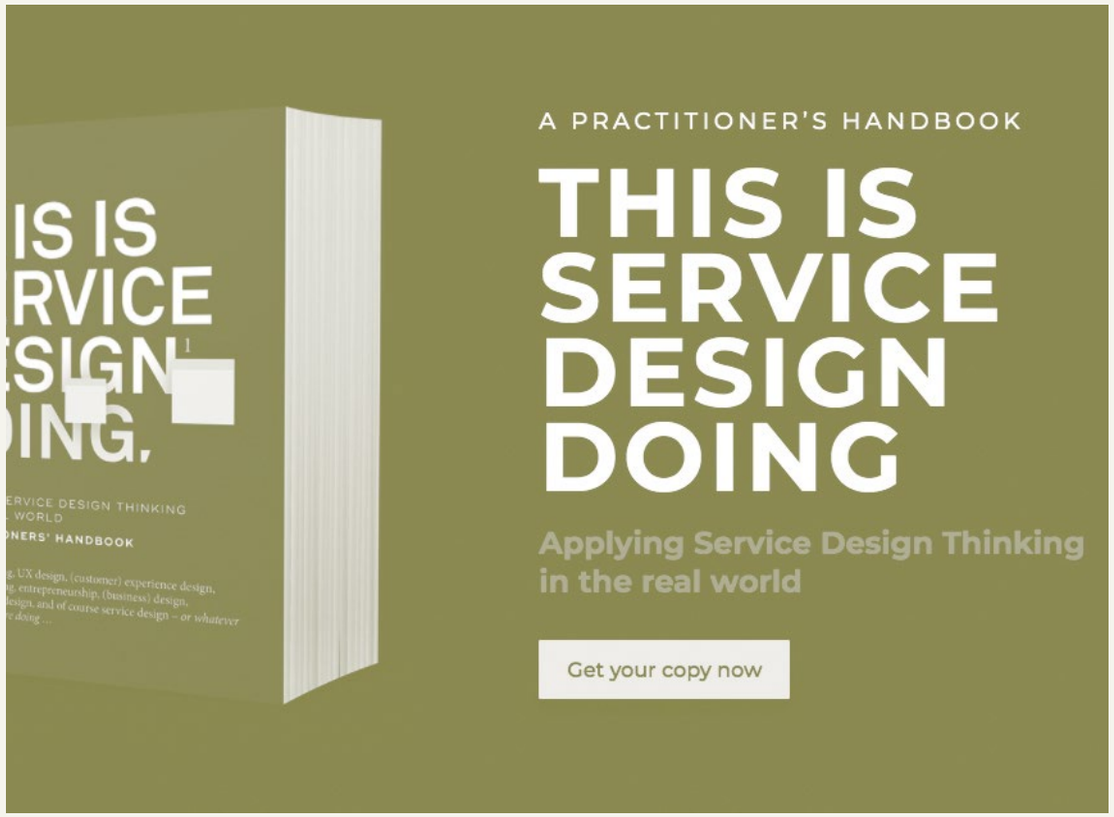


Figure5.15 This is service design thinking. Source: https://www.thisisservicedesigndoing.com/.

"The first comprehensive book on how to actually do service design to improve the quality and the interaction between service providers and customers. Specific facilitation guidelines on how to run workshops, perform all of the main service design methods" (Stickdorn et al., 2018).

Year early 2018

Main target service design practitioners, organizations, corporations.

Aim understand how to organize and structure activities in service design projects and workshops.

Offline channels
- printed book (theory, methodologies, case studies, tools)
- workshops (methods & tools sharing, group activities)
- talks (lessons, experts intervents)

Digital channels
- digital book (theory, tools, free resources)
- own website (free resources, tools, videos)
- Twitter (articles, experts' interviews parts)
- Issuu (theory, digital book)

Evaluation

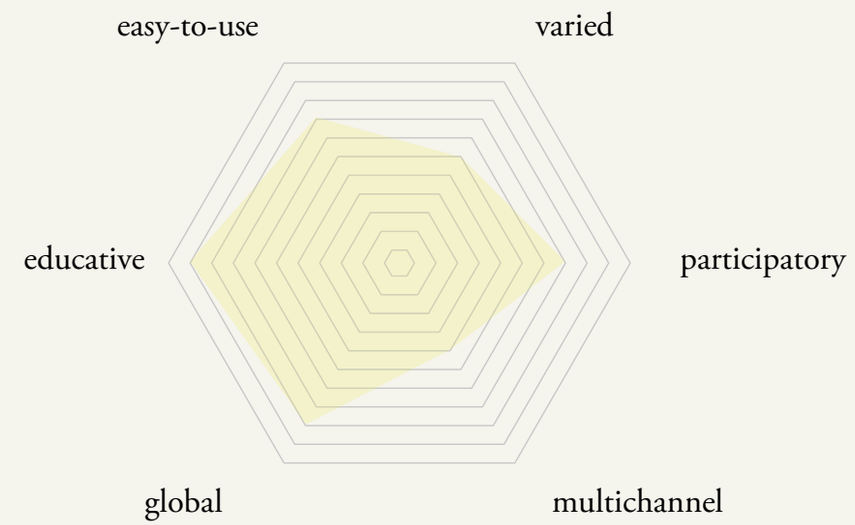


Figure5.16 This is service design DOING evaluation. Source: the author.

Service design magazine

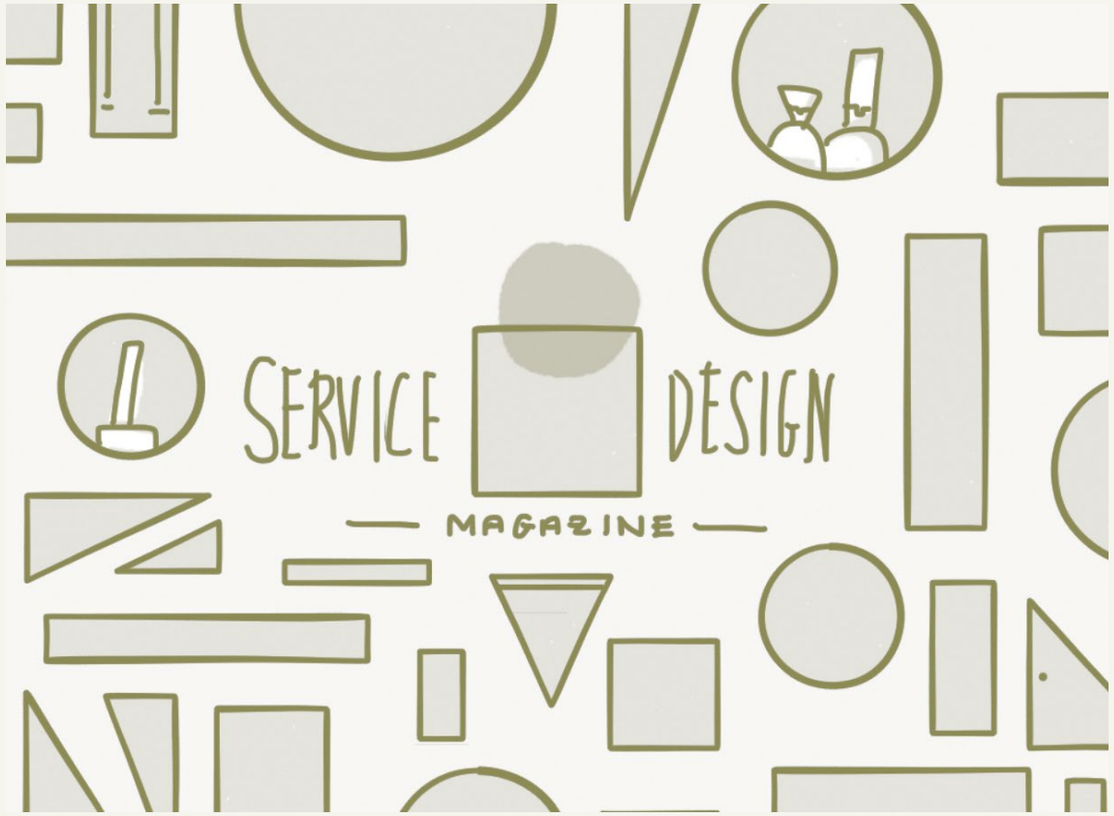


Figure5.17 Service design magazine. Source: https://service-design.co/.

"Service Design Magazine is an independent online publication. The magazine represents a way to remember and store tips and principles that could be interesting for the service design community" (Catalanotto, 2017).

Year 2015 - present

Main target service designers, business owners.

Aim tools, methods and tips to make service design simpler and accessible to every service designer and business owner.

Offline channels
- printed books about di_erent topics linked to service design (theory, useful examples, tools)

Digital channels
- Medium (theory, dictionary, videos, suggestions, case studies)
- Own website (online lessons and training, free tools and templates)
- Youtube channel (online lessons and training, videos)
- App (dictionary of service design words and terms)

Evaluation

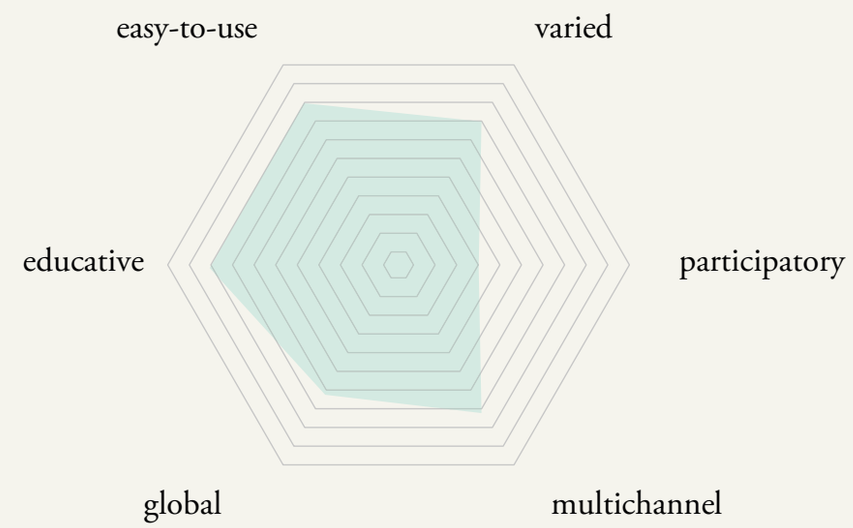


Figure5.18 Service design magazine evaluation. Source: the author.

Design Better – by Invision

Figure5.19 Design Better by Invision. Source: https://www.designbetter.co/.

"DesignBetter.Co is the essential guide to the best design practices from top design experts. It provides free access to insights that strenghten design teams and the creative community, as well as experts interviews, data report and useful free tools" ('Discover the world's best design practices—DesignBetter.Co', 2017).

Year 2017 - present

Main target creative community, designers, organizations.

Aim digital education portal; provide a centralized repository of resources to learn good design practices.

Offline channels

- printed copies of some books (theory, examples, case studies, experts interviews)
- workshops (lessons, methods & tools sharing, experts talks)

Digital channels

- Own website (online books and pdf copies, articles, interviews, reports, useful links, tools)
- "Inside design" (blog, case studies)
- Spotify, apple music, google music, suncloud (podcast, audio lessons)
- Twitter (articles, piece of interviews)
- Medium (pieces of research, interviews' extracts)

Evaluation

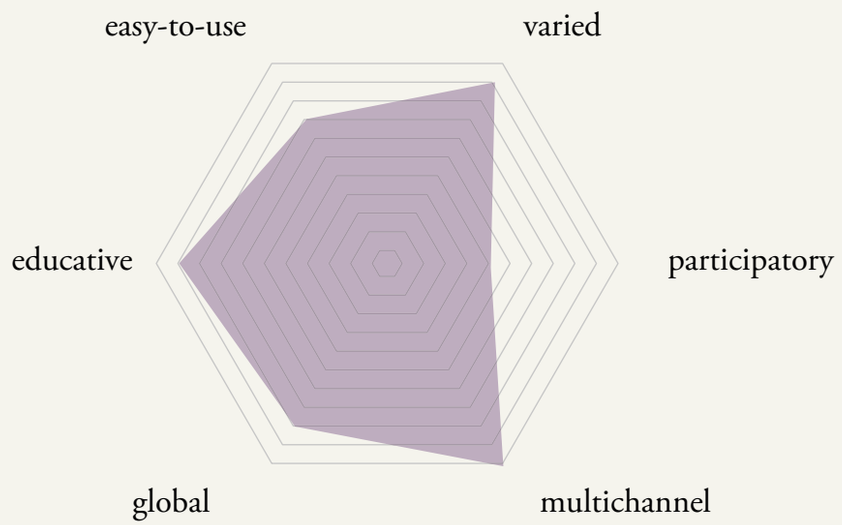


Figure5.20 Design Better by Invision evaluation. Source: the author.

99U magazine

Figure5.21 99U magazine by Adobe. Source: https://99u.adobe.com/.

"99U is Adobe's resource and event series to help creatives supercharge their work and make their ideas happen. Whether you're a designer, marketer, engineer, educator, artist, or CEO —if you approach your work creatively, 99U's goal is to help you build an incredible career" (Inc, 2014).

Year 2014 - present

Main target creative community, designers, marketers, educators, artists and CEOs.

Aim sources and events to help creative people build careers and make their ideas happen; empower the creative community.

Offline channels
- printed magazines (articles, interviews, creative tips and designers guides)
- annual 99u conference (experts talks and activities)

Digital channels
- Own website (online articles, online guides & resources, interviews)
- Behance (free tools, magazine graphics)
- Twitter (articles, designers guides)
- Linkedin (articles, interviews' extract)

Evaluation

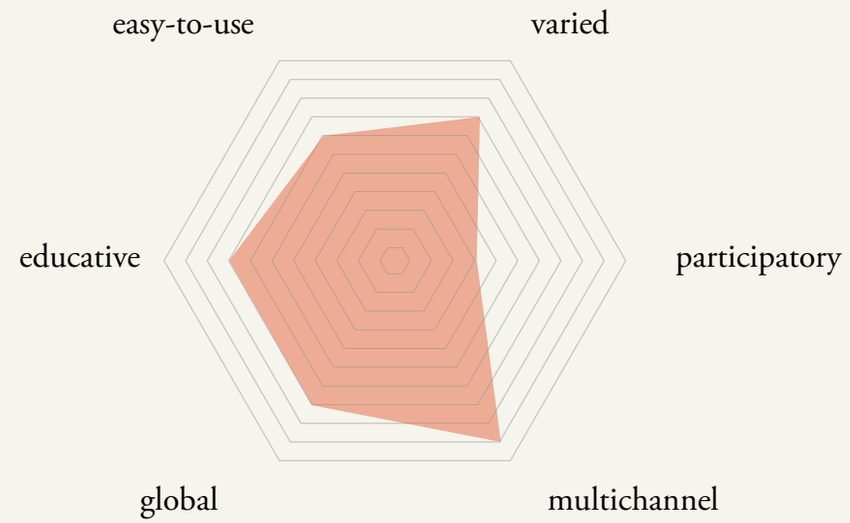


Figure5.22 99U magazine evaluation. Source: the author.

Touchpoint magazine by SDN

Figure5.23 Touchpoint magazine by SDN. Source: https://www.service-design-network.org/touchpoint.

"Comprehensive seasonal collection of articles, cases and interviews from an international array of service design experts. Published since 2009 by Service Design Networks" (SDN, n.d).

Year 2009 - present

Main target service design community, organizations.

Aim get inspired by a comprehensive collection of articles, cases and interviews from an international array of service design experts.

Offline channels
- printed magazines (articles, case studies, interviews)
- SDN conferences (experts talks and activities)

Digital channels
- SDN website (digital magazine, interviews, case studies, tools)
- Medium (selected free articles and interviews)
- Linkedin and Twitter (discussion groups and pieces of articles/case studies)
- SDN Instagram account (tools and free contents)

Evaluation

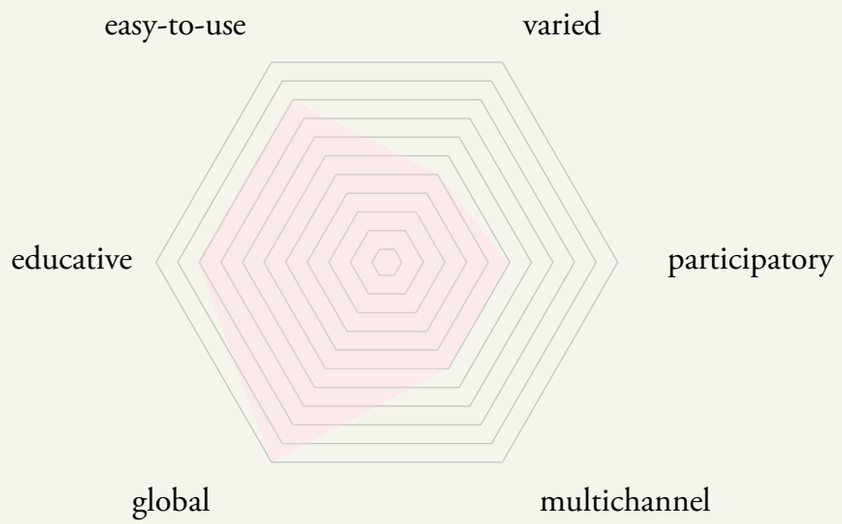


Figure5.24 Touchpoint magazine evaluation. Source: the author.

Impact Report: Public Sector

Figure5.25 Impact report: Public sector by SDN.
Source: https://www.service-design-network.org/books-and-reports/impact-report-public-sector.

"The Service Design Impact Report gives a broad overview of service design driven activities in governments and public service organisations all over the world. The report shows the role of design in the public sector, and it gives insights in many opportunities yet to exploit" (Mager, 2016).

Year 2016

Main target service design community, organizations.

Aim a broad overview of service design driven activities in governments and public service organisations all over the world.

Offline channels
- printed book (research, articles, case studies, data and key _ndings, interviews' extracts)
- SDN conferences (experts talks and activities)

Digital channels
- SDN website (digital book, selected articles, case studies, tools)
- Linkedin and Twitter (discussion groups and pieces of articles/case studies)
- SDN Instagram account (tools and free contents)

Evaluation

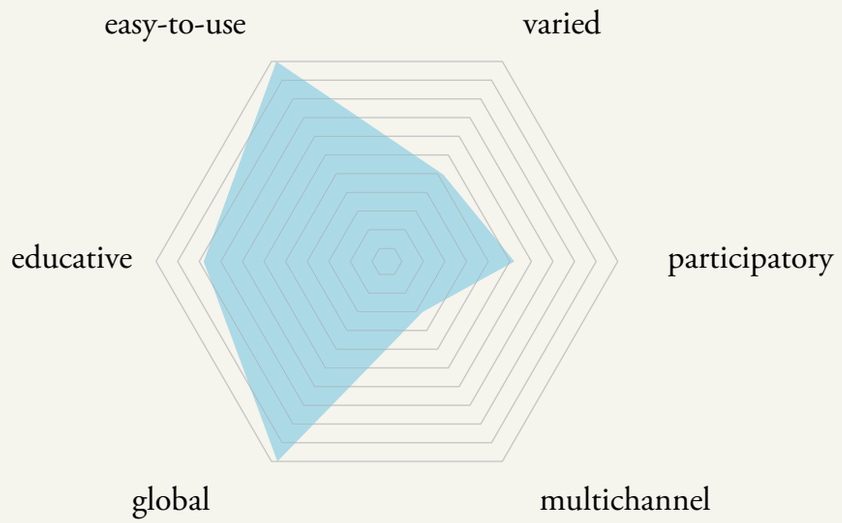


Figure5.26 Impact report: Public sector evaluation. Source: the author.

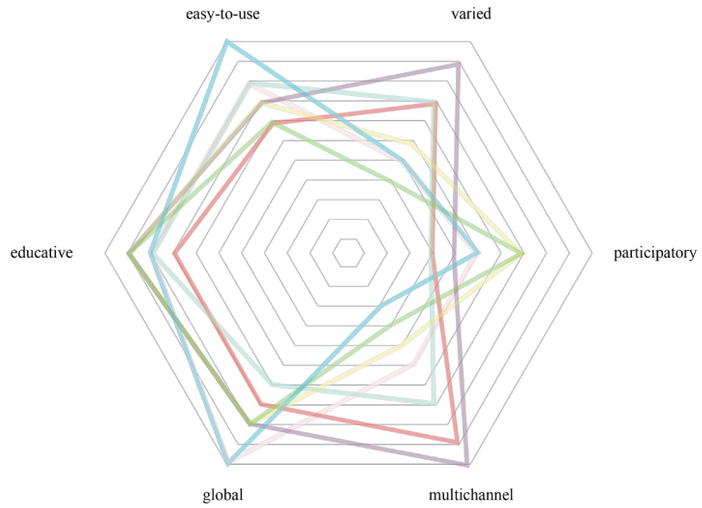


Figure5.27 Global evaluation. Source: the author.

To summarize the case studies analysis, the author visualized all the seven evaluations together in the same chart (Figure5.24).

In addition, she also designed a two-page matrix to compare case studies accordingly to the six key parts of the hypothesized project offering map, to understand which project was actually providing a similar offer and how (Figure5.28 and figure5.29). The tool of the case studies matrix helped the author in gaining inspiration for each point of the offering map.

- **knowledge**: the project aims at giving the reader a general overview about the situation as well as general information and useful data about the phenomenon (as Design Better by Invision and Impact report: public sector). As Service design magazine, the tone of voice will be familiar and easy to be understood, in order to make the reading pleasant and not too heavy.
- **inspiring examples**: it's very important to show evidence of what can be done and what does already exist. For this reason, the publishing will have a dedicated section for case studies (as in This is service design thinking) as well as in-text links to external examples/ projects (as in Design Better by Invision)
- **basic terminology**: among the case studies, just one of them (Service design magazine) has one ad hoc section that works as a vocabulary of specific terms. This is something that will be added and implemented in the project proposal.
- **participation**: compared to the case studies, following the examples of This is service design thinking and doing, the publishing aims at involving users in a more collaborative system, from the design of the publishing itself until the actual publication and beyond.
- **experts' voice**: experts play a fundamental role in this panorama. For this reason, is important to share their expertise and knowledge. The publishing will provide full-transcript experts' interviews, following the example of Design Better by Invision and 99U magazine.
- **useful resources**: to enhance an active learning approach and expand the "Community of practice" is fundamental to give users all the necessary and available resources. This can be done creating a digital repository of different and useful items (links, tools, digital material, interesting readings, etc.) starting from the example of the case studies (This is service design doing, Service design magazine and Design Better by Invision), but broadening the range of contents.

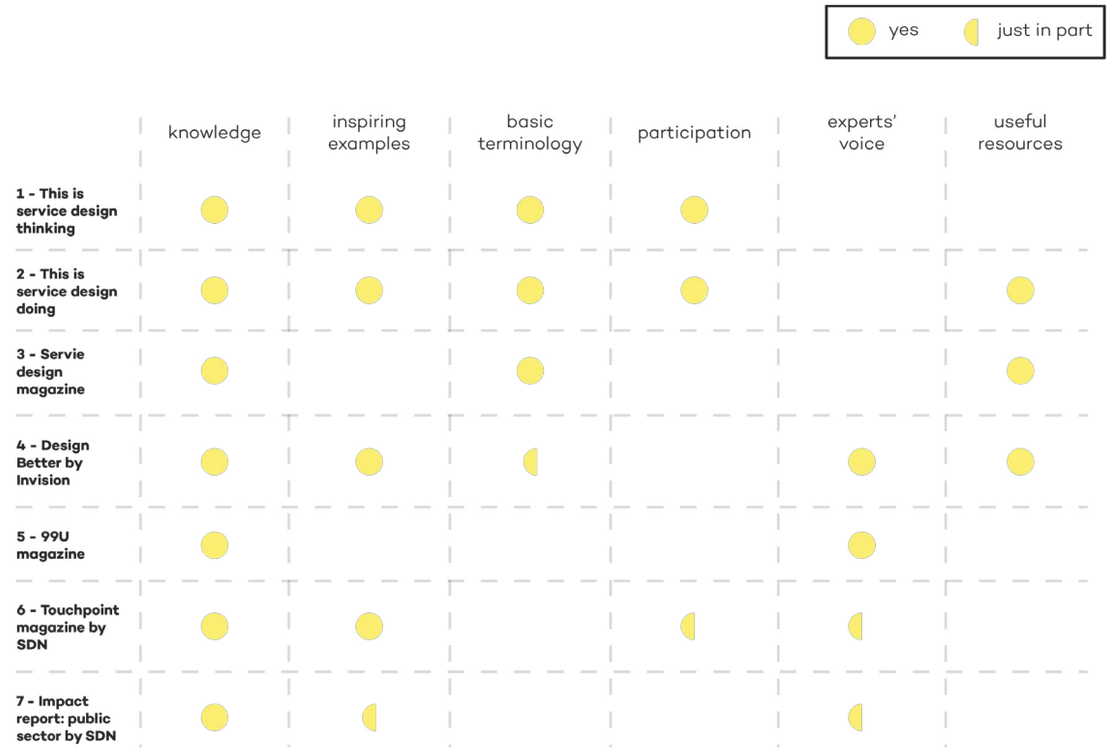


Figure5.28 Case studies matrix (part 1). Source: the author.

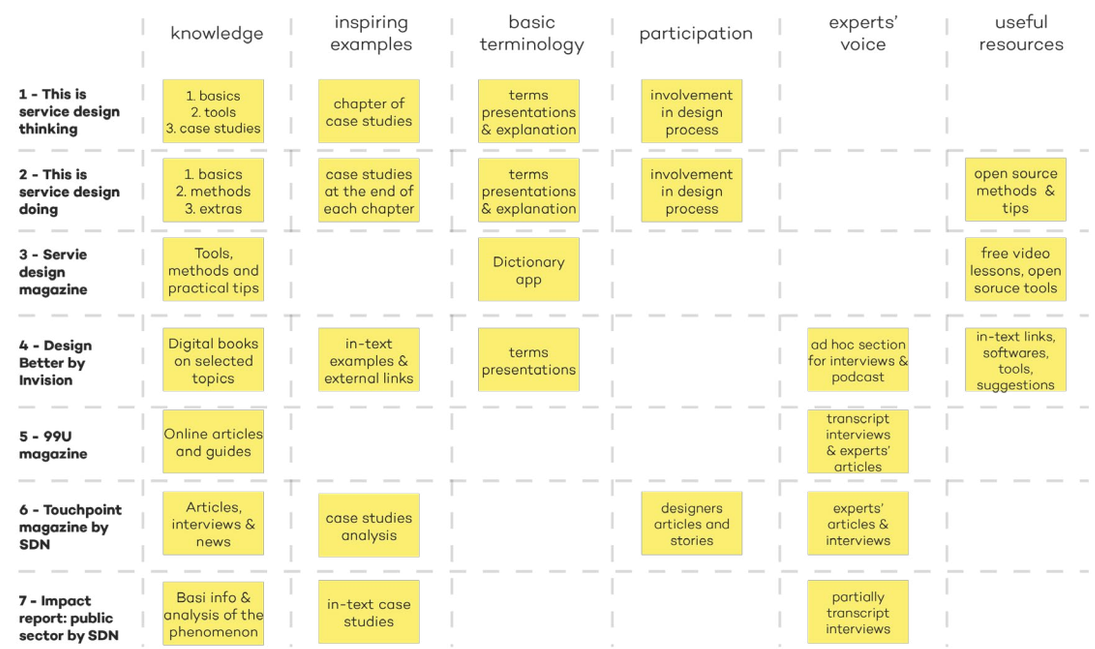


Figure5.29 Case studies matrix (part 2). Source: the author.

The last map highlighted a gap area in the space of multichannel-participatory proposal.

The last part of the case studies analysis involved the development of three different positioning maps, aimed at looking for unexplored areas where to position the own proposal, based on key aspects of the publishing (Figure5.30, Figure5.31, Figure5.32). Framed upon an axes structure, the maps presented as a constant value the "multichannel" aspect and as changing the ones of local/global, mono-content/variety of contents and static/participatory.

In particular, **the last map highlighted a gap area in the space of multichannel-participatory proposal.** The author decided to position her design solution in that space, developing a proposal to involve actors in a participatory learning system, both in the design phase of the publishing and after its launch, maintaining a capillarity on different channels to reach as many users as possible (Figure5.33).

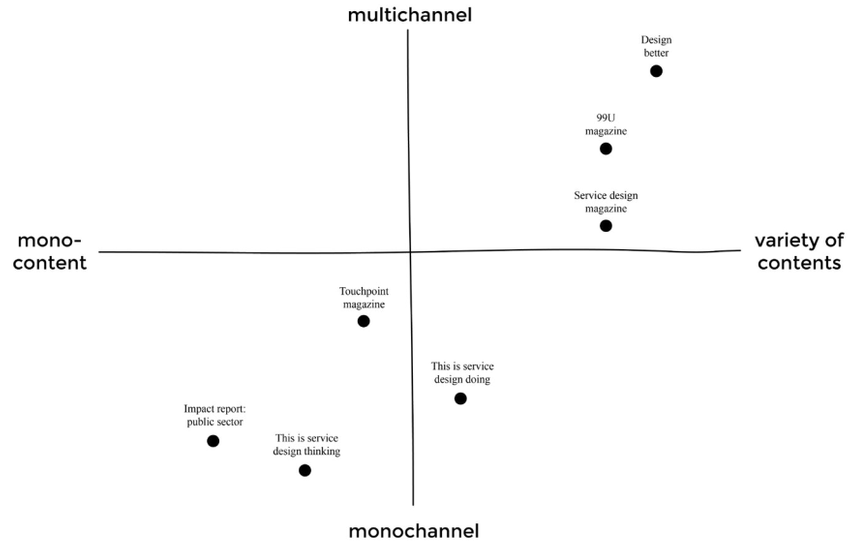


Figure5.30 Positioning map number one. Source: the author.

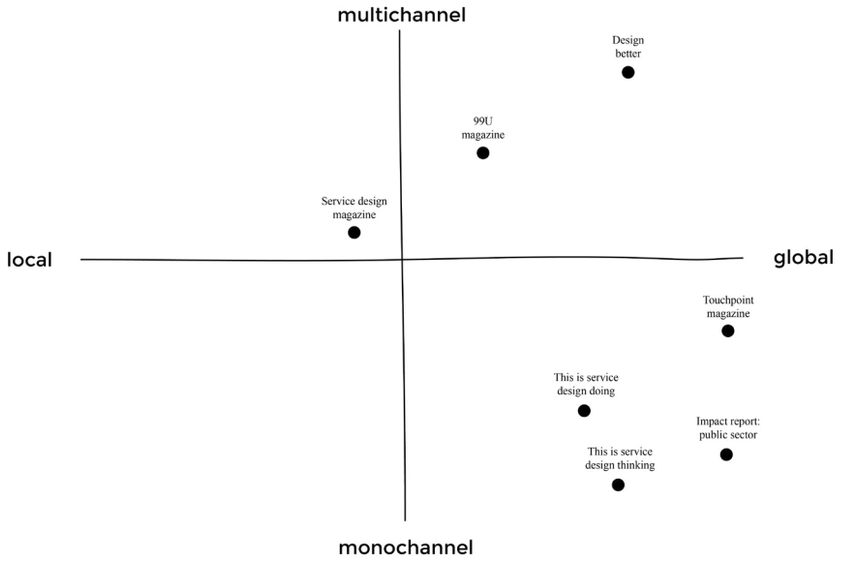


Figure5.31 Positioning map number two. Source: the author.

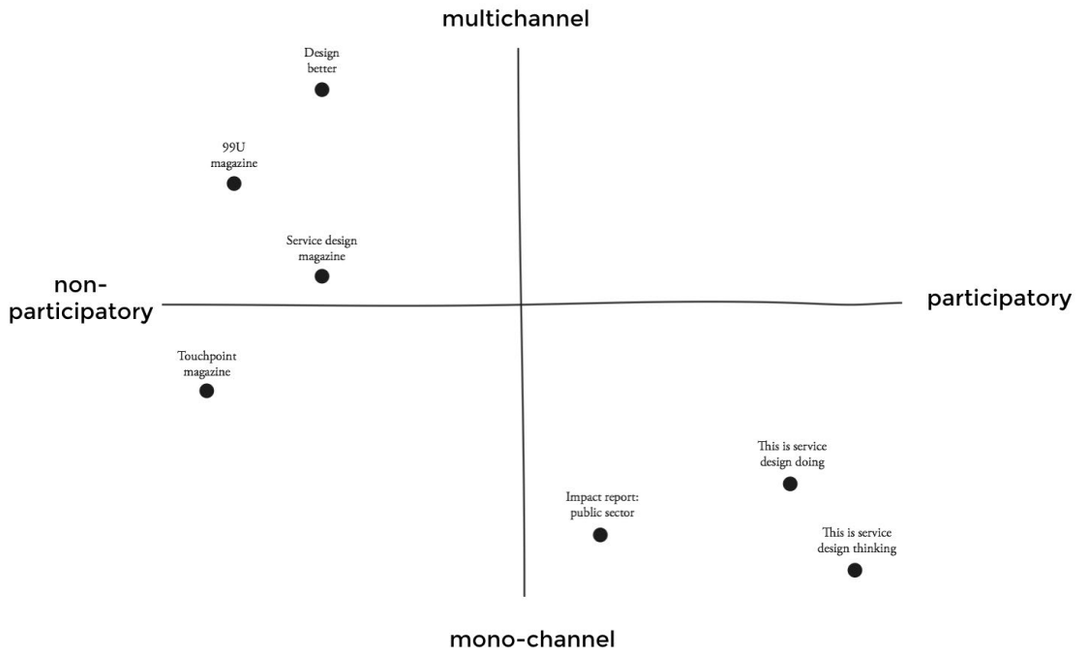


Figure5.32 Positioning map number three. Source: the author.

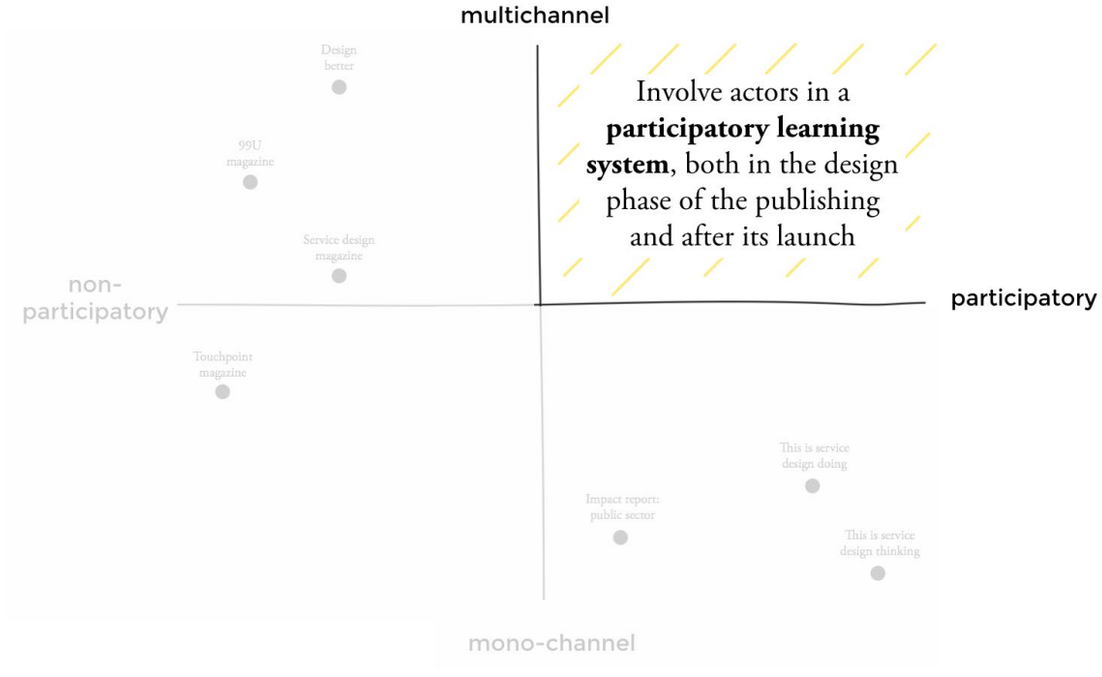


Figure5.33 Final positioning map. Source: the author.

In line with the objective of involving the users since the design phase, the author decided to plan **three co-creation sessions with people from the core target group.**

5.2.6 Co-creation sessions

In line with the objective of **involving the users since the design phase, the author decided to plan three co-creation sessions** with people from the core target group, namely service designers who are starting now working with the public sector, service design students interested in the topic and innovative civil servants who wants to know more about service design discipline. The active participation during projects' development offers the possibility of contributing directly to their design, rather than having to adapt to solutions set by others. Co-creation is widely considered an essential tool of innovation: it allows people to join forces to regain possession of systems and logic that influence the context in which they live and, consequently, their daily lives (Tassi, 2019).

When undertaking a co-creation process is important to plan in the right way all the activities to synthesize and translate the relevant insights gathered, concretize the ideas collected and, finally, identify a good strategy for the execution and maintenance of the proposal. Thus, the first step has been the activities' scope definition. The author defined the aim as working together to redefine the project's offering map and co-design the first draft of its structure, starting from users' needs, feelings and ideas. Once the objective was clear, the author moved forward to the analysis of existing theories about co-creation and, more specifically, on how to structure and facilitate the sessions. Thanks to the reading of two illuminating books - "This is service design DOING" and "The seven principles of complete co-creation"-, the author acquired the necessary knowledge to deal with the initiatives' planning and she was then able to design both the timeline and exercises sequence. The co-creation was organized in two main phases: the topic presentation linked to the concept introduction and the following practical activities. **Leveraging on the study of existing methods, the author had the chance to identify useful tools and re-adapt them to the specific context and scope.** In particular, she re-designed the tool of the user profile (Figure5.34), cards and canvases for the case studies evaluation (Figure5.35, figure5.36), the Bull's eye diagram (used to prioritize elements) (Figure5.37) and the sequence to facilitate the creation of the offering map.

Tools:

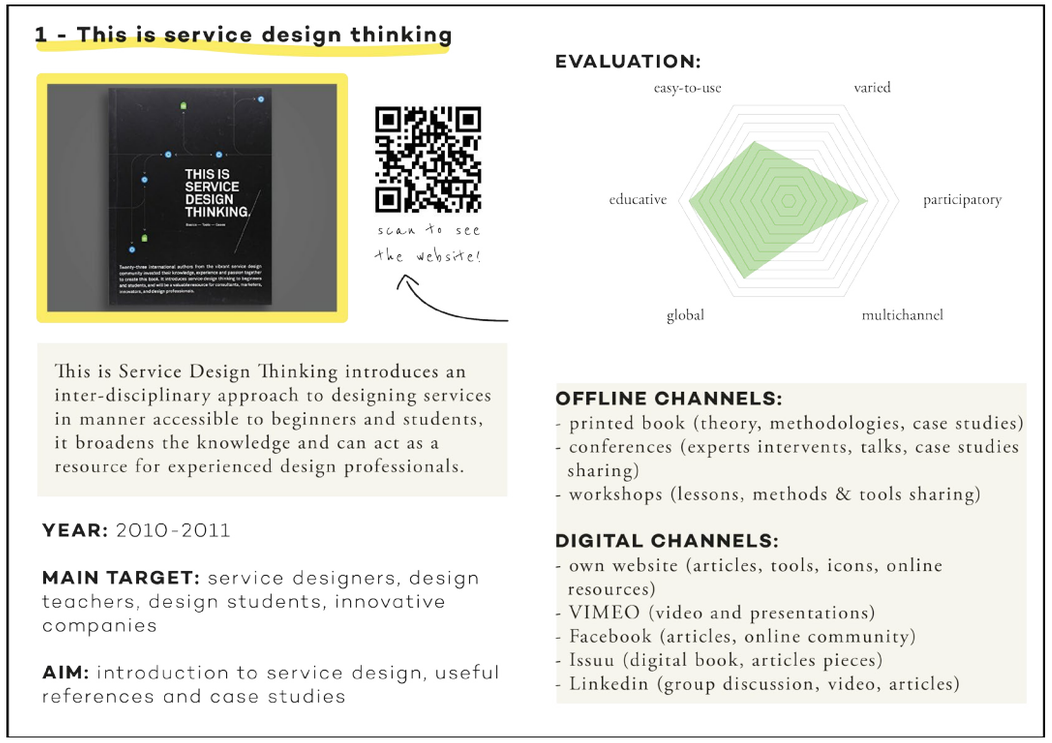


Figure5.34 User Profile. Source: the author.

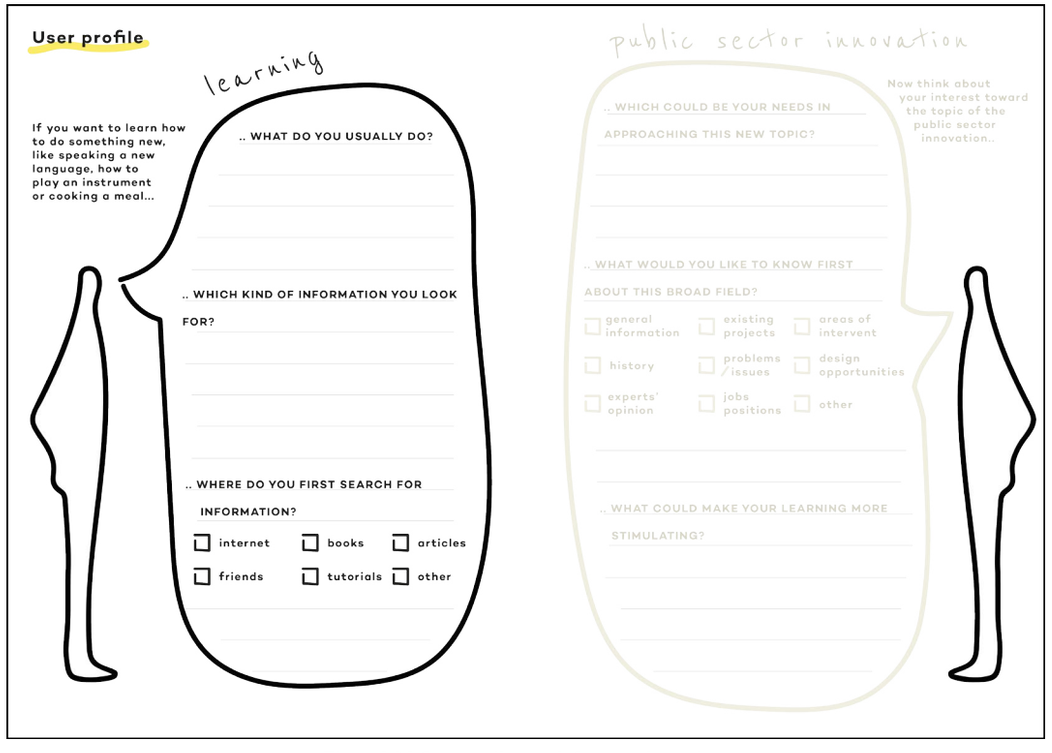


Figure5.35 Case studies card. Source: the author.

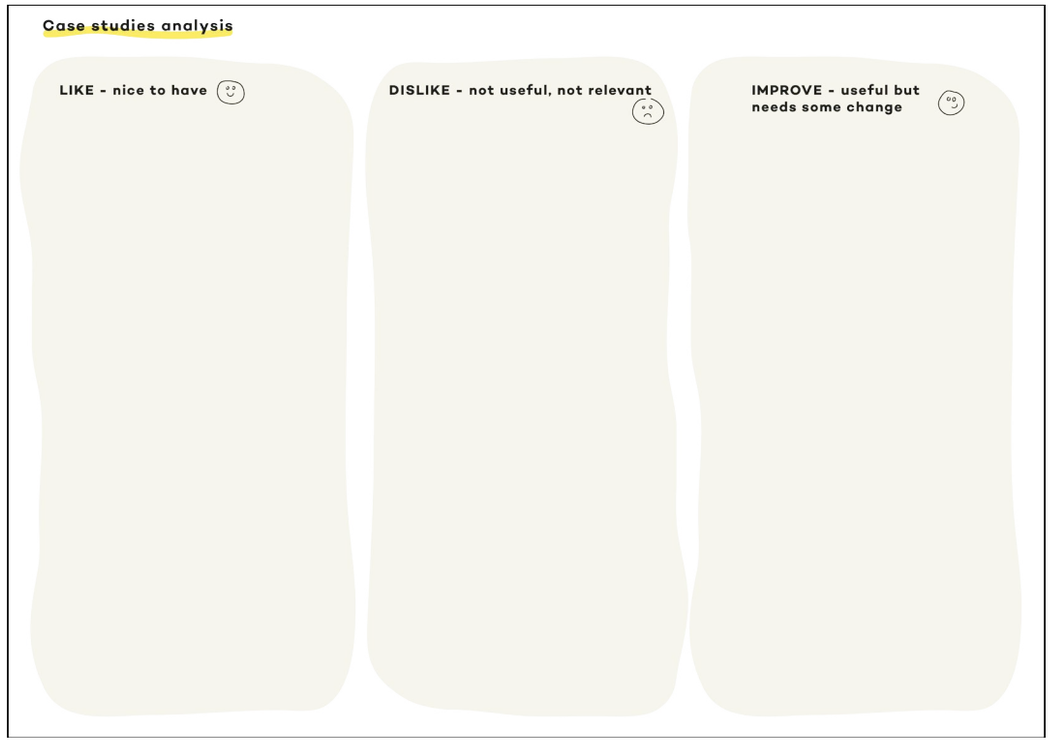


Figure5.36 Case studies evaluation canvas. Source: the author.

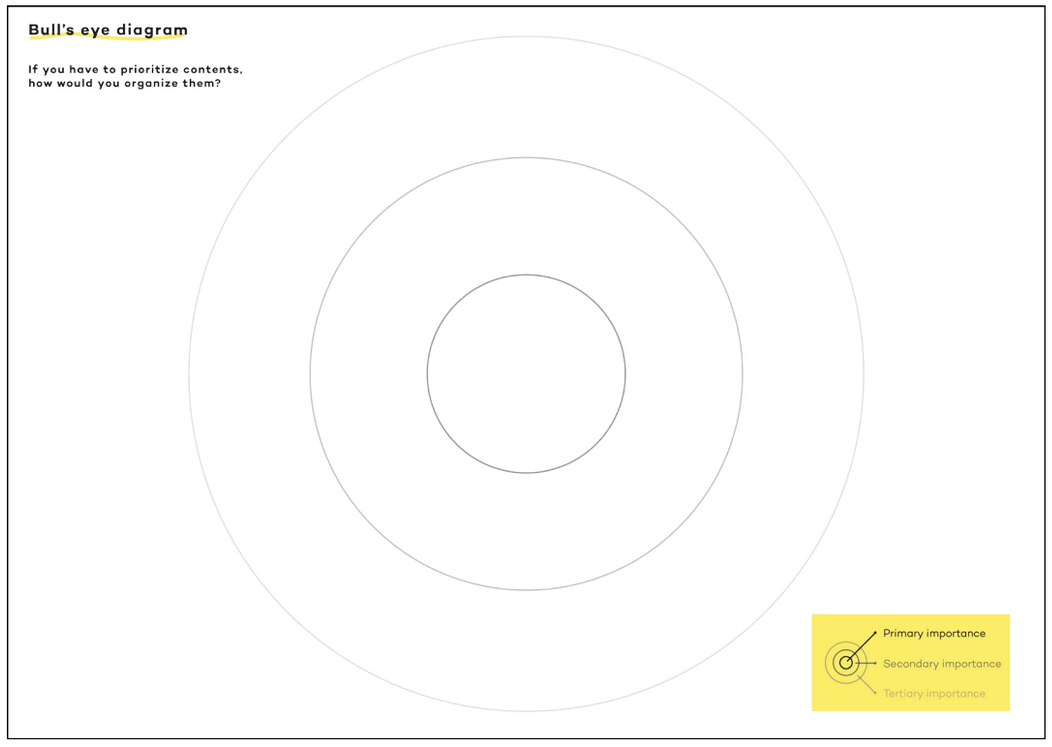


Figure5.37 Bull's eye prioritization diagram. Source: the author.

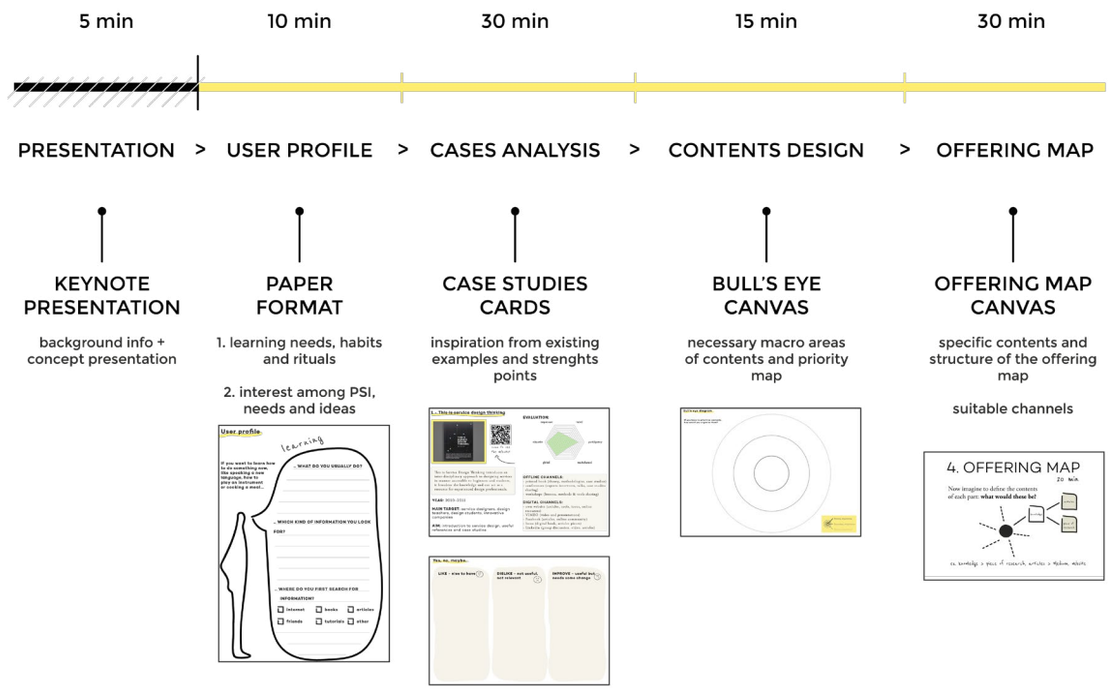


Figure5.38 Co-creation timeline. Source: the author.

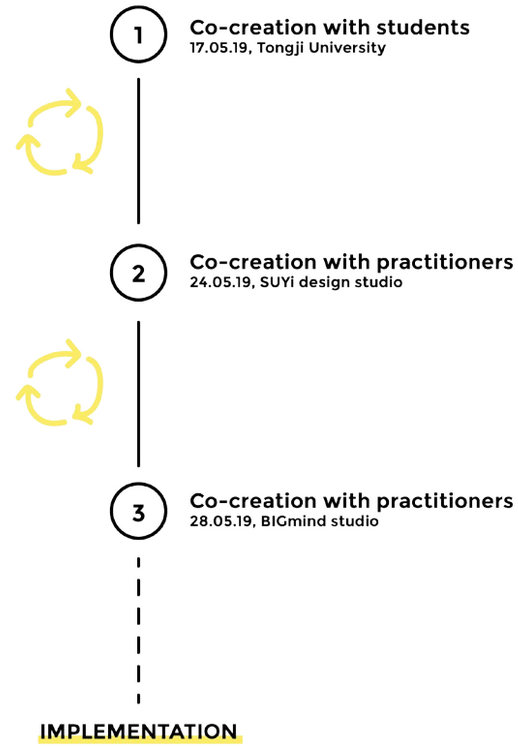


Figure5.39 Co-creation process. Source: the author.

The activities and the initial presentation were designed to last maximum one hour and a half: 5 minutes for the presentation, ten minutes for the first exercise (user profile), thirty minutes for the case studies analysis and evaluation, fifteen minutes to complete the contents design and finally half an hour to design the offering map and act the final proposal playback (Figure5.38).

The author carried out three co-creations, all in the city of Shanghai: **the first one with service design students at Tongji University and the other two in different design studios with practitioners.** They were all held over two weeks and, between the first session and the last, the author reiterated and implemented settings and tools in order to make the activities even more effective and engaging (Figure5.39). The author succeeded in reaching **a total of eleven service designers interested in the topic of public sector innovation, seven students and the remaining four practitioners.** Following a brief summary for each of the sessions before presenting the overall results.

FIRST CO-CREATION – service design students

When 17.05.19 - Tongji University, Shanghai.

Who seven service design students from Italy, five women and two men. They were split into two groups for the activity.

Notes for tools implementation the time set for the activities (particularly the case studies analysis and evaluation) was not enough for participants. This obliged the author to combine the last two activities (prioritization and offering map design). For this reason, the author decided to simplify the case studies exercise for the following session, to facilitate the overall co-creation.

Key findings the co-creation highlighted several interesting points. First of all, speaking about general habits in learning, it came out how the totality of participants uses the internet to find useful information when dealing with something new. In addition, many students usually refer to friends and other designers that they know having experience on a specific topic. For what concerns the specific topic of the public sector innovation, the main point, suggested by both the two groups, was the importance of presenting existing projects. Indeed, getting in touch with real projects, can - accordingly to participants - easily show possible practical applications of what users are learning. As well as presenting them, accordingly to Group 1, is important also to structure their presentation in an effective and clear way. One other intriguing element suggested was to present not only successful cases but also failures, explaining the reasons why the project/activity didn't succeed. The analysis of case studies highlighted the importance of having all the information open source. For this reason, many participants mentioned in the offering map part the use of channels like Medium, Instagram and Spotify, easy to access and free. Additionally, these digital channels allow also a constant contents update, an aspect that for students was necessary to monitor the ongoing phenomenon constantly. Finally, for many of the service designer, it represented a crucial point to give a "younger communication style" to the publishing: the graphics represent a pivotal peculiarity to attract young designers, but also - accordingly to Group 2 - to make the learning process more interesting and attractive. The following figure visually summarizes some data from the co-creation (Figure5.40).

Moreover, in the next pages, the author presents some pictures taken during the session (from Figure5.41 to Figure 5.49).

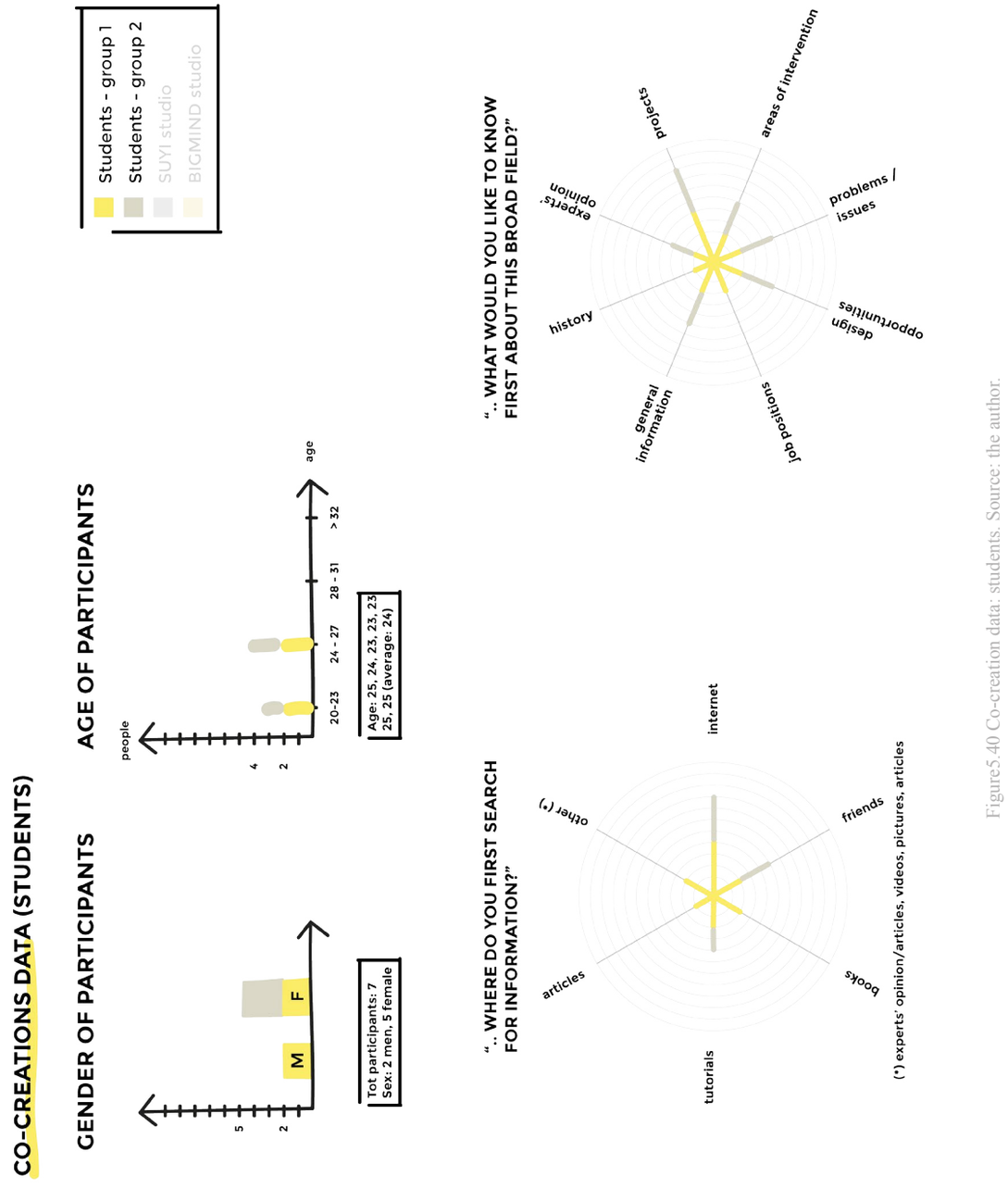


Figure5.40 Co-creation data: students. Source: the author.

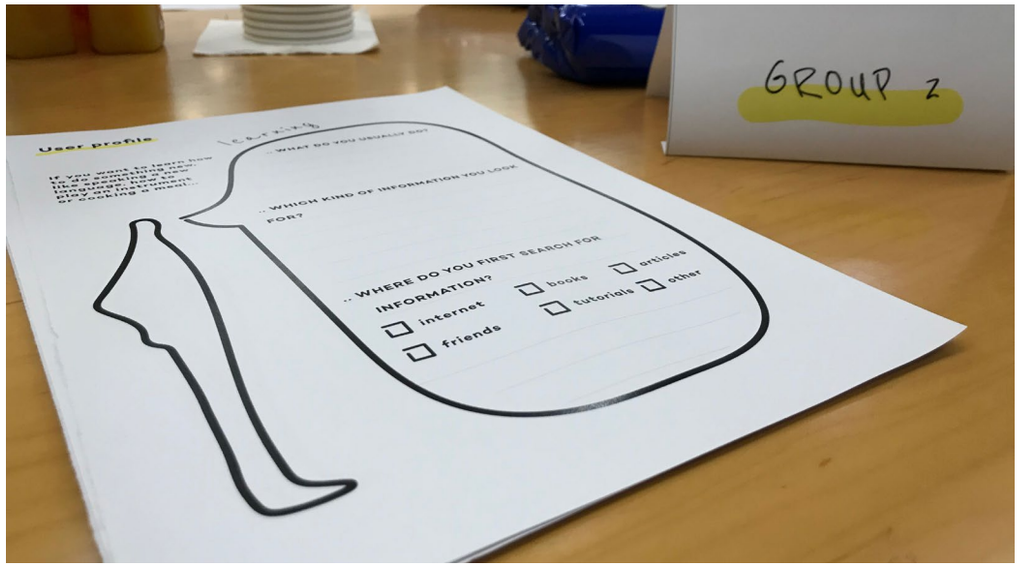


Figure5.41 User profile card. Source: the author.

Figure5.42 Space setting. Source: the author.

Figure5.43 Co-creation introduction. Source: the author.

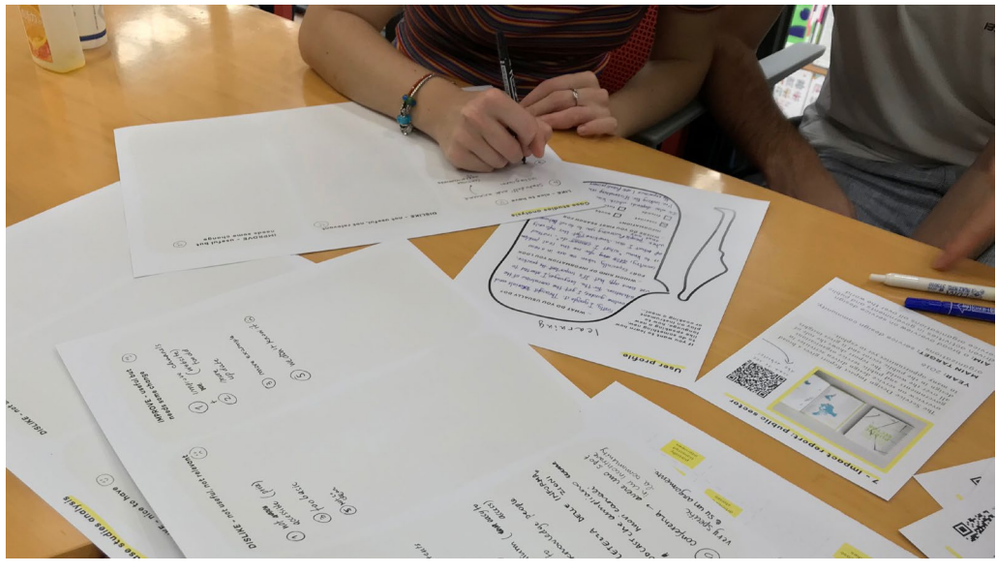


Figure5.44 First activity. Source: the author.

Figure5.45 Group work. Source: the author.

Figure5.46 Team discussion Group 1. Source: the author.

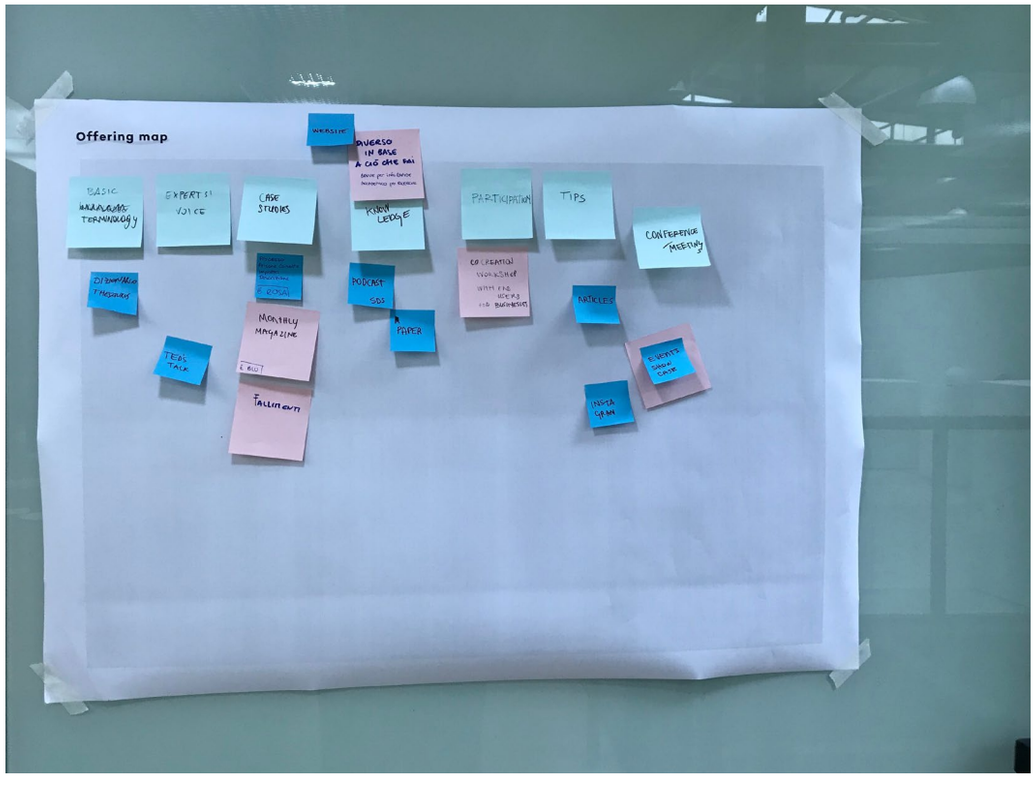


Figure5.47 Offering map: Group 1. Source: the author.

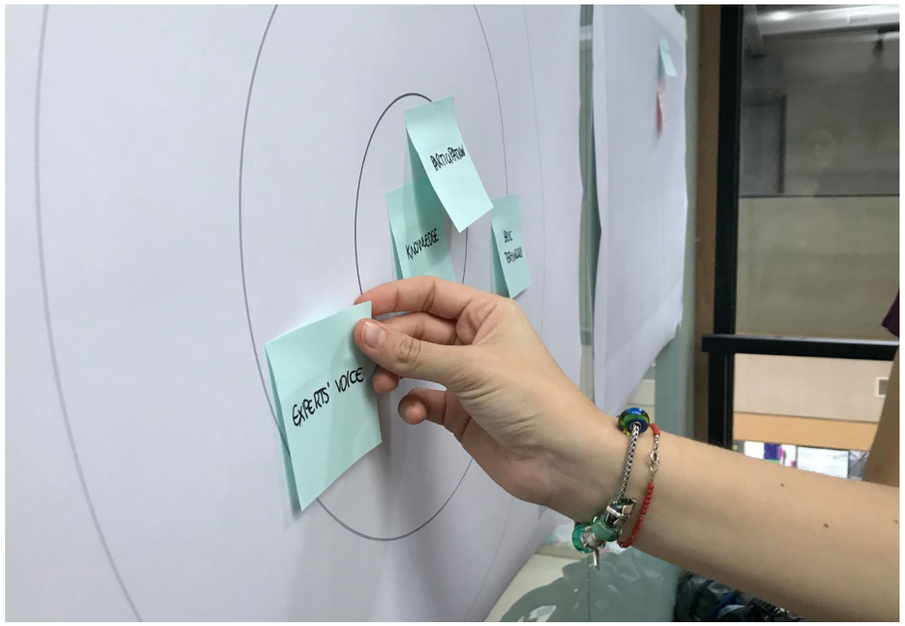


Figure5.48 Offering map: Group 2 (part 1). Source: the author.

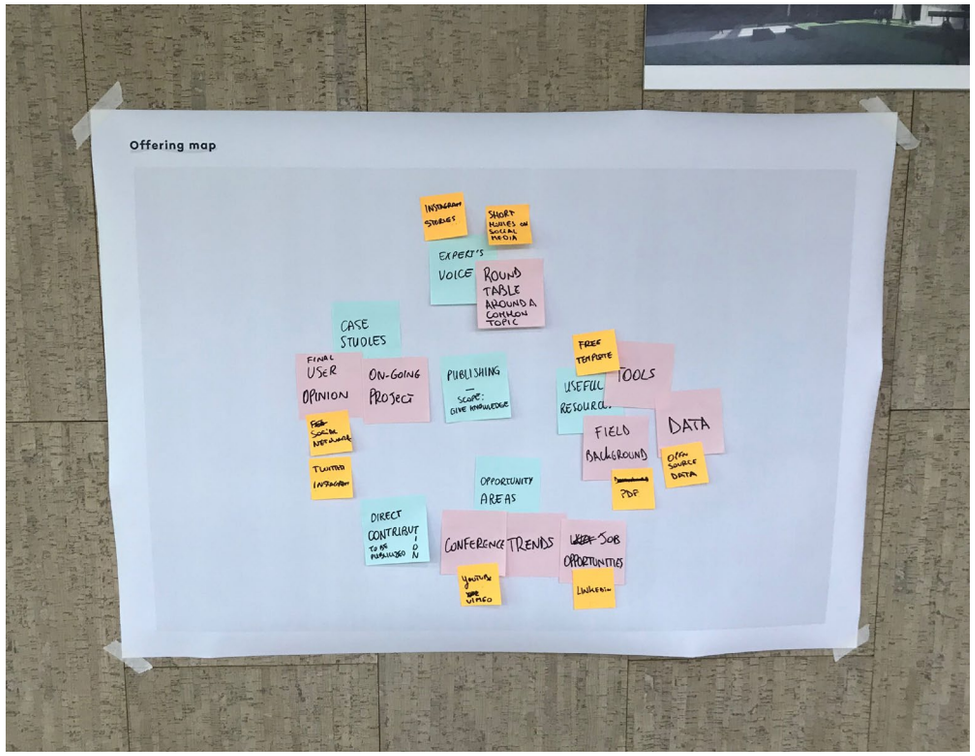


Figure5.49 Offering map: Group 2 (part 2). Source: the author.

SECOND CO-CREATION – service design practitioners

When 24.05.19 – SUYi design studio, Shanghai.

Who three service designers, two women and one man.

Notes for tools implementation after the first changes, the co-creation' timing worked really good: the author introduced directly the case studies during the first part and this made the second activity easier. Nevertheless, one of the participants suggested to introduce and explain directly also the evaluation parameters giving to users a chart to give a score to each one.

Key findings differently from students, designers use both internet and tutorial to learn new topics. This is still an interesting result since it validates the importance of the digital dimension in modern learning. The part of the user profile linked to the public sector innovation highlighted a pragmatic approach from designers: indeed, more than students, practitioners are interested in putting into practice what they learn and they want to get in touch with existing projects as well. One service designer pointed out the relevance that learning with a community and, consequently, knowing new people has for her since members of a community can collaborate and help each other during the education process.
The following activities confirmed some findings from the previous co-creation: the need to have accessible information, the relevance of social media as a democratic tool to spread knowledge (in this case the social media mentioned were Facebook, Twitter, Linkedin and Wechat), the importance of well-structured case studies, stressing the practical effects that adopting a service design approach could have. The service designers linked the 'participation' aspect of the proposal with seasonal workshops, conferences and other events to bring together the design community and civil servants. The following figure visually summarizes some data from the co-creation (Figure5.50).

Moreover, in the next pages, the author presents some pictures taken during the session (from Figure5.51 to Figure 5.57).

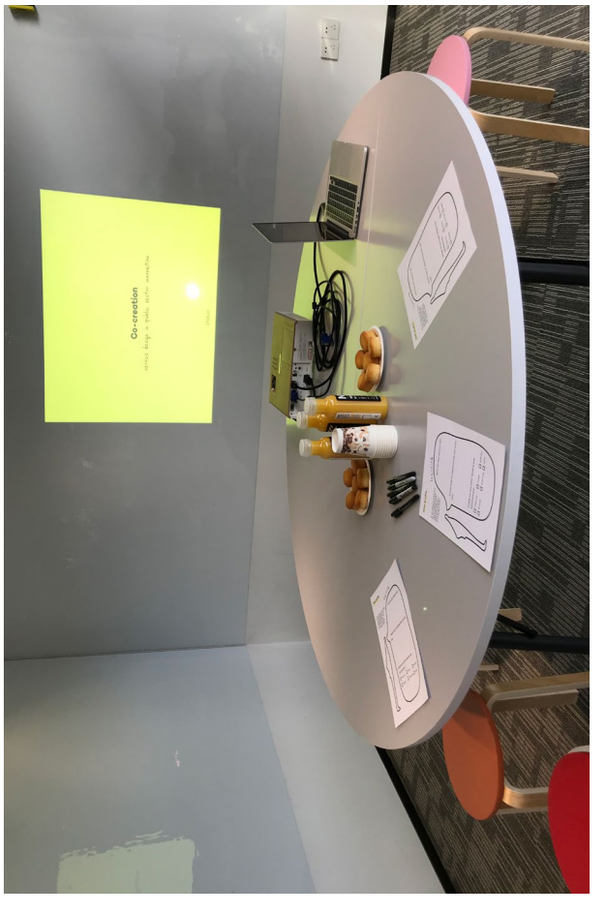


Figure5.51 SUYi studio space setting. Source: the author.

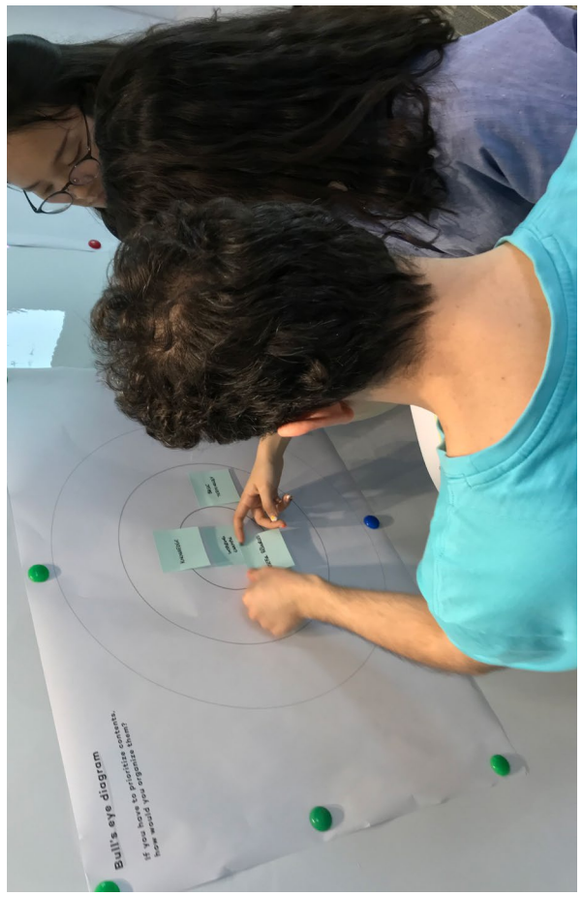


Figure5.52 SUYi team. Source: the author.

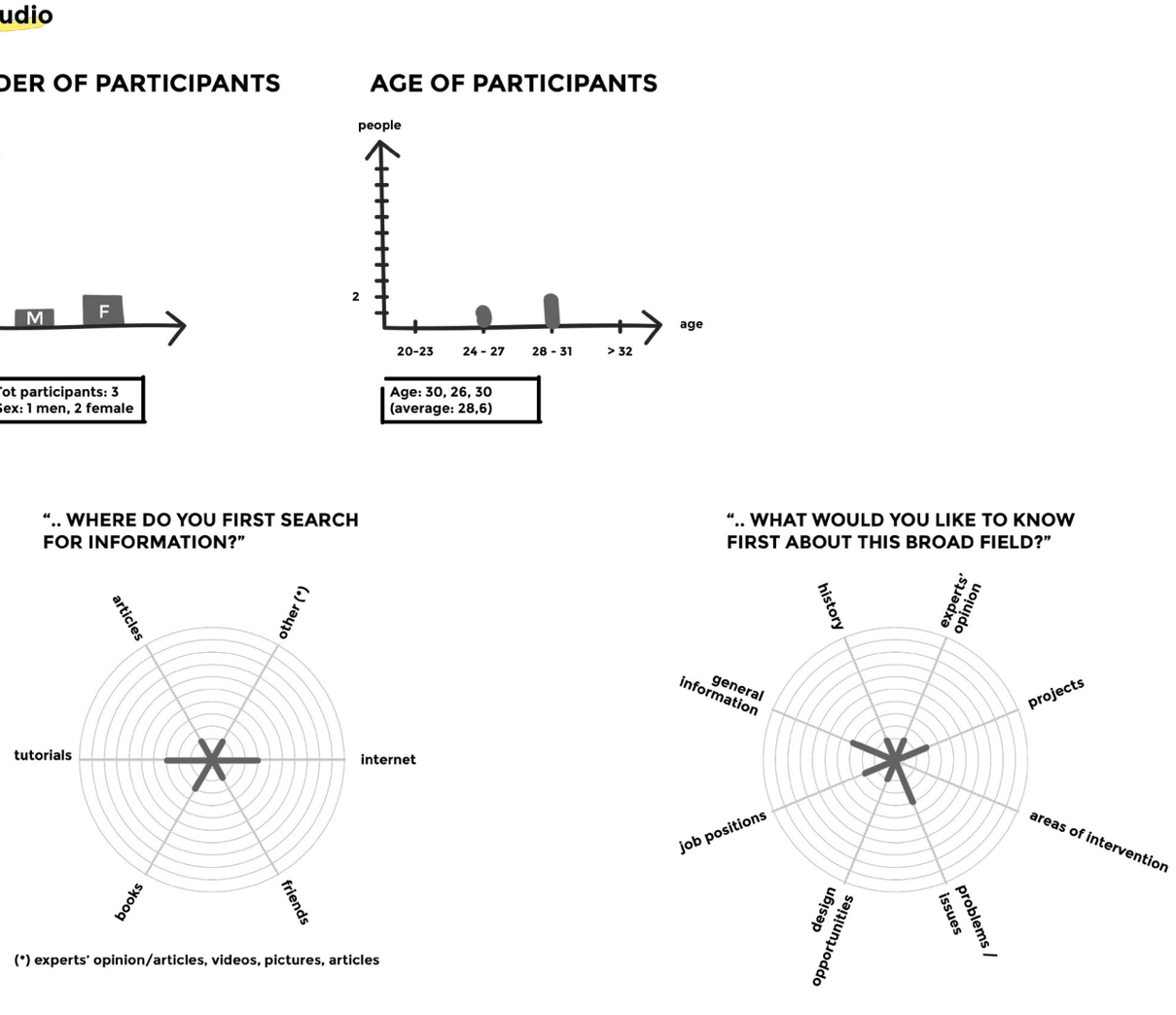


Figure5.50 Co-creation data: SUYi. Source: the author.

Figure5.53 SUYi team work (part 1). Source: the author.

Figure5.54 SUYi team work (part 2). Source: the author.

Figure5.55 SUYi service designer. Source: the author.

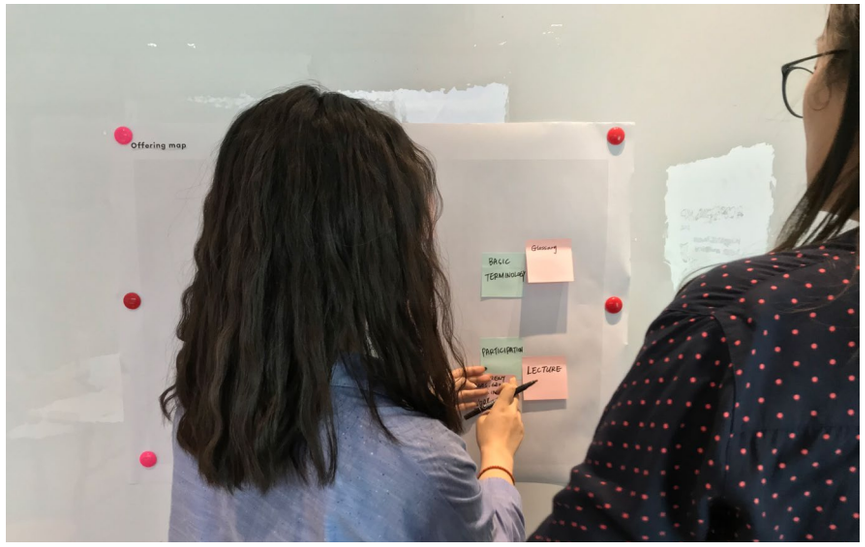


Figure5.56 Drafting the offering map. Source: the author.

Figure5.57 Offering map: SUYi team. Source: the author.

THIRD CO-CREATION – service design practitioners

When 28.05.19 – BIGmind design studio, Shanghai.

Who one to one co-creation session with the lead designer of the BIGmind service design studio.

Key findings being a one to one activity, the author had the chance to focus more on user's needs, habits and ideas and following in a direct way all the steps of the co-creation. The participant was really interested in the introductory presentation, and he actively cooperated also in this early phase, asking questions and deepening. The designer, both referring to general topics and to the public sector innovation one, highlighted the importance on gaining a general overview when learning a new topic, something that actually works as a basis for the following analysis. He usually exploits the internet to learn a new topic. In line with the previous teams, he pointed out the relevance of presenting existing projects to understand values and opportunities in approaching this field. This should be done, in the user's opinion, unveiling tools and methods used along the process, to inspire other studios to do similar things. In this way, studios that are starting now approaching the public sector field can have several guiding examples to follow. Practicality and simplicity are two key aspects that should be embedded inside the publishing. Accordingly to the designer, a pivotal aspect in his opinion is not just providing information, but the way this information are presented, in order to make them attractive and really useful. In this way, knowledge actually become the weapon to encourage a service design-driven public sector innovation.

The 'participation' should involve both service designers and civil servants in an active way: indeed, is important to make the two fields bounding together even before the actual start of a certain project. Moreover, accordingly to the participant, the aspect of having a community behind the publication could attract even more people who can share the feeling of belonging to a real project. Another aspect not to be underestimated is undoubtedly the participation of experts from both fields: they can, in fact, share their knowledge and their experiences enriching the knowledge of the publication. The user summarized the three fundamental aspects to be linked to the offering map into engagement, inspiration and evaluation (Figure5.58).

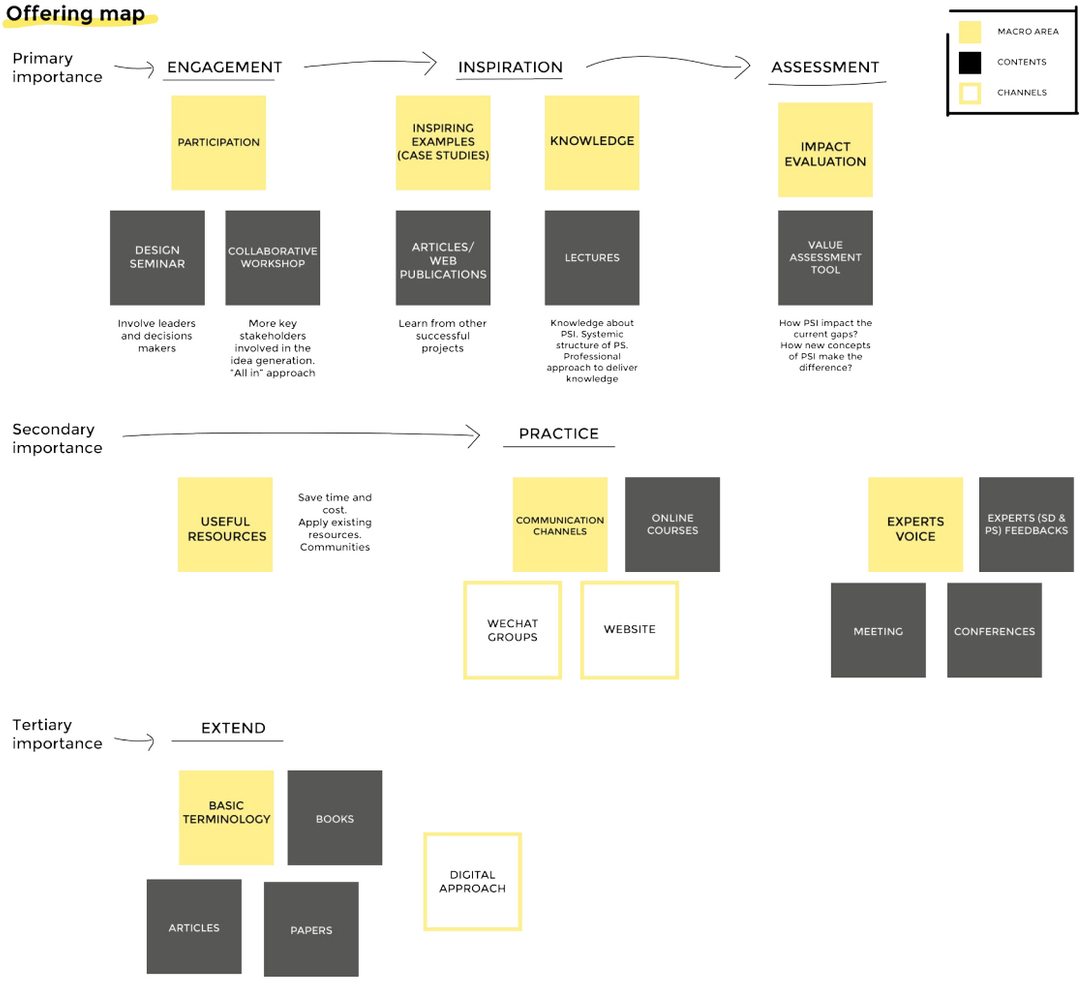


Figure5.58 Offering map: BIGmind studio. Source: the author.

The following figure visually summarizes some data from the co-creation (Figure5.59).

Moreover, in the next pages, the author presents some pictures taken during the session (from Figure5.60 to Figure5.64).

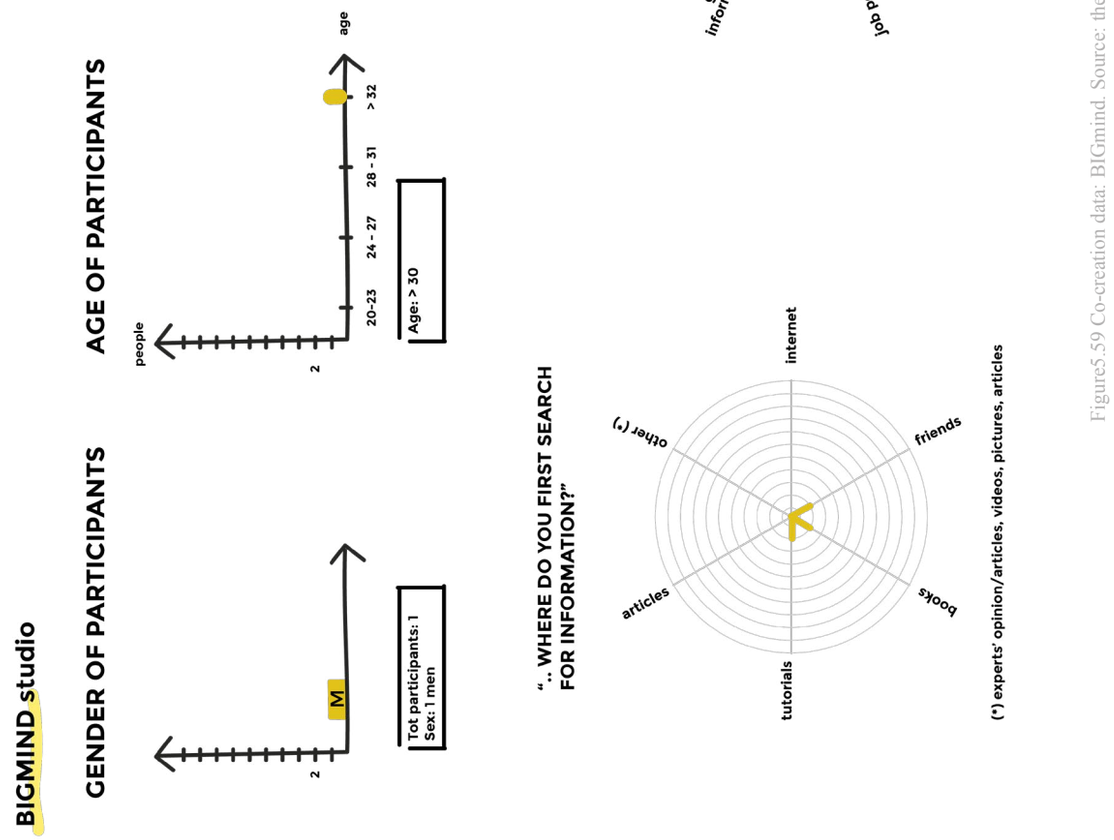


Figure5.59 Co-creation data: BIGmind. Source: the author.

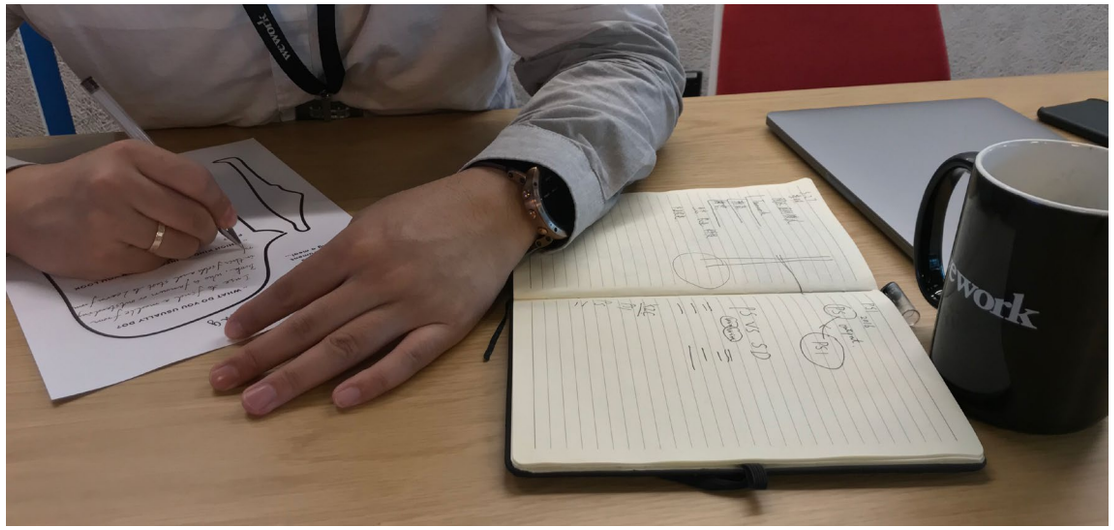


Figure5.60 First activity and user's notes. Source: the author.

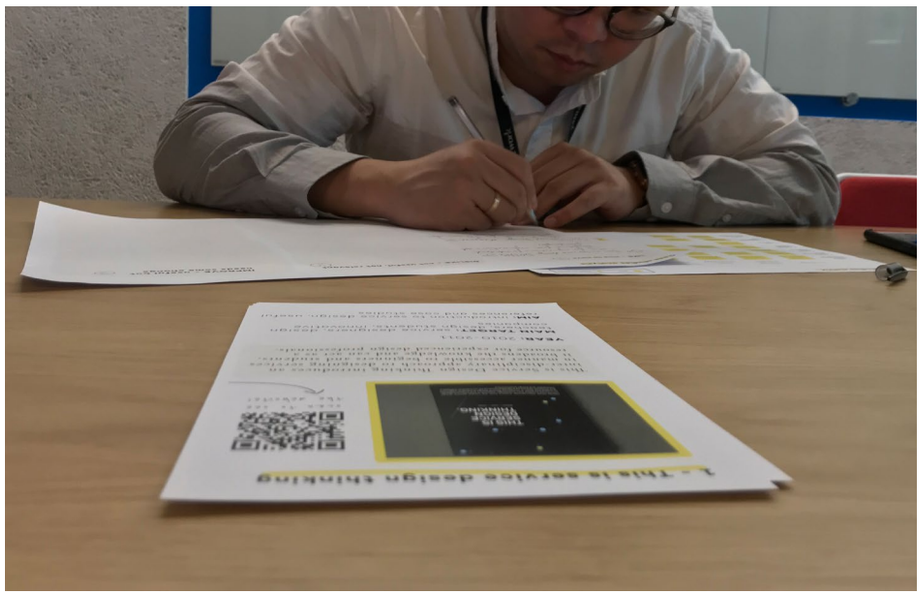


Figure5.61 Case studies analysis and evaluation: BIGmind studio. Source: the author.

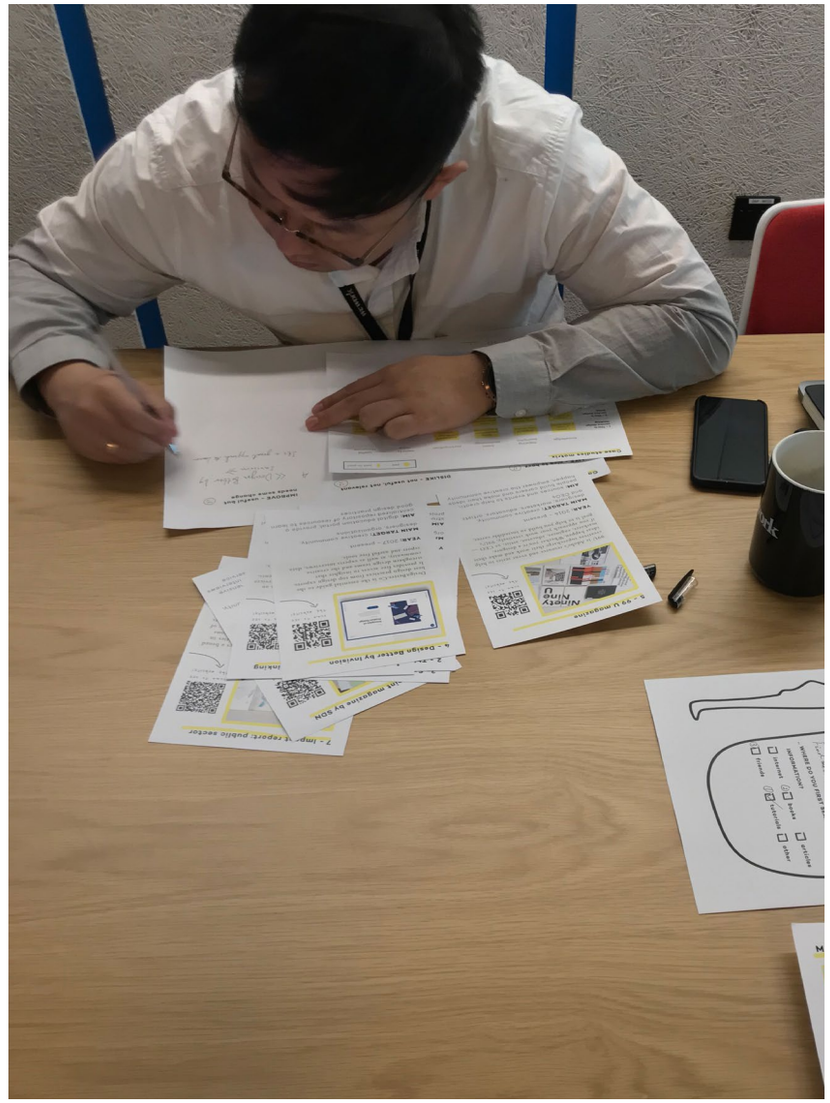


Figure5.62 Second exercise. Source: the author.

Figure5.63 Prioritization activity (part 1). Source: the author.

Figure5.64 Prioritization activity (part 2). Source: the author.

Co-creations results

The users' profile data strongly confirmed the main idea of using the digital space rather than offline channels to share the contents of the publishing.

At the end of the last co-creation, the author combined the relevant results obtained. All the participants showed a sincere interest in being involved in the process and toward the concept itself. Part of the initial design hypothesis was confirmed during the co-creations, while others changed or have been re-arranged.

The users' profile data strongly confirmed the main idea of using the digital space rather than offline channels to share the contents of the publishing. Indeed, all the participants said the internet is their first choice when looking for information about a new topic or subject. Moreover, the goal of supporting the community of practice through the proposal was in line with the mentioned importance that learning with a community of people has for many users.

Speaking about contents, comparing the final data it was clear that the first two elements to embed in the final development should have been general information and examples from existing projects, suddenly followed by problems and issues linked to this field. Many users also mentioned the relevance of presenting the several opportunities that service design and public sector could have working together (Figure5.65).

Merging the four prioritization maps, the author was able to draft the definitive hierarchy of the elements offered: **knowledge has been confirmed as the central core of the whole project, followed by the presentation of inspiring examples, useful resources and experts' voice at the same level of importance.** The last two elements were participation and basic terminology (Figure5.66).

Other additional recurrent points mentioned were the importance of graphics, a good and light structure to have easy access to all the information needed, and the explanation of how to use design methodologies in the public sector field.

Finally, the users mentioned different channels that the author hasn't initially taken under account, including Instagram, Spotify, Youtube, Facebook, Vimeo and TED's talk.

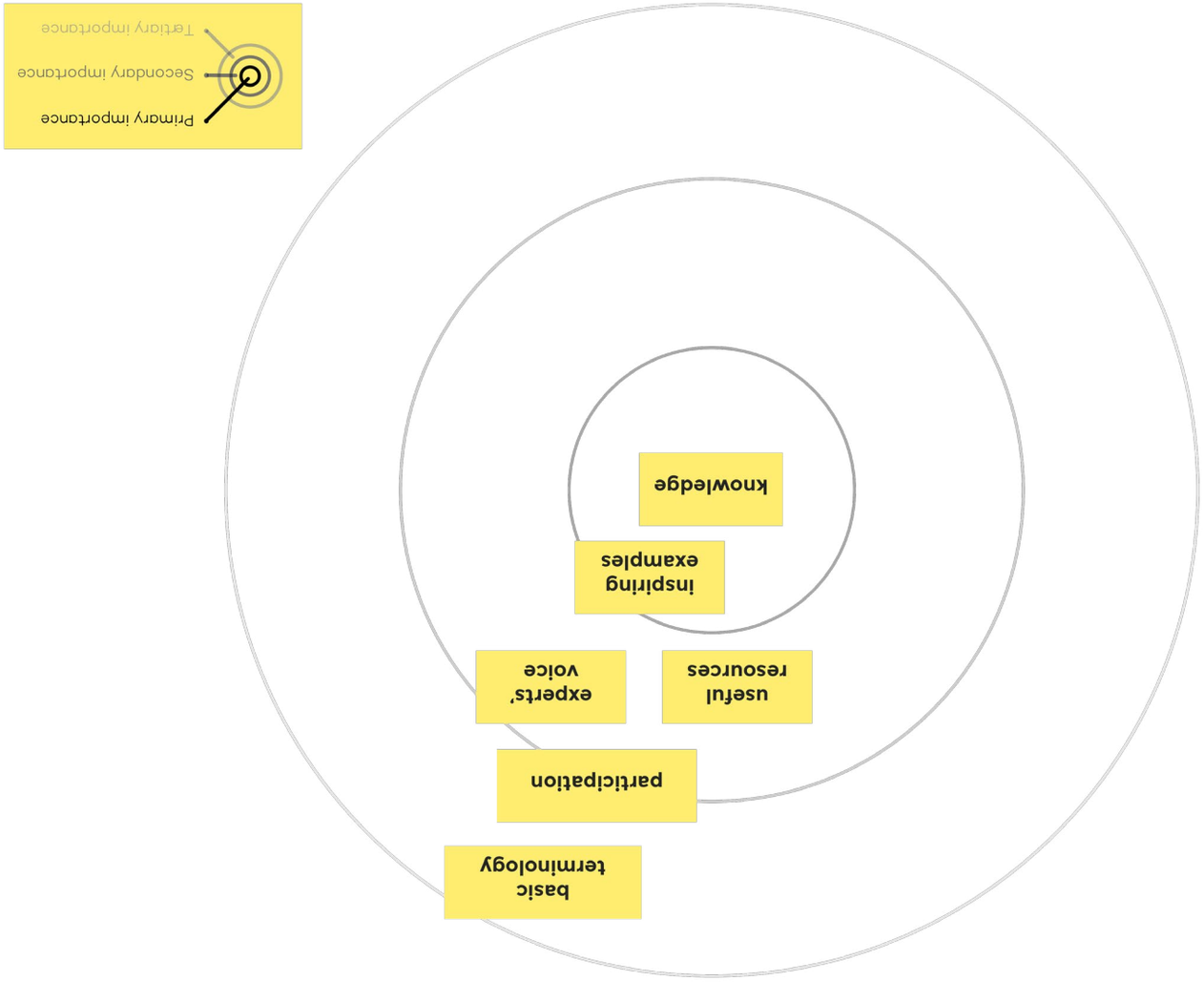
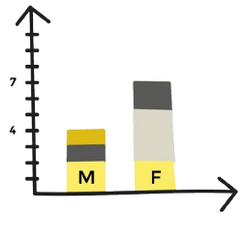


Figure5.66 Final prioritization map. Source: the author.

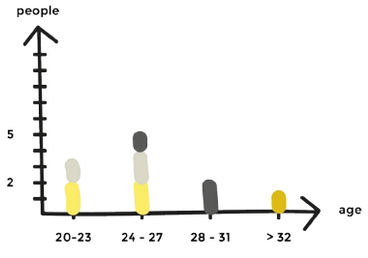
CO-CREATIONS DATA (GLOBAL)

GENDER OF PARTICIPANTS

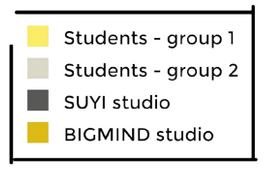


Tot participants: 11
Sex: 4 men, 7 female

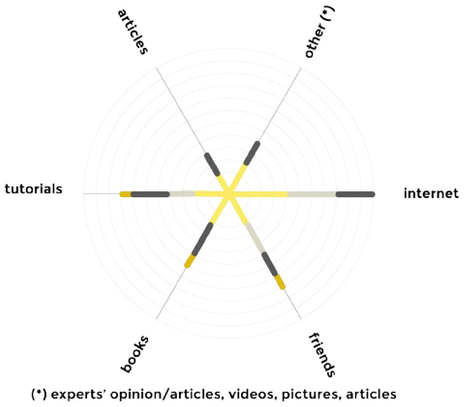
AGE OF PARTICIPANTS



Age average: 26,7



".. WHERE DO YOU FIRST SEARCH FOR INFORMATION?"



(*) experts' opinion/articles, videos, pictures, articles

".. WHAT WOULD YOU LIKE TO KNOW FIRST ABOUT THIS BROAD FIELD?"

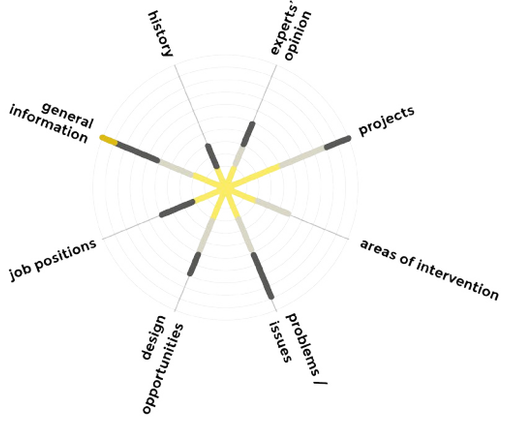


Figure5.65 Co-creation global data. Source: the author.

The co-creations represented **the best chance to improve the initial proposal**. After having summarized and organized all the findings from the three events, the author could finally compare her initial hypothesis with the several users' proposal, shaping the final idea accordingly.

5.3 Concept re-iteration

The co-creations represented the best chance to improve the initial proposal. After having summarized and organized all the findings from the three events, the author could finally compare her initial hypothesis with the several users' proposal, shaping the final idea accordingly. The author went back to the initial offering proposal and, comparing it with the results of the activities, she was able to draft the basis for the final development.

First of all, the author re-adapted the offering map. She decided to keep five out of the six primary elements initially linked to the project' offer, moving the 'terminology' part inside the macro area of 'knowledge'. This, together with the guidelines from the co-creations, allowed a clearer organization of contents structured into: general information, problems/issues, opportunities and terminology. The 'useful resources' were limited to suggested readings, templates/tools and data, with the addition of the analysis framework as support for further projects and researches. The interviews part was reviewed in order not to deliver the transcripts version, but rather a more modern audio-version, exploiting the channel of Spotify.

In terms of channels - beyond the addition of Spotify - the effectiveness of Medium for users was confirmed together with the relevance of Instagram. Fort this reason, the author decided to keep Medium as previously decided, and include Instagram as additional channel of the publishing. On the other hand, she chose to remove all the others sharing methods: Wechat, ISSUU, Linkedin, Twitter and the own platform. The last one was rather transformed into a simple digital book online, aimed at embodying the core of knowledge of the publishing (Figure5.67 and 5.68).

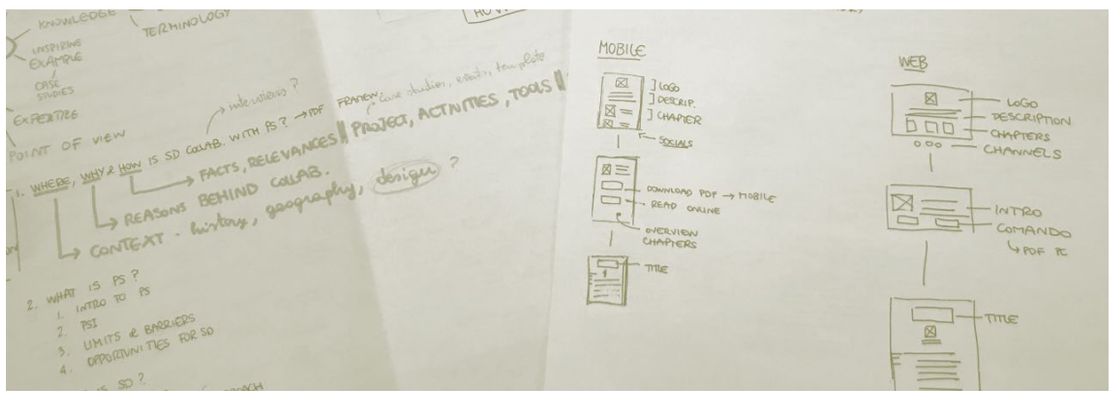


Figure5.67 Digital book sketches (part 1). Source: the author.

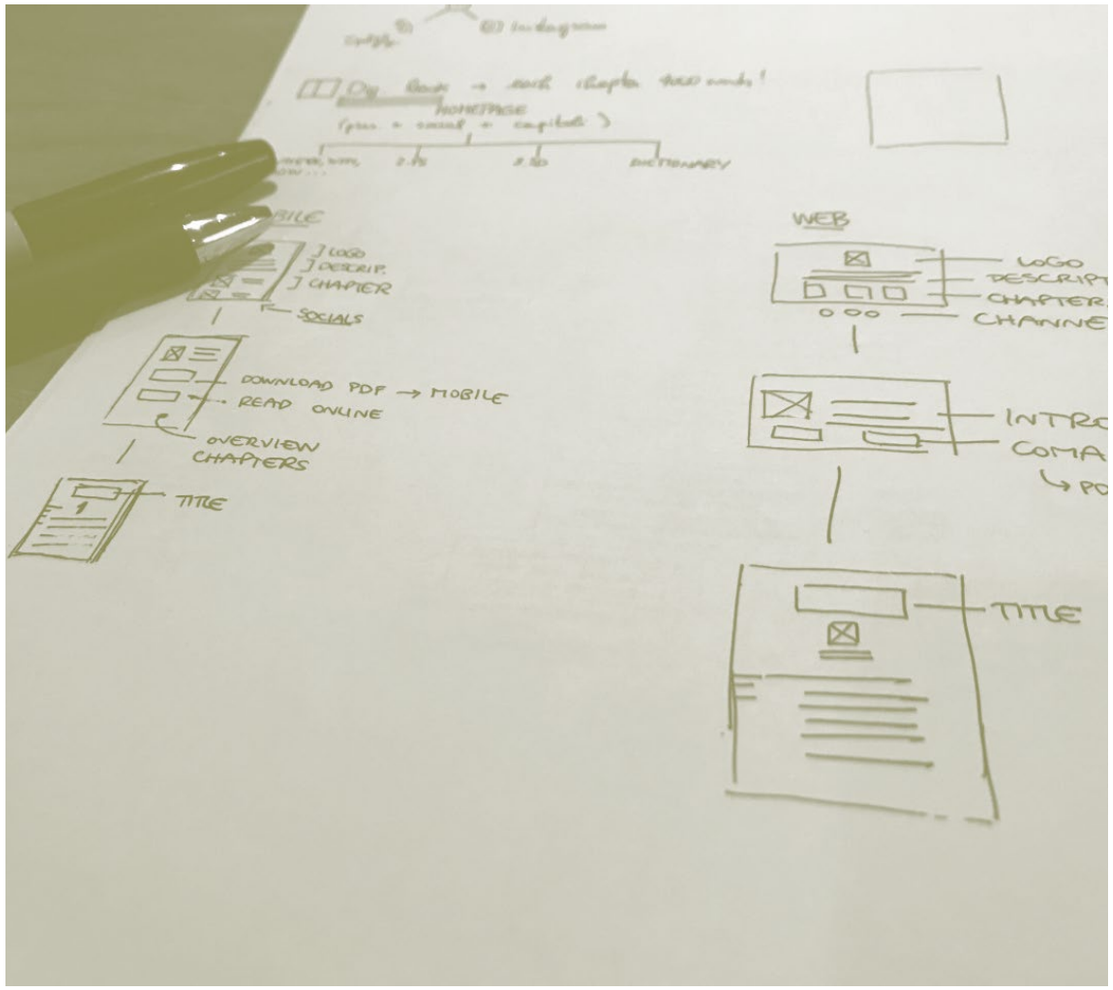


Figure5.68 Digital book sketches (part 2). Source: the author.

5.4 Prototyping

After having developed and visualized the concept, the author decided to plan a prototyping session to test the draft of the final project. Involving the users again, she decided to organize it with one of the service design studio that followed the full project development, the SUYi design studios, run by the Italian designer Gabriele Tempesta. The testing session aimed at trying the usability of the publishing, testing the first version of the digital book and the developed analysis framework, and gaining feedback from users to turn comments into further improvement for the final development.

Similarly to the process followed for the co-creation, the author first chose to look at existing theory and suggestion on how to structure the prototyping once the objectives of the activity were clear. Once again, she found useful information in the book "This is service design DOING", but this time the main insights belonged to "The field guide to human-centered design", produced by IDEO in 2015. After the theory part, the author went ahead with the design of the activity timeline and all the support material for the session. She decided to divide the prototyping into three main stages:

- a **brief recap presentation** to summarize the co-creations findings, the last project developments and to present the tools for the activity;
- the **usability test**, structured upon three different user scenarios;
- the **final user evaluation and feedback session**.

To support these three steps, the author produced a short presentation and designed a prototyping booklet to follow the successive two phases. Moreover, she also printed the 'SD and PS collaboration framework' out of transparent papers to allow users to combine the three layers accordingly to the diverse scenarios' requests (from figure5.69 to figure 5.73).

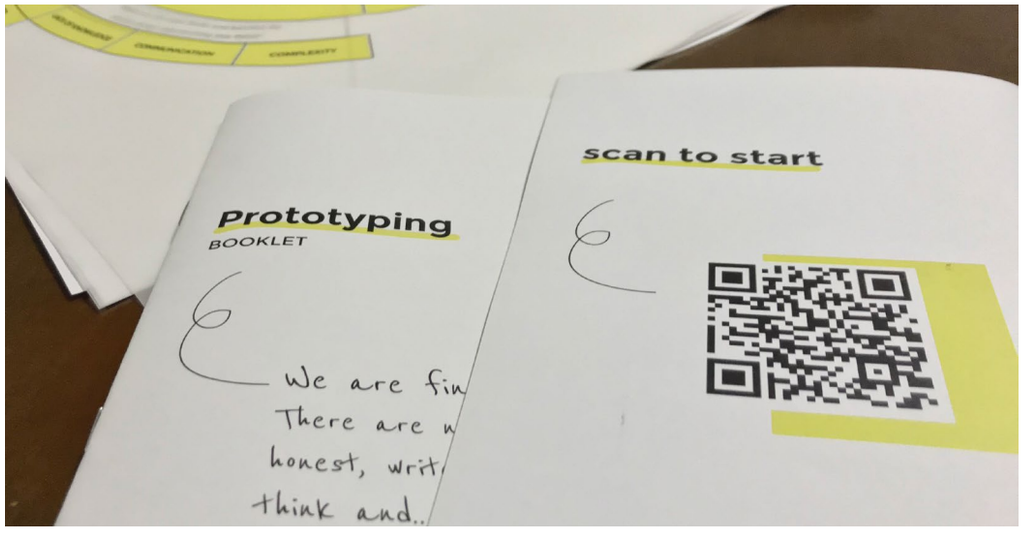


Figure5.69 Prototyping material (part 1). Source: the author.

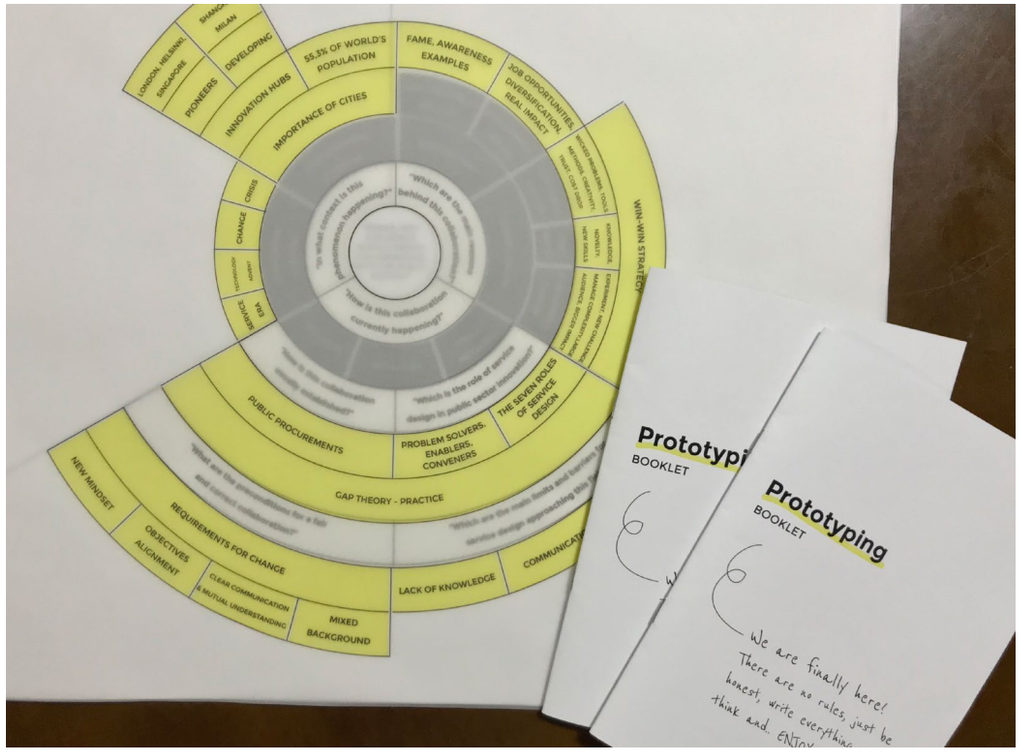


Figure5.70 Prototyping material (part 2). Source: the author.

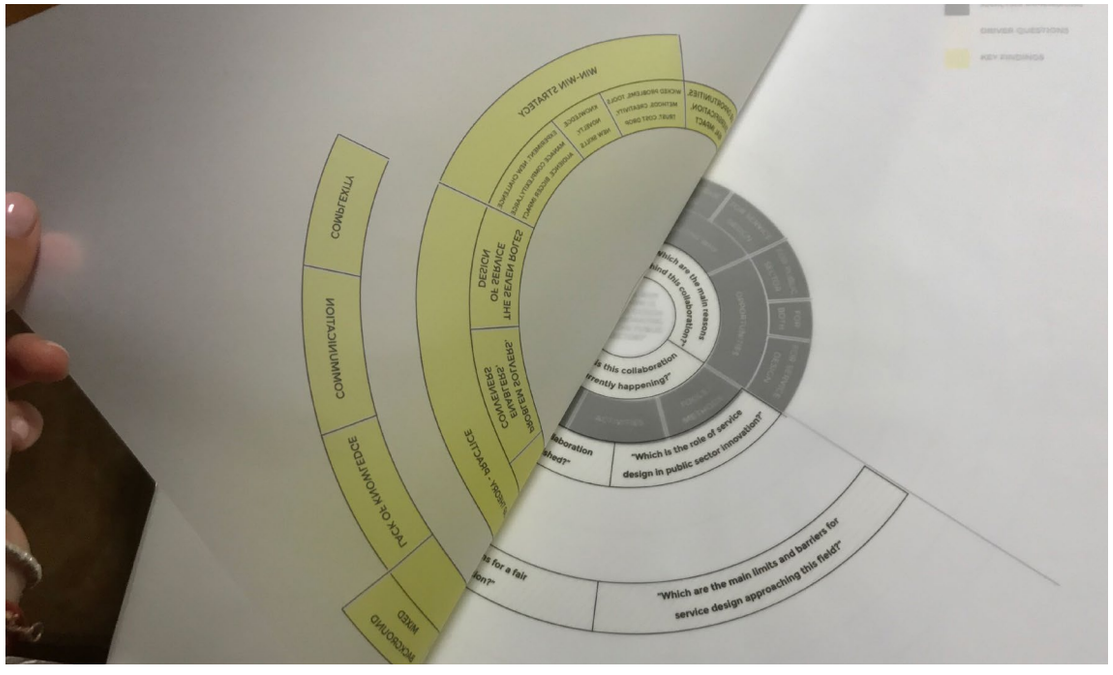


Figure5.71 Prototyping material: 'SD and PS collaboration framework' (part 1). Source: the author.

Figure5.72 Prototyping material: 'SD and PS collaboration framework' (part 2). Source: the author.

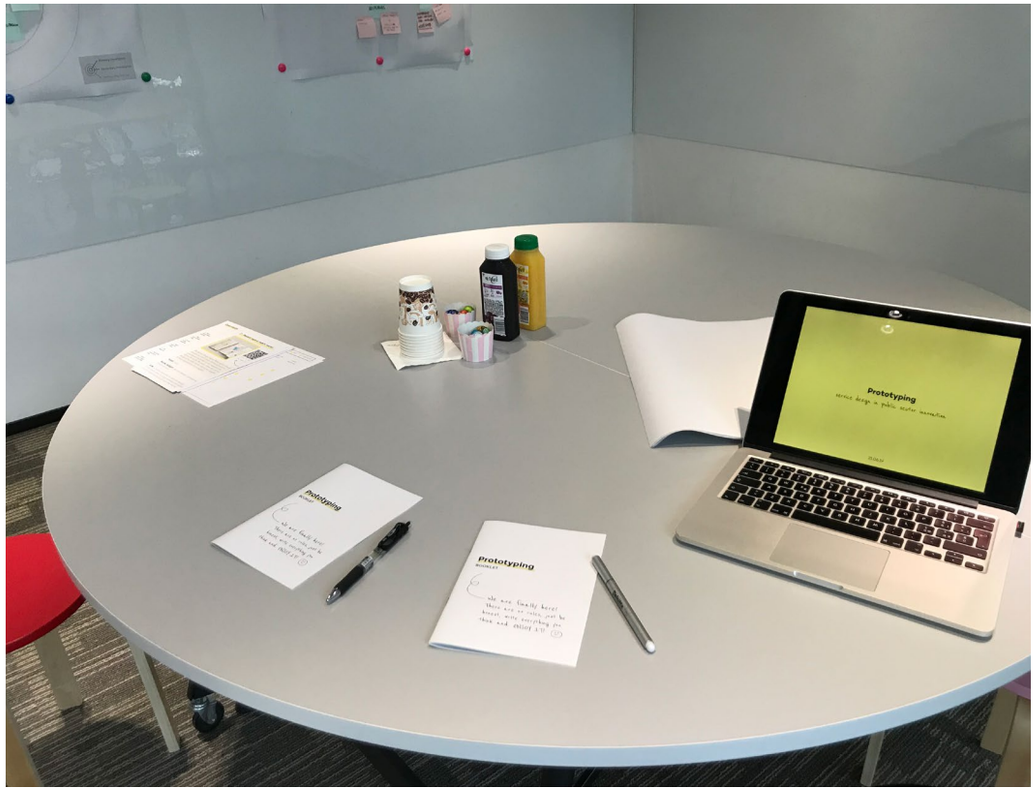


Figure5.73 Space arrangement for the prototyping. Source: the author.

The usability test leveraged on three different scenarios linked to the three categories of users belonging to the core target group: service designers, students and civil servants.

5.4.1 Usability test

The usability test leveraged on three different scenarios linked to the three categories of users belonging to the core target group: **service designers, students and civil servants.** Besides, each scenario asked users to look for information in different book' chapters and to use the framework in various configurations. These settings allowed the author not only to test the two touchpoints but also to try out the different situations in which users could use them.

Together with the scenario presentation and exercise guidelines, the author wrote in the booklet some simple questions similar to all the three activities. They aimed at understanding if users found all the information they were looking for, if they had problems in doing that, if they used the framework and if so in which way and, finally, if in their opinion something was missing. After having scanned the QR code put on the back of the booklet, the users started the usability test.

The first scenario was linked to service designers who never approached the public sector field before. The exercise asked users to search general information about the topic, specifically an introduction to the public sector field and the definition of public sector innovation. The author set timing of 15 minutes to execute the activity, told designers to use the whole analysis framework as supporting tool and read the second chapter of the digital book "What is the public sector?" (Figure5.74).

SCENARIO 1
"You are working in a service design studio and you have just been told you are going to start a collaboration with the local public healthcare department.

You don't know anything about the public sector and, before starting the project, you would like to get a **GENERAL OVERVIEW OF THE TOPIC**.

In particular you decide to search for:

1. general introduction to public sector
2. what does public sector innovation mean?

You decide to spend **15 minutes** to get these information."

RULES:

1. Use the whole framework as a support for your research
2. Take notes in the last pages if you want
3. Read the chapter "What is the public sector?"

QUESTIONS:

1. Did you manage to find all the information you were looking for?
☐ yes ☐ no

2. Would you be able to briefly describe what public sector innovation is? (You can have a look at the book or your notes again ☺)

3. Do you think something was missing from the information given? (If yes, what?)
☐ yes ☐ no

4. Was it easy to find the information you were looking for?
☐ yes ☐ no

Figure5.74 Usability test: first scenario. Source: the author.

The following scenario was instead connected to the students' environment: it asked users to imagine they were developing a thesis on the topic of the public sector innovation and they had to find information about service design approaching this field. In particular, they had to search in the texts existing opportunities for designers and connect them to the framework, using it without the "findings" part. The author also asked designers to look for information in the first chapter of the book "Where, why and how?", spending around 10 minutes to do that (Figure5.75).

SCENARIO 2
"You are a service design student who is developing a thesis about the service design-oriented public sector innovation.

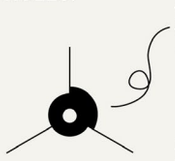
In particular, your objective is to understand **SERVICE DESIGN OPPORTUNITIES** in working in this field.

Then, you decide to:

1. look for existing opportunities
2. use a tool to support your research and write down your findings

You decide to spend **10 minutes** to get these information."

RULES:



1. Use the framework without the findings as a support for your research.
2. Complete the framework with your findings.
3. Read the chapter "Where, why and how is service design collaborating with the public sector"

QUESTIONS:

1. Did you manage to find all the information you were looking for?
☐ yes ☐ no

2. Did you use the framework? (If yes, did you find it useful?)
☐ yes ☐ no

3. Do you think something was missing from the information given? (If yes, what?)
☐ yes ☐ no

4. Was it easy to find the information you were looking for?
☐ yes ☐ no

Figure5.75 Usability test: second scenario. Source: the author.

The various scenarios aimed at understanding if users found all the information they were looking for, if they had problems in doing that, if they used the framework and - if so - in which way and, finally, if in their opinion something was missing.

The third and last scenario was the one linked to civil servants. The description on the booklet asked to search information related to the possible roles of service designers in a maximum time of five minutes but, this time, without the support of the 'SD and PS collaboration framework'. The reference chapter pointed out was the chapter 3 "What is service design?" (Figure5.76).

SCENARIO 3
"Imagine you are a civil servant and you are working for the healthcare department of your country's public sector.

You have just been told you are going to start a collaboration with a local service design agency and you don't know anything about this.

You decide to get information about:
1. **ROLES OF SERVICE DESIGN** in public sector innovation.

You decide to spend 5 min to get these information."

RULES:

1. DO NOT use the framework.
2. Take notes in the last pages if you want
3. Read the chapter "What is service design?"

QUESTIONS:

1. Did you manage to find all the information you were looking for?
☐ yes ☐ no

2. Would you be able to mention at least 4 role of service design? (You can have a look at the book or your notes again ☺)

3. Do you think something was missing from the information given? (If yes, what?)
☐ yes ☐ no

4. Was it easy to find the information you were looking for?
☐ yes ☐ no

Figure5.76 Usability test: third scenario. Source: the author.

Some pictures taken during the usability test:

Figure5.77 Usability test: download of the digital book. Source: the author.

Figure5.78 Usability test: first activity. Source: the author.

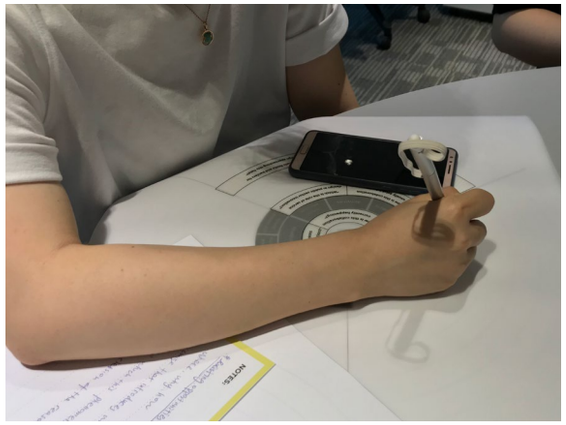


Figure5.79 Usability test: second activity (part 1). Source: the author.

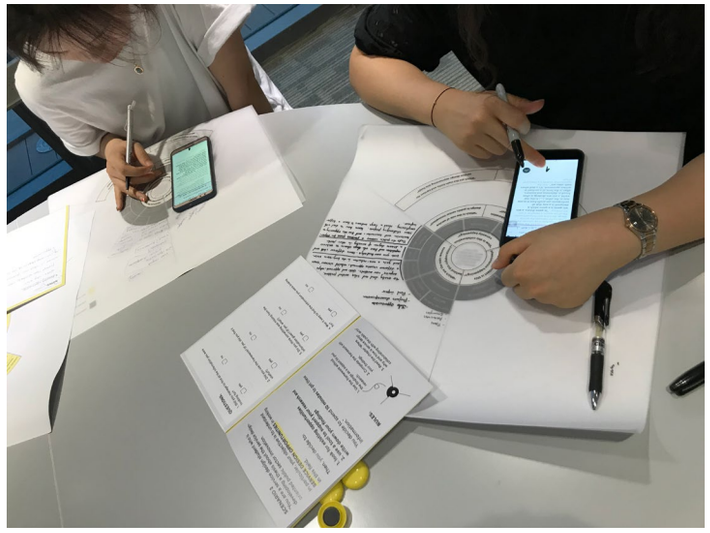


Figure5.80 Usability test: second activity (part 2). Source: the author.

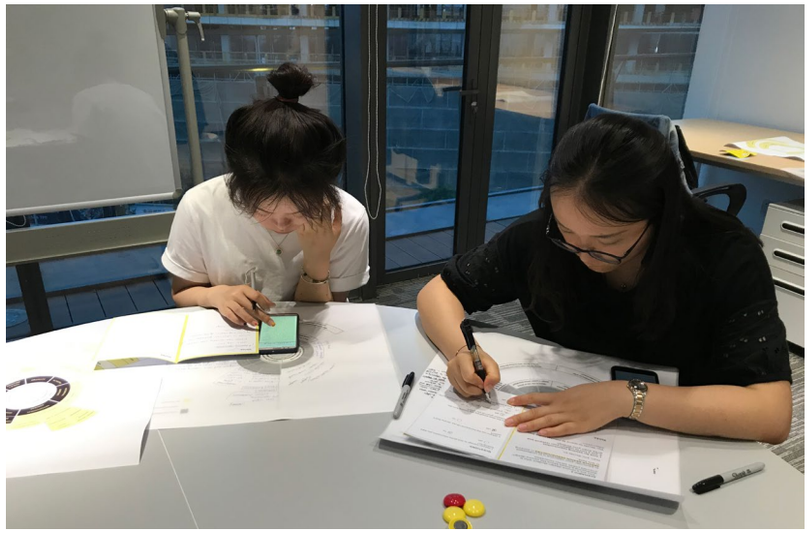


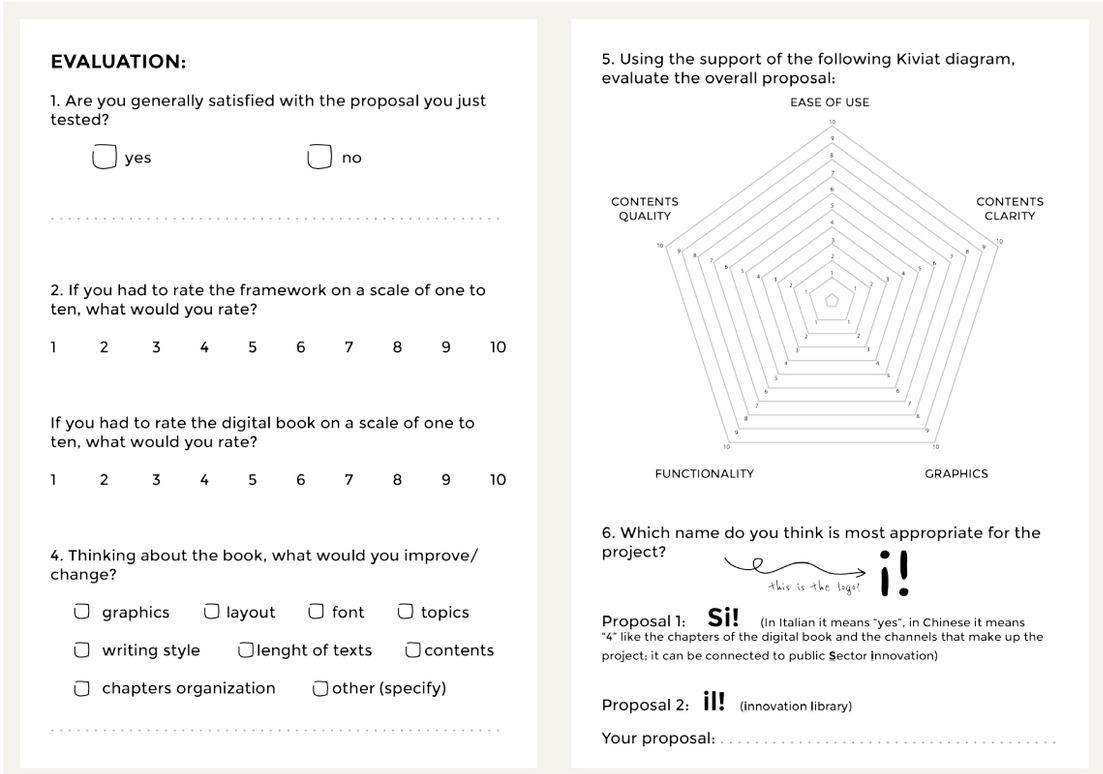
Figure5.81 Usability test: third activity. Source: the author.

Through six simple questions, the author asked the users to evaluate both the overall proposal and the two touchpoints tested.

5.4.2 User evaluation

The following phase was the user evaluation. Through six simple questions, the author asked the users to evaluate both the overall proposal and the two touchpoints tested.

To do that she also used the support of the Kiviat diagram that, as seen in the chapter about the case studies analysis, aims at evaluating different aspects of a product. In particular, the author asked to assess the ease of use, contents clarity and quality, functionality and graphics of the overall proposal. Finally, the sixth question was linked to the project naming: the author proposed two selected proposals to make users give their opinion on it, validating or changing the idea (Figure5.82).



EVALUATION:

1. Are you generally satisfied with the proposal you just tested?

☐ yes ☐ no

. . . . . .

2. If you had to rate the framework on a scale of one to ten, what would you rate?

1 2 3 4 5 6 7 8 9 10

If you had to rate the digital book on a scale of one to ten, what would you rate?

1 2 3 4 5 6 7 8 9 10

4. Thinking about the book, what would you improve/ change?

☐ graphics ☐ layout ☐ font ☐ topics

☐ writing style ☐ lenght of texts ☐ contents

☐ chapters organization ☐ other (specify)

. . . . . .

5. Using the support of the following Kiviat diagram, evaluate the overall proposal:

6. Which name do you think is most appropriate for the project?

this is the logo! ¡!

Proposal 1: **Si!** (In Italian it means "yes", in Chinese it means "4" like the chapters of the digital book and the channels that make up the project; it can be connected to public Sector Innovation)

Proposal 2: **¡!** (innovation library)

Your proposal: . . . . . .

Figure5.82 User evaluation: questions. Source: the author.

Some pictures taken during the the user evaluation activity:

Figure5.83 User evaluation: users' feedback. Source: the author.

Figure5.84 User evaluation: final discussion (part 1). Source: the author.

Figure5.85 User evaluation: final discussion (part 2). Source: the author.

Both the usability test and the user evaluation proved the ease of use of the proposal. The assessment of contents was also satisfying, both in terms of quality and clarity, meaning that the designers found the information clear and useful.

5.4.3 Prototyping results

The two exercises represent a perfect way to gain users opinion toward the proposal and move forward the final development. Both the usability test and the user evaluation proved the ease of use of the proposal. The assessment of contents was also satisfying, both in terms of quality and clarity, meaning that the designers found the information clear and useful.

The functionality was, accordingly to the users, a little bit low, but during the final discussion, the two service designers agreed on the fact that is was linked to the prototype-stage of the proposal. Graphics and layout were both to improve accordingly to the users: indeed, they said that having a lot of information also linked to a complex topic, it would be necessary to alternate written parts and nice graphics to lighten reading and learning of the topic. Also, the layout needed to be enhanced to distance more different chapters and provide a better contents organization. Finally, users suggested making texts shorter to provide a quick and fast reading particularly for practitioners and civil servants that could possibly have very little time to spend on the topic learning. Other single positive evaluations pointed out the fact that users found the digital book a clever and useful instrument, and, together with the framework, they had no problems in finding the information needed. The digital book is accordingly to them also a great choice to have constant access to information in a quick way and to gain directions on how to approach the public sector field. Moreover, users liked the logo proposal and the prototype booklet' design and style.

On the other hand, other aspects to improve or change were:

- **find a faster way to look for needed information** (i.e. images or highlighted keywords);
- **put quotes /reference of books by the side of the text** (in the web version). "If you want to know more you can connect to books directly";
- **make texts shorter**, to make the process of finding information even easier;
- **put a middle step between the in-text case study and the external link** (maybe a case study card?) and put pictures of projects and existing examples;
- **connect more the digital book and the framework**, integrating the two touchpoints in a better way;
- make the digital version on the framework **more interactive**.

6 Final design

“il” is a multichannel publishing aimed at triggering and encouraging future collaboration between service design and public sector, filling the lack of knowledge. The system aims at sharing the same contents and information but exploiting diverse methods and ‘forms’. The main offer of the proposal can be divided into five primary elements: knowledge, inspiring examples, useful resources, participation and experts’ voice.

6.1 Introduction

"il" is a multichannel publishing created by a small collective of designers passionate about public sector improvement and aimed at filling the lack of knowledge while triggering and encouraging future collaborations between service design and public sector. By using four different digital channels, it intends to support the establishment and growth of a community of practice around the topic of public sector innovation, disseminating languages, methods and approaches. In addition, the project seeks to involve service designers and civil servants in an innovative and participatory learning journey.

The system is composed of five main touchpoints: a digital book online with the embedded 'SD and PS collaboration framework', a blog on the platform Medium, a reference Instagram account and a podcast collection of experts' interviews on Spotify (Figure6.1).

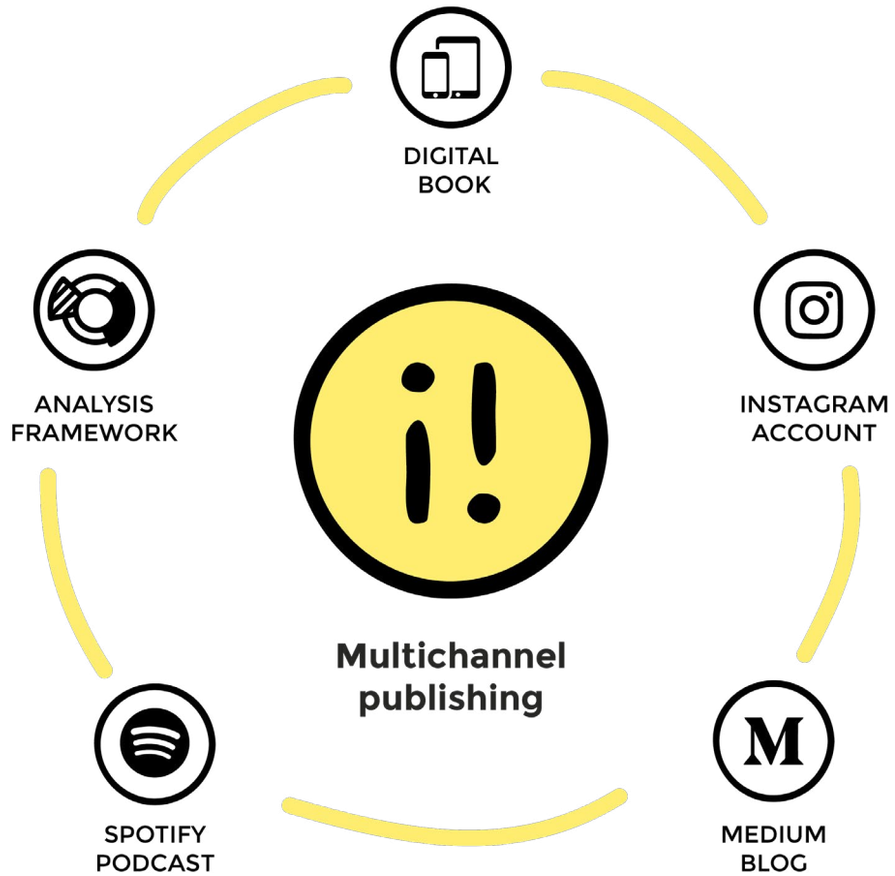


Figure6.1 il: multichannel publishing. Source: the author.

6.2 Design objectives and values

"il" has been designed together with end-users to provide all the basic information necessary to know the other's field. The project principal objectives are:

- Involve actors in a participatory learning system, both in the design phase of the publishing and after its launch.
- Leverage on education to trigger action and future collaborations between the two fields.
- Provide useful resources to facilitate and support the learning process.
- Share existing examples to inspire new innovative solutions for the public sector.
- Enhance the "community of practice" around the topic of public sector innovation.

The project addresses various actors (as we will see in the following chapters) and for each one of them, it has unique value propositions. All the actors belonging to the core target group can have at their disposition **a digital, open source and accessible tool to learn basic information related to the topic.** Service design students can get in touch with a new field, where they can also look for internships and possible working experiences. Service design practitioners who are starting now working with the public sector can speed up their learning process about the ambit, and have all the general key information at hand. Moreover, they can have a look at real projects and understand which methods did the other designers used and how they adapted the service design principles to the field. Finally, innovative civil servants have the unique opportunity to quickly learn service design principles, methods and approaches and have a look at existing solutions.

For what concerns the secondary stakeholders, public sector innovation experts, whether they are designers or not, can find in the multichannel publishing an effective way to make their work known and share their experience. Research centers, universities and no-profit organizations that can potentially fund the project and care about its

"il" has been designed together with end-users to provide all the basic information necessary to know the other's field.

maintaining, can exploit the publishing to collect updated data about the phenomenon and monitor the interest of users toward the topic.

Also the tertiary actors benefit from the publishing. Even though political science students are not part of the core target audience, since they are not directly interested in the topic, they can get in touch with the project for instance through university channels. For them "il" represents the unique possibility to know the new field of service design and learn something new related to the public sector innovation. Local government can benefit from the proposal both directly and indirectly: in the first case, they can exploit the publishing to get inspiration for innovative public sector solutions. On the other hand they can also gain more innovative proposal when they launch public projects calls. Finally, all the providers connected to the four channels, can collect useful data that they can use to improve their offer.

6.3 How it works

The system aims at sharing the same contents and information but exploiting diverse methods and 'forms'. The main offer of the proposal can be divided into five primary elements: **knowledge, inspiring examples, useful resources, participation and experts' voice.**

Knowledge represents the core of the design solution and the fuel of the whole learning system behind the publishing. This part will provide general information about the phenomenon of the public sector innovation, an introduction about both service design and public sector field, problems and issues connected to the topic, the various opportunities areas and an useful bank of terms related to the two fields. The second section of the offer is linked to the case studies that will be embedded into the texts of the digital book and presented through the Instagram account. They will be presented using a descriptive structure designed to facilitate their understanding and learning methods, roles and approaches that designers embraced to reach the success. The publishing will include some useful resources for the community of practice, that could be linked to the 'shared repertoire' explained in the theory part (see Chapter5). Namely, suggested readings and focus books, existing templates and tools directly linked to the publis sector innovation and the designed analysis framework that can be used in different ways accordingly to the layers combination (as explained in the Chapter4). This last element will be directly embedded inside the digital book, but it will be also possible to download it as an open source support tool. The publishing participation is linked to the users' involvement both during the design phase, thanks to co-creation workshops and prototyping tests – as happened during the development of this thesis- and after the publishing launch, exploiting the open platform Medium. Finally, the experts' experience, expertise, points of view and opinions will be part of the experts' voice, element that will leverage on the Spotify podcast (Figure6.2).

The main offer of the proposal can be divided into five primary elements: **knowledge, inspiring examples, useful resources, participation and experts' voice.**

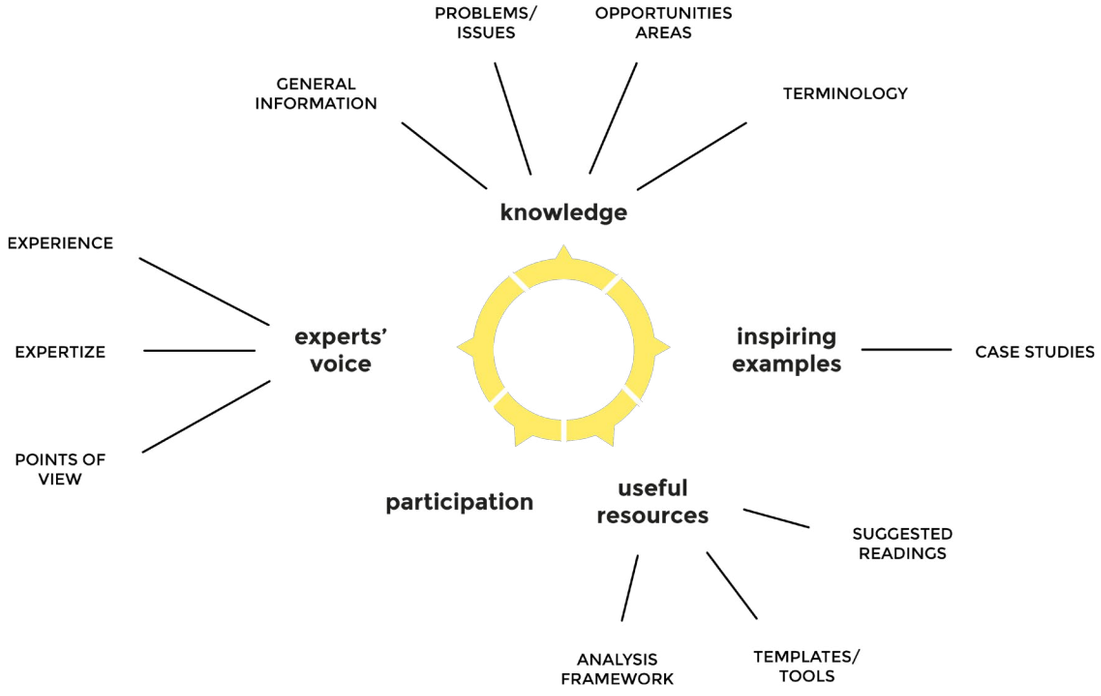


Figure6.2 il: offering map. Source: the author.

This offer will be satisfied by using the four channels in different ways. Therefore, while the knowledge will be shared across all the four, the other elements will exploit the other digital touchpoints differently. Case studies will be presented in the digital book and on Instagram, the resources will be embedded inside the texts of the book and Medium articles and linked to the Instagram account' stories. Users can participate writing articles and sharing stories on Medium, suggesting key terms for the PSI dictionary and talking directly to the author through the Instagram account direct messages. Finally, experts experiences will be shown mainly on the Spotify's podcast and in the Instagram account (Figure6.3 and Table6.1).

	knowledge	inspiring examples	useful resources	participation	experts' voice
DIGITAL BOOK	- Digital book with three chapters - Analysis framework - PSI dictionary	- Embedded projects inside the texts (case studies table and link)	- Analysis framework - Suggested readings and templates/ tools linked to the texts	- Possibility to suggest new terms for the PSI dictionary	
INSTAGRAM ACCOUNT	- Book chapters into the account' highlights - Key data in the post	- Picture and short description in the highlights - Pictures in the post	- Saved as collection into the account' highlights - Short presentation and quotes as post	- Instagram direct to get directly information about "il" and the whole project	- Experts' presentation in the account'post - Quotes shared as post
MEDIUM BLOG	- Articles from experts and people interested in the topic		- Suggested readings and templates/ tools linked to the texts	- Call to write articles and share stories about the topic	- Quotes embedded inside texts
SPOTIFY PODCAST	- Experts' experience and knowledge				- Podcast with experts interviews

Table6.1 Channels offering matrix. Source: the author.

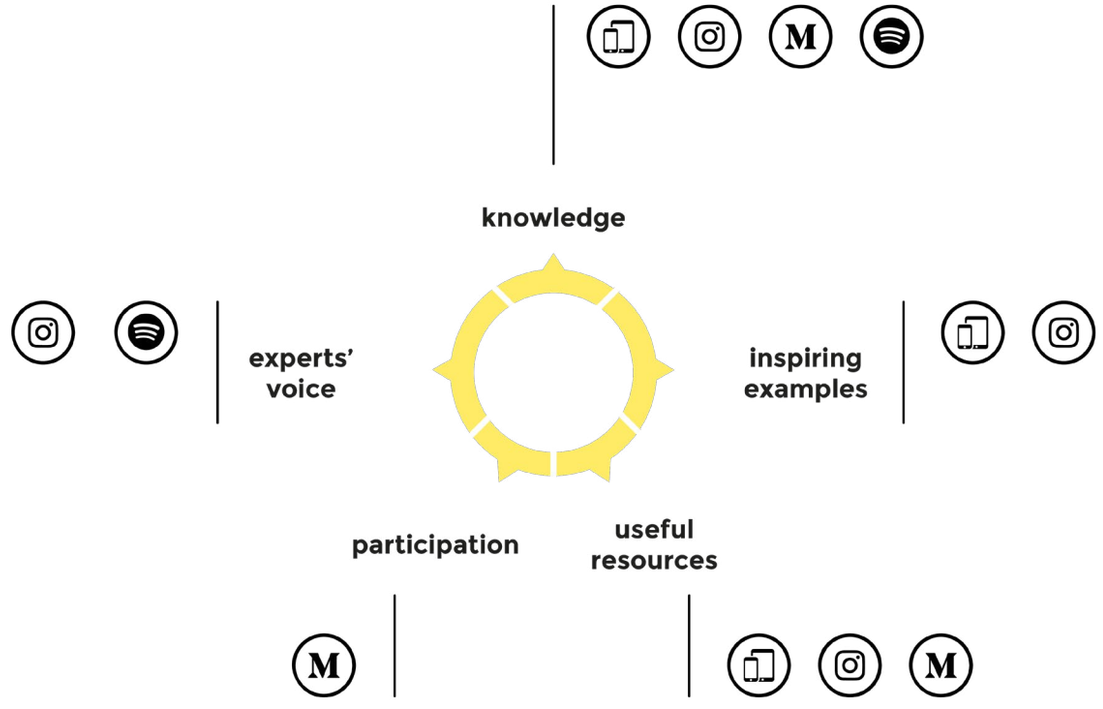


Figure6.3 Offering map: channels. Source: the author.

The four channels have been carefully selected after the author's analysis and thanks also to the contribution of co-creation participants and their feedbacks. They target users in different ways leveraging on their key peculiarities, as shown in the Figure6.4.

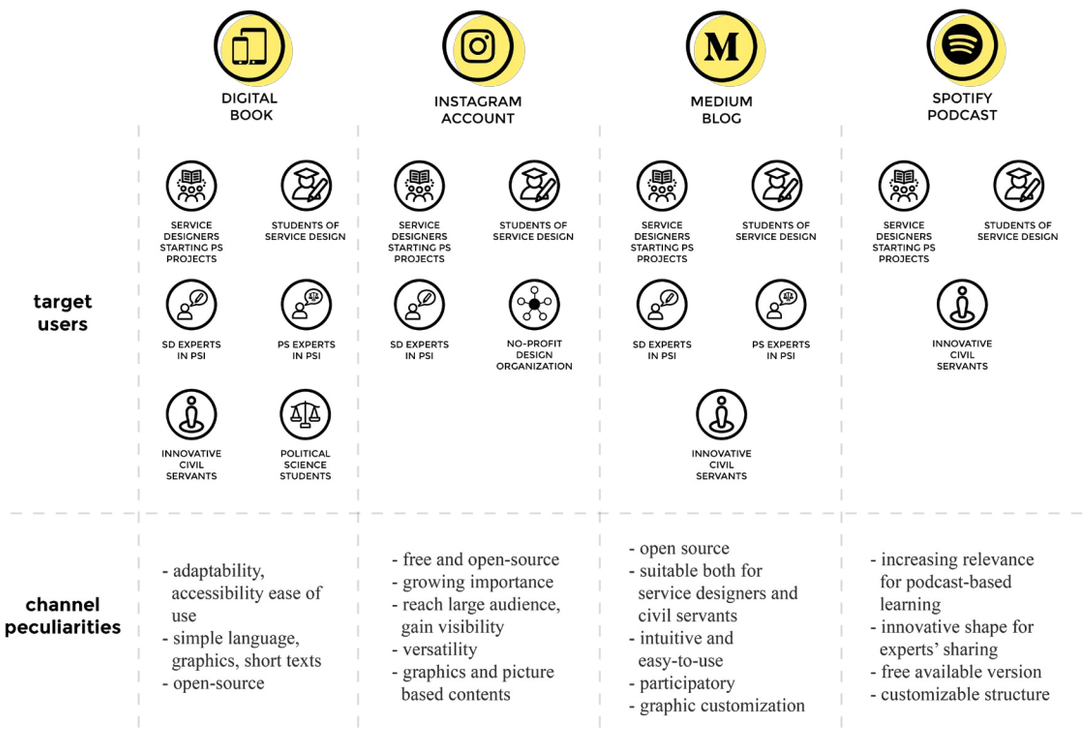


Figure6.4 Channels analysis. Source: the author.

The digital book is addressed to all the actors of the core target group and also to the public sector innovation expert. In fact, its adaptability, accessibility and ease of use make it a suitable touchpoint for different kind of target audience. Moreover, the simple language style together with the graphics and the short texts, allow also not really expert users, like the political science students, to handle it.

The well-known social media Instagram mainly target a young audience but is a fact that more and more service design-related activities and project are finding their space on the platform. Moreover, Instagram is gaining a lot of importance in the last year and this allows "il" not only to reach a large audience, but also in possibly gain visibility and attract other actors from the service design community.

In addition, it has been chosen for its versatility and the fact that it is perfect to show all the contents of the publishing in a different way, using more graphics and pictures-based elements. Moreover, the texts contained in the book, could be shared in the highlights of the account to be immediately visible by the visitors of the page and be read in an innovative way.

Despite being quite new, Medium represents the best web space where to bring together people from different fields. Indeed, being completely free and accessible, more and more users are starting to share their own stories and experiences. This makes it the perfect participation space for the publishing, that allows all the people who belongs to the community of practice around the topic to share their knowledge and experience. The platform is really intuitive and easy to use and the presence of keywords make the articles easy to be discovered. In addition, the channel allow also a certain degree of personalization that allowed the author to customize the Medium account and present graphics contents in the page.

Finally Spotify has been chosen to give a different form to the experts' contribution, following the recent trend of the podcast-learning. Indeed, particularly among the design community, the channel is gaining an increasing relevance when it comes to learn new subjects and get quick information about specific topic. Unfortunately, is not completely free, but there is an available free version that just involves advertisements during the audio playback. On the other hand, the design of a podcast allow a certain degree of freedom in terms of structure, something that allows to organize topics by season, topics or chronological sequence.

In order to get a better understanding on the project functioning and how the channels are linked among them, is fundamental to gain a clear overview about the complete structure. For this reason, the author is going to present one by one all the four channels and how they work in the following paragraphs. The figure below represents instead the whole structure (Figure6.5).

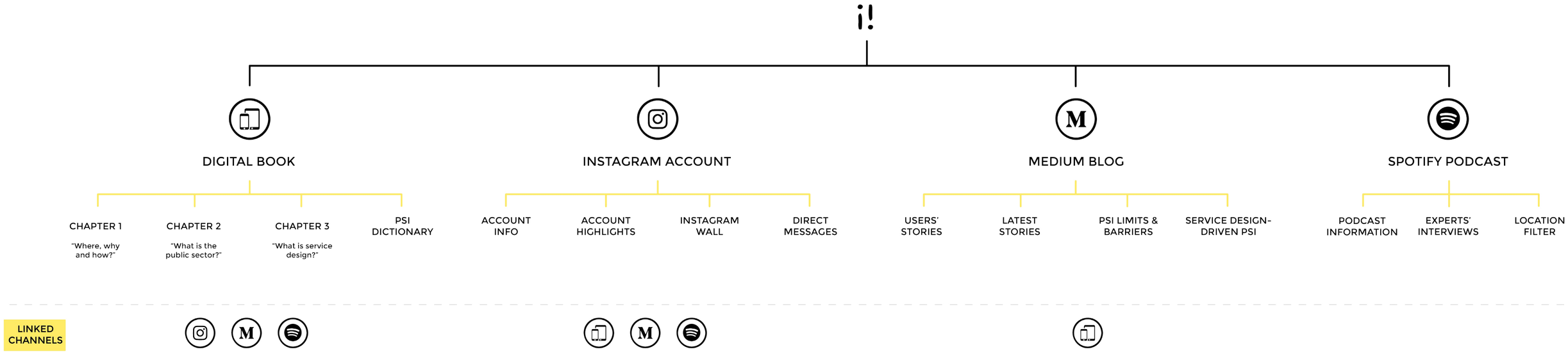


Figure6.5 il: project structure. Source: the author.

The whole channel is structured upon four main sections: **three chapters readable online and the PSI dictionary.**

6.3.1 Digital book

The digital book represents the principal touchpoint of the multichannel publishing. It provides all the learning materials gathered and the direct link to all the other channels of the publishing. Moreover, it also allows the download of the analysis framework and the pdf version of all its chapters. The book has both the desktop and the mobile version, in order to make the reading easy-to-access from all the types of digital devices (Figure6.6).

The whole channel is structured upon four main sections: **three chapters readable online and the PSI dictionary**. In addition the "homepage" links users directly to Instagram and to the Spotify podcast and directs them to the articles submission for the blog on Medium

Despite the different contents, **the first three chapters have in common a similar length of text** (about 3500 words), **aimed at containing the learning time within 10-15 minutes of reading.** In fact, the four sections of each, want - as already mentioned - to present a basic knowledge of each topic addressed by focusing on attracting the attention of readers within the limit of the so-called 'reading attention span'. According to the latest studies on the subject, **the maximum time of attention of an average adult is 15 minutes or less, because our brains after that time may lose the focus toward the topic** ('Attention span', 2019). For the same reason, leveraging on the advantages of using a book in digital format, the texts of the three chapters alternate with external links, useful resources and other supporting materials that make learning a more interactive and interesting process.

The first three chapters have in common a similar length of text, aimed at containing the learning time within 10-15 minutes of reading.

Scan the QR to navigate the book

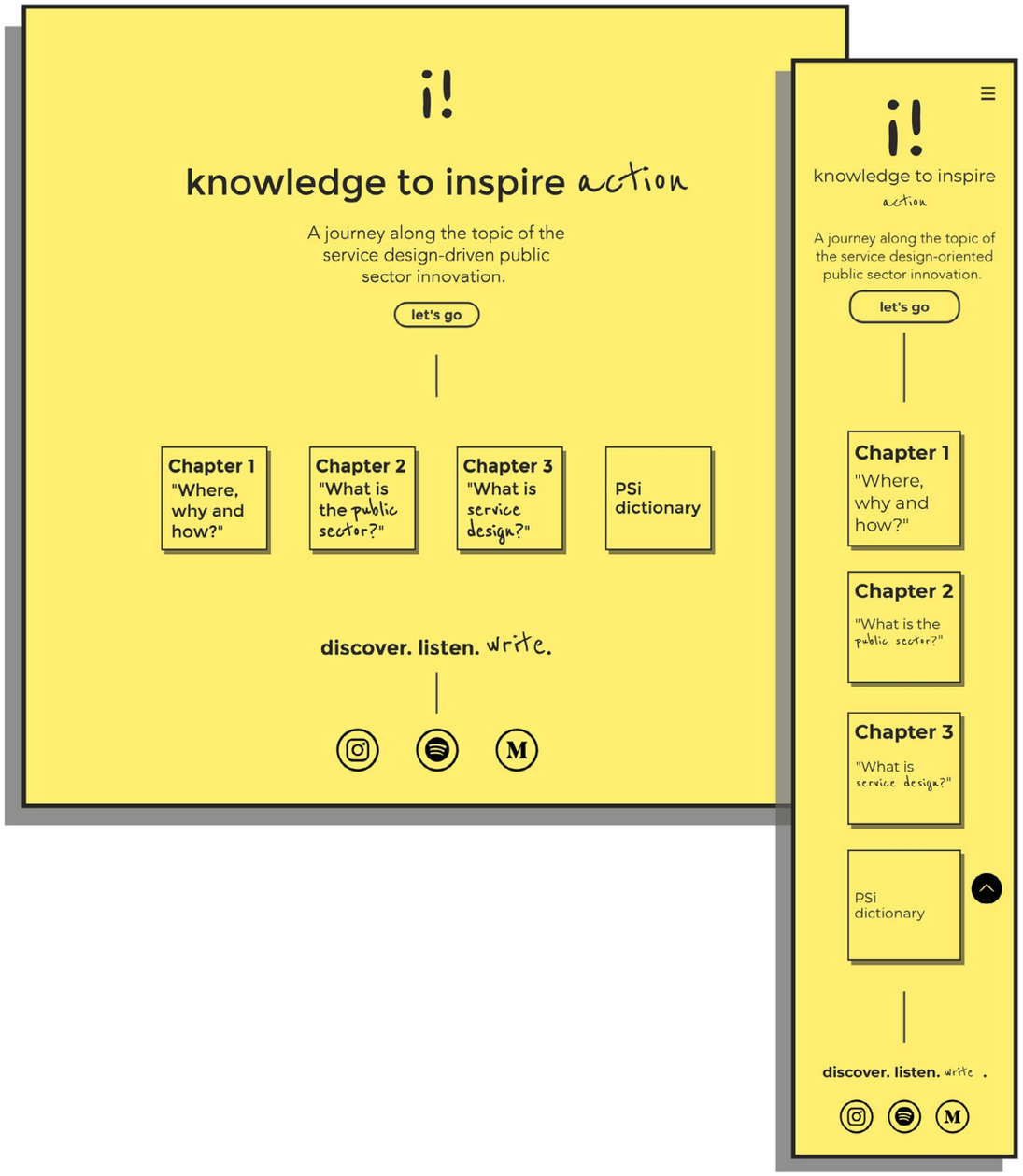


Figure6.6 Digital book: desktop and mobile version. Source: the author.

The first chapter of the book regards the topic of the **"where, why and how" service design is collaborating with the public sector**. The first part introduces the research that the author carried on, a general overview upon the topic and presents the **'SD and PS collaboration framework'** developed, explaining how to use it and how to approach the different layers. In fact, this section allows users to download the pdf version of the framework to make them exploit it as a useful tool during projects and researches related to the topic of the public sector innovation (as explained in the Chapter4). The "where" dimension explains the context analysis carried on, presenting also some suggested readings as an useful resource for deepening the knowledge related to this area. The third part explores the reasons behind the collaboration between service design and public sector field and is directly linked to the experts' interview collected in the Spotify podcast. The last section is the one of the "how" dimension, where users can discover case studies related to project, activities and tools/methods of the service design-driven public sector innovation, together with the different roles that designer can play and the barrier that this collaboration is facing right now. Indeed, the whole structure of the chapter, follows a simplified version of the framework' one, to give users from the two fields a satisfying overview of the ongoing phenomenon together with resources to deepen the research (Figure 6.7).

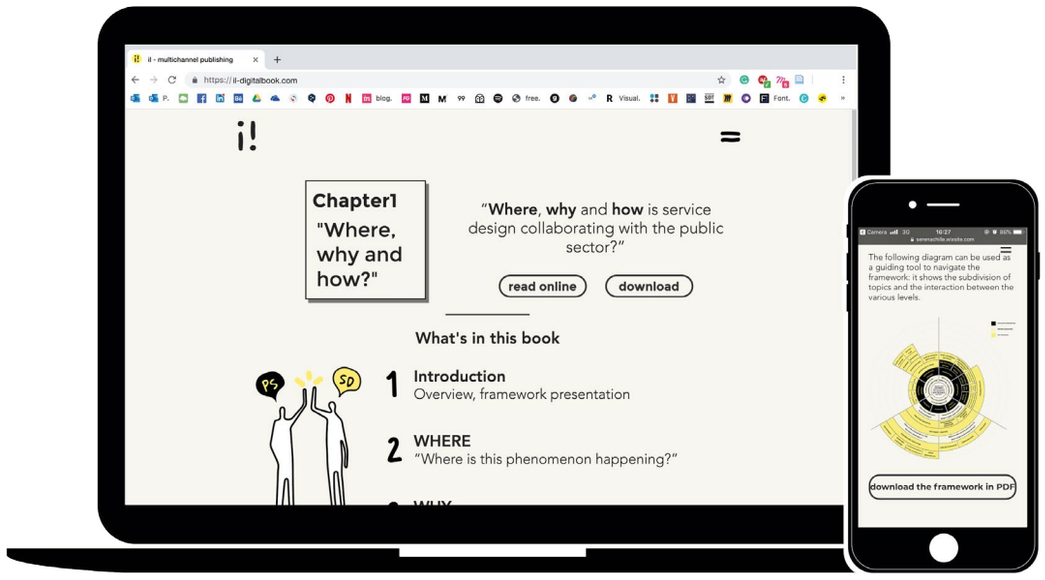


Figure6.7 Digital book: chapter1. Source: the author.

The chapter number two **aims at giving service designers a general overview about the public sector.** This is done in four sections. A first general introductory part that presents useful definitions, principles and areas of intervention and is linked to external links embedded in the text as well as suggested readings selected by the author. Similarly, also the following part linked to innovation links readers to interesting book and articles about the same topic. This section explains the reasons why governments are seeking for change and transformation and the different types of innovation that exist. The third part embodies the presentation of the main limits and barriers toward changes and is connected to the Spotify podcast to get an idea about what experts think. Finally, the fourth point shows several opportunities that service design could have approaching this field, highlighting its role and the different chances it could have. As the previous one, also this section is connected to the channel of Spotify, but also to the analysis framework (Figure 6.8).

Figure6.8 Digital book: chapter2. Source: the author.

“What is service design?” is the title of the third chapter that, similarly to the previous one, **aims at giving an overview about service design, its practice and approach.** This is, however, addressed to the other branch of users, namely that of the civil servants.

Also organized in four parts, the chapter first introduce the field of service design using key definition and presenting its principles, also trough suggested readings. The following part is the one linked to service design approach, methods, tools and processes and allow the users to discover existing examples by using some case studies from Chapter 1. The last two sections focus on to the role of service design and the opportunities that the public sector can have by collaborating with it. They both refer to the interviews on Spotify and the last one also to the framework developed by the author (Figure 6.9).

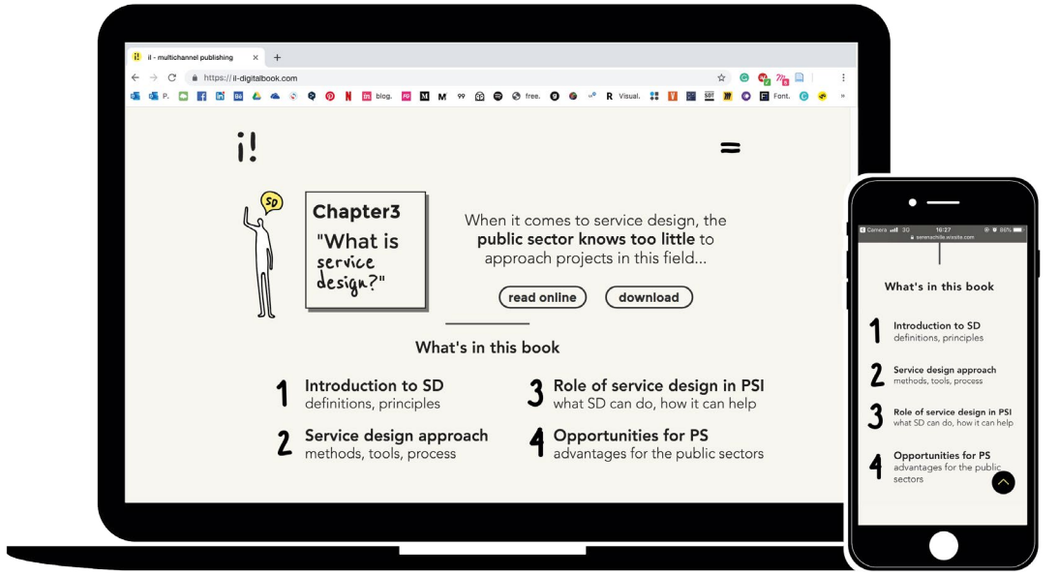


Figure6.9 Digital book: chapter3. Source: the author.

Finally, the last key area of the digital book is the one aimed at **presenting key terms connected to the service design-driven public sector innovation.** Also this section, as the previous one, is available in the pdf format and both the online and offline versions provide useful links for many key terms to deepen the knowledge related to the specific topic. Moreover, the dictionary allow users to participate in its development thanks to the possibility of suggesting new words to be added to the list (Figure 6.10).

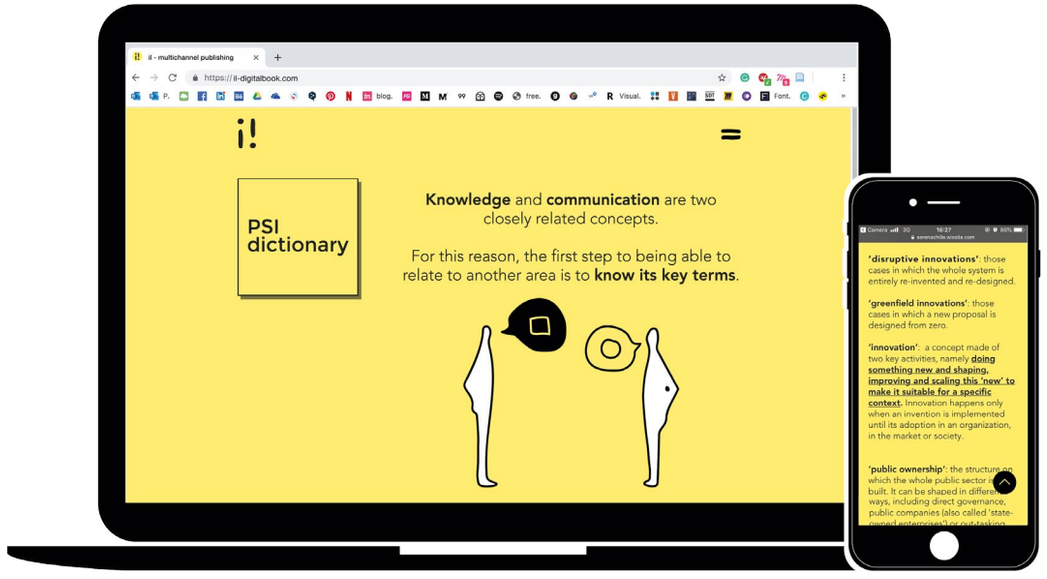


Figure6.10 Digital book: PSI dictionary. Source: the author.

The entire structure of the digital book can be visualize in a sort of navigation tree as shown in the Figure6.11.

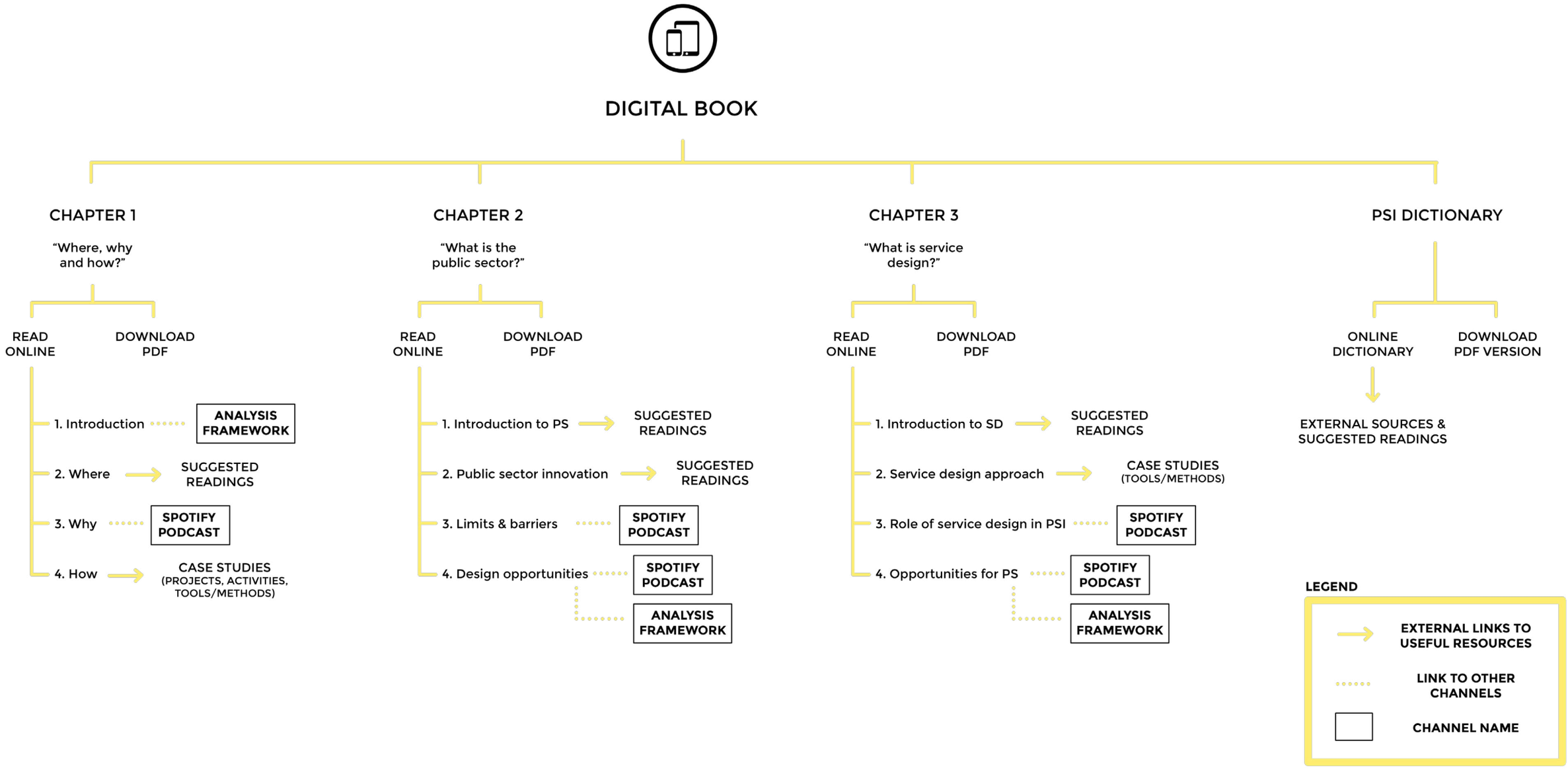


Figure6.11 Digital book: structure. Source: the author.

Instagram is used as a channel to spread knowledge in a more graphics/pictures oriented style.

6.3.2 Instagram

As stated in the introduction, **Instagram is used as a channel to spread knowledge in a more graphics/pictures oriented style.** The "il" business account represents another key touchpoint of the multichannel publishing. The page is directly linked to the other three digital channel by using the external links in the introduction, section that is used as well to briefly summarize the project information and objectives (Figure 6.12).

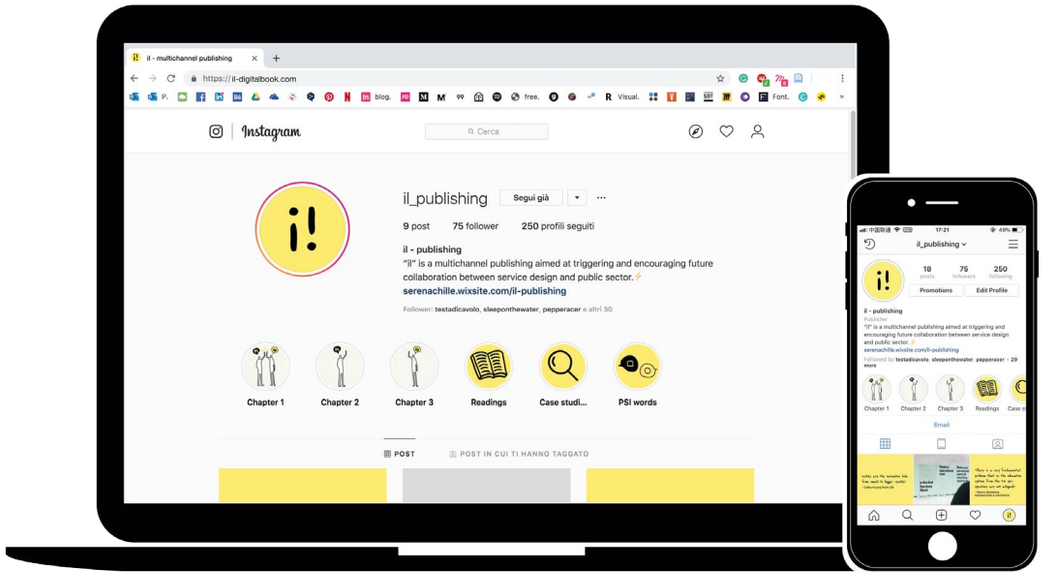


Figure6.12 Instagram account: overview. Source: the author.

The row below concerns the so-called 'highlights' and allows users to save permanently Instagram stories into several featured contents organized by topic. In the specific case this section is used to share the chapters of the digital book, the PSI dictionary, present case studies and suggested readings (Figure 6.13).

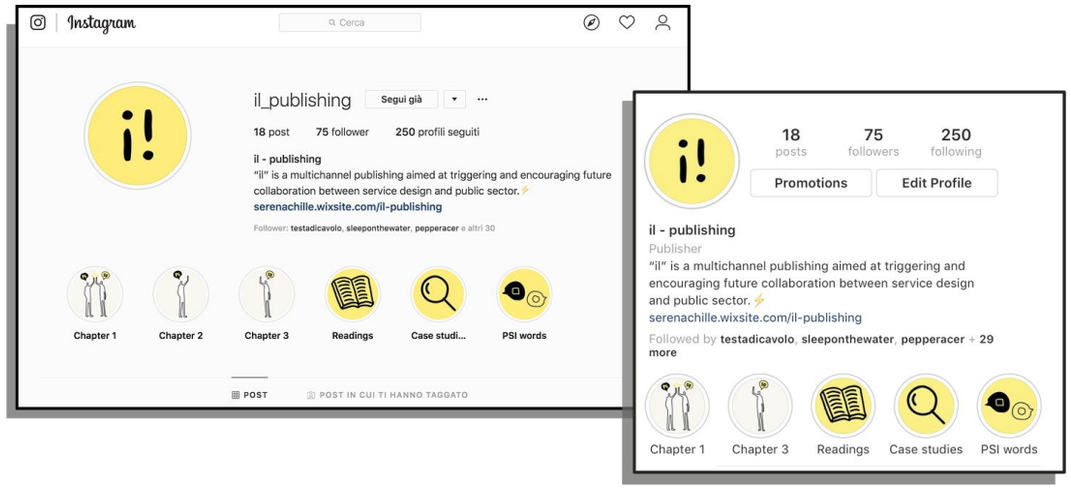


Figure6.13 Instagram account: account highlights. Source: the author.

The chapters of the digital book are re-adapted to Instagram as readable screenshots to be swiped until arriving at the following book' section. This innovative way to share knowledge can be useful particularly for those users that do not have much time to read and those who get first in touch with the multichannel publishing by Instagram in order to give them a first overview of the whole publishing (Figure 6.14)

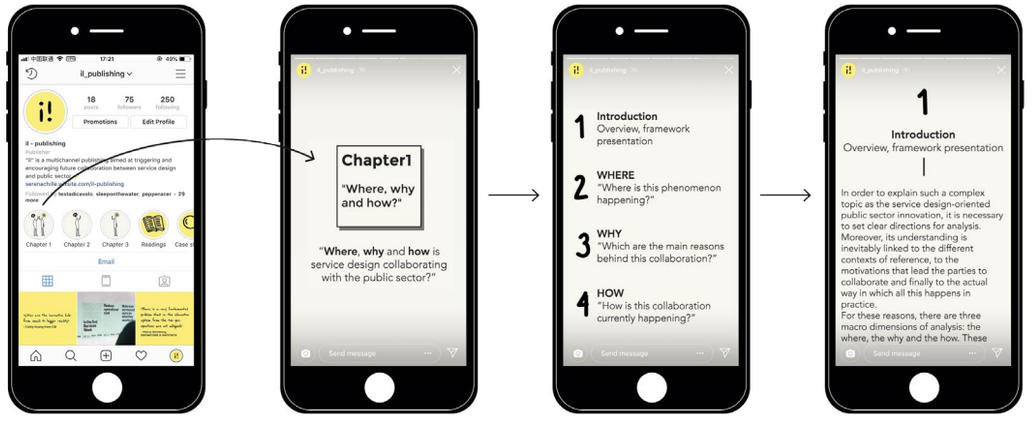


Figure6.14 Instagram account: book chapters. Source: the author.

Both the dictionary part and the suggested readings, are presented as **picture or graphics to screenshot and save on the phone library.** In this way, users can have access every time to the new useful terms learned and a reminder for interesting books and articles related to the various topics (Figure 6.15 and 6.16).

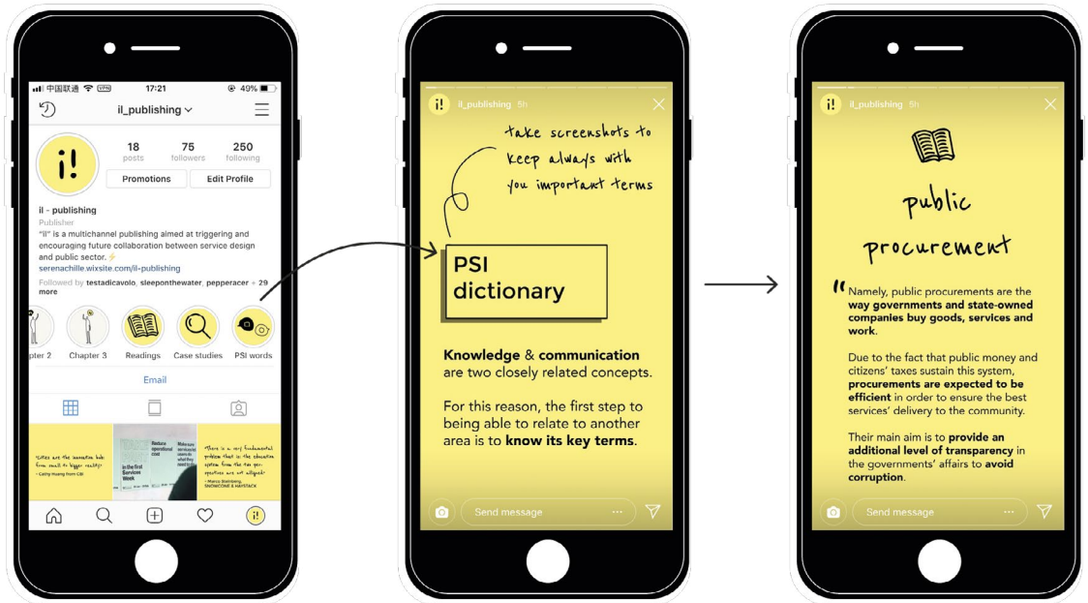


Figure6.15 Instagram account: PSI dictionary. Source: the author.

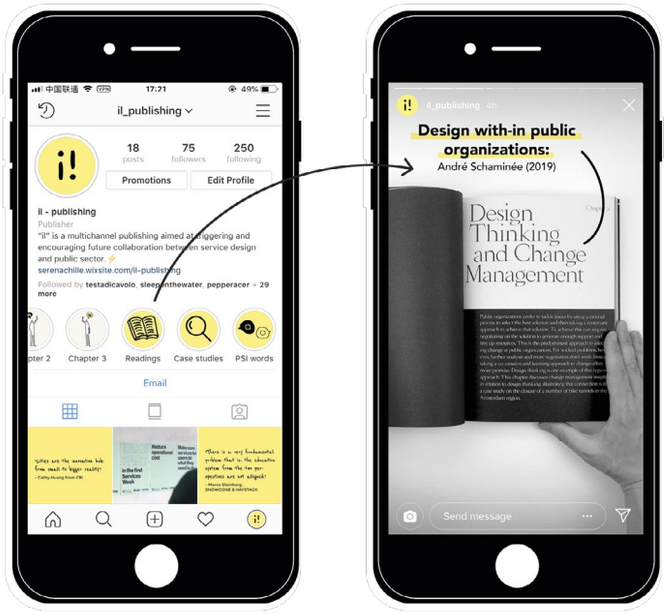


Figure6.16 Instagram account: suggested readings. Source: the author.

Users can have access every time to the new useful terms learned and a reminder for interesting books and articles related to the various topics.

Finally, the case studies presented in the account highlights are pictures with title and a short description together with the link to the descriptive cards of the examples (the same ones that are linked to the digital book) (Figure6.17).

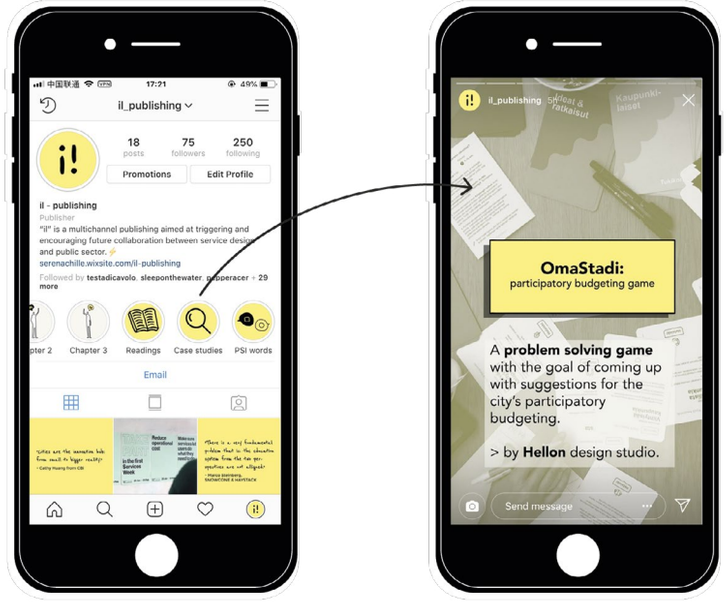


Figure6.16 Instagram account: suggested readings. Source: the author.

For the main wall, the author decided to **organize contents with a checkerboard pattern.** As shown in the figure below, the different posts alternate between picture and yellow background graphics (Figure 6.18).

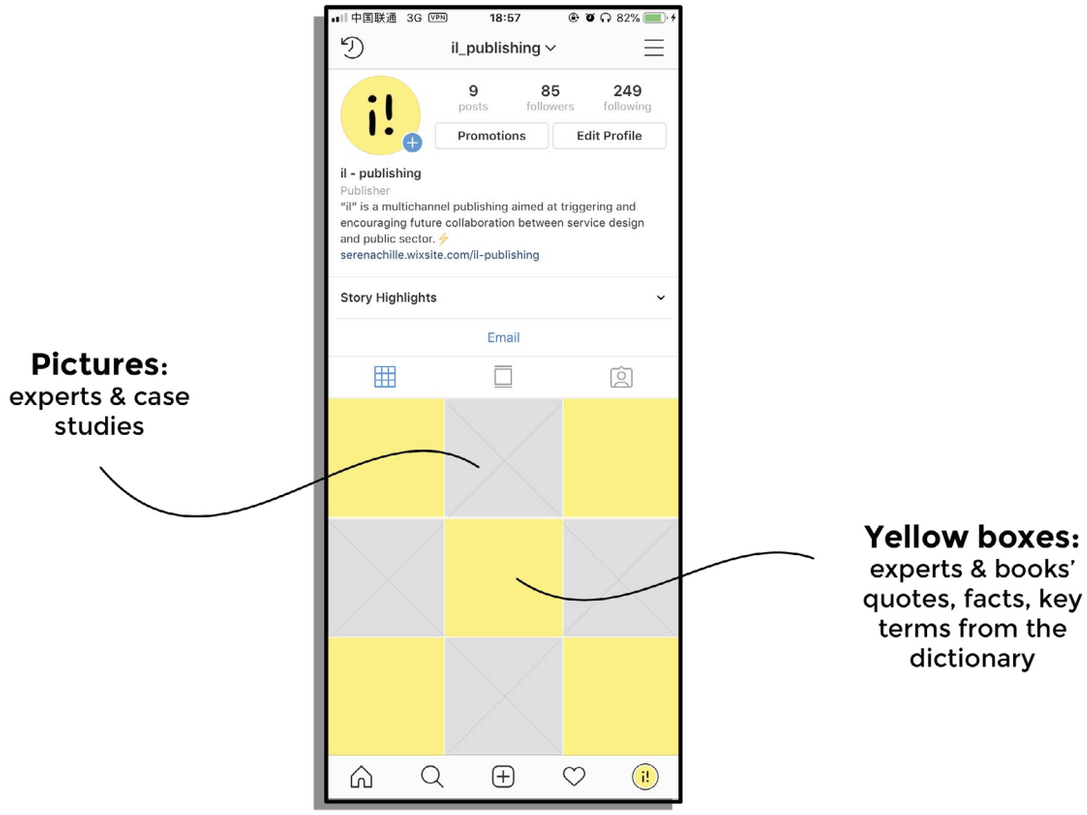


Figure6.18 Instagram account: checkerboard pattern. Source: the author.

The pictures presents the **experts and some relevant case studies**, while the colored squares are linked to **experts and books' quotes, facts connected to the topic and some key terms from the dictionary.**

The pictures **presents the experts and some relevant case studies, while the colored squares are linked to experts and books' quotes, facts connected to the topic and some key terms from the dictionary** (Figure 6.19).

Moreover, as mentioned before, users can directly contact the account using the Instagram direct messages. In this way they can actively interact with the project, asking more information, suggesting new readings or additional sources and terms linked to the topic.

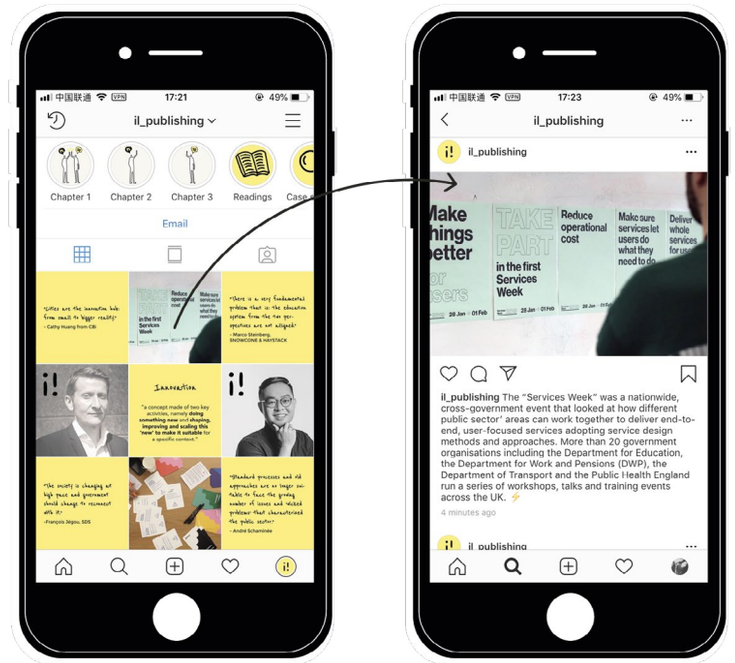


Figure6.19 Instagram account: wall visualization. Source: the author.

The entire structure of the Instagram account can be visualize in a sort of navigation tree as shown in the Figure6.20.

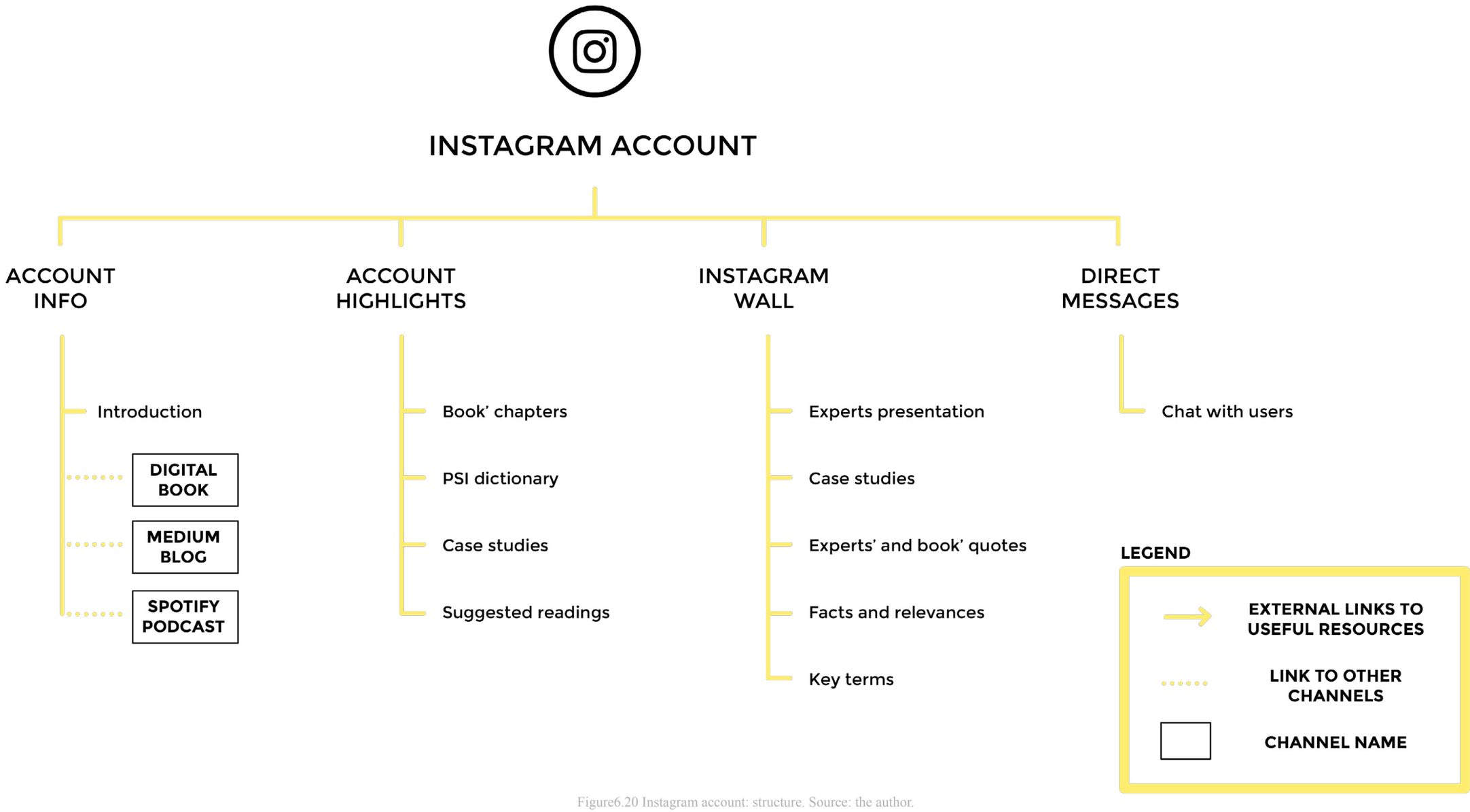


Figure6.20 Instagram account: structure. Source: the author.

The Medium blog, called **PSJ (Public Sector Journal), turned into the main participatory touchpoint of the publishing**

6.3.3 Medium

Started by the author and another fellow Master's Candidate, Francesco Olivieri, to keep track of the various progresses of the ongoing study – as discussed in Chapter1 – **the Medium blog, called PSJ (Public Sector Journal), turned into the main participatory touchpoint of the publishing** (Figure6.21).

Although the main part of the participation is base in the 'before the launch' phase, after the release of the publishing users can still take part into the project. From the digital book landing page, they can have access to the open call for articles, where they can submit their stories to be reviewed and then eventually published on the participatory blog (Figure6.22).

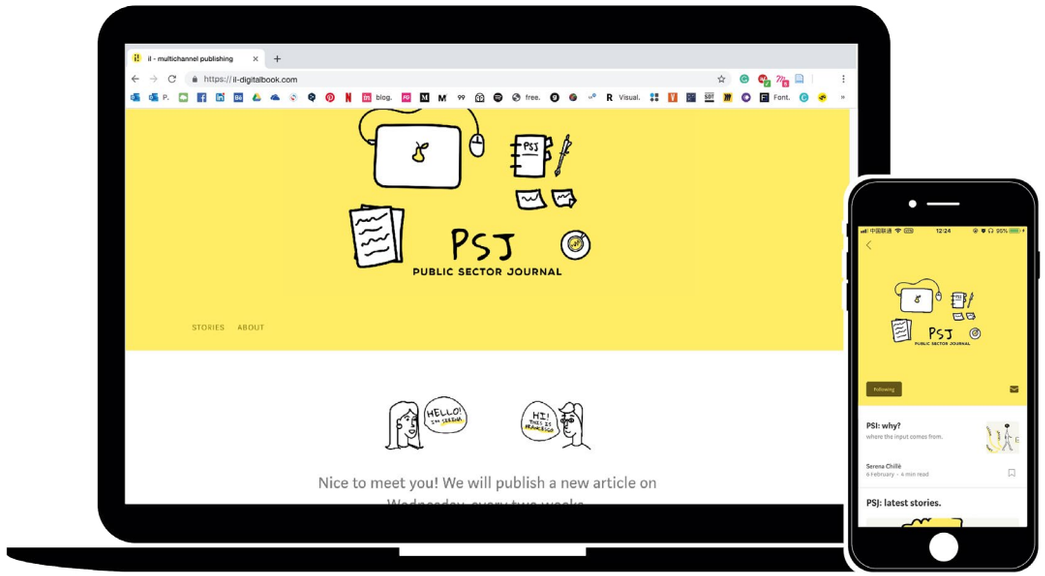


Figure6.21 Medium: desktop and mobile version. Source: the author.

Scan the QR to see the account

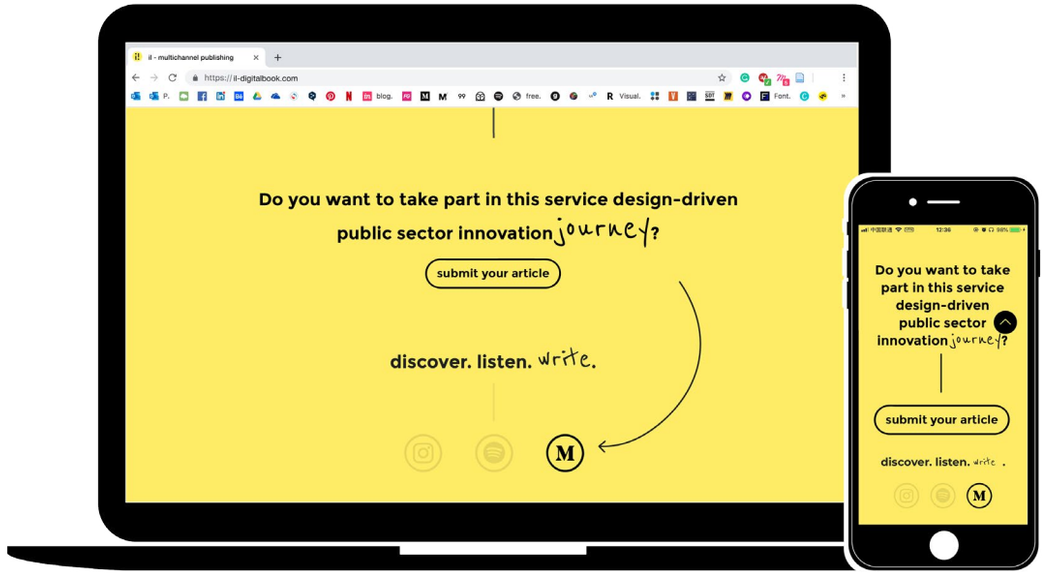


Figure6.22 Medium: articles submission. Source: the author.

Moreover, users have still access to the previous articles, clustered by latest stories, PSI limits and barriers and service design-driven psi (Figure6.23).

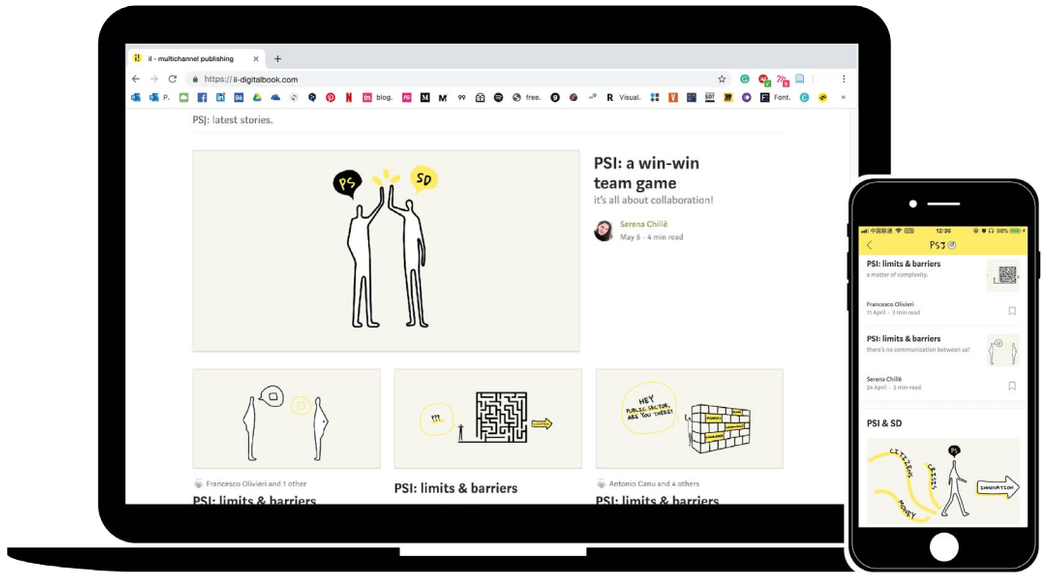


Figure6.23 Medium: blog sections. Source: the author.

The entire structure of the Medium blog can be visualize in a sort of navigation tree as shown in the Figure6.24.

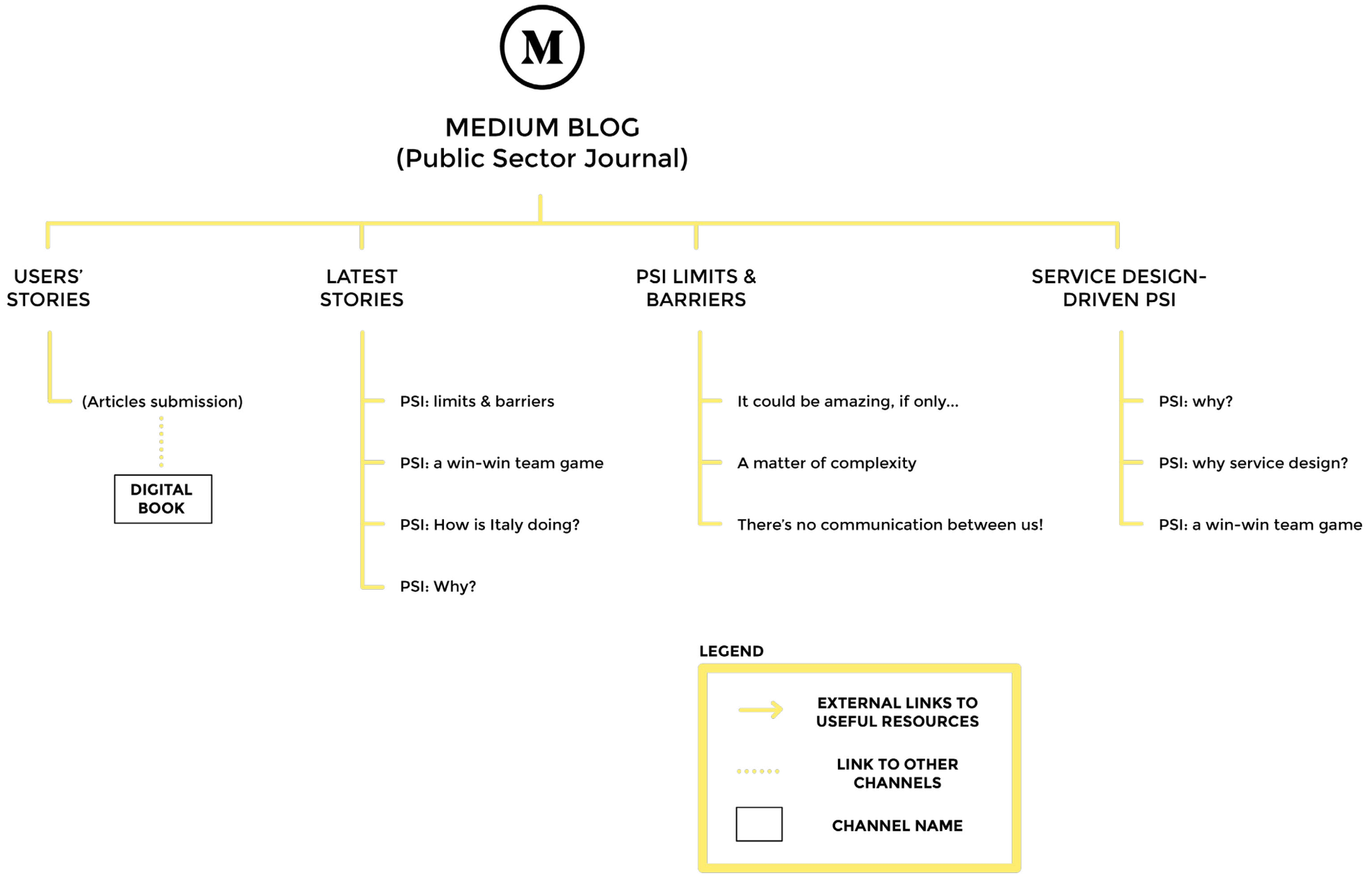


Figure6.24 Medium blog: structure. Source: the author.

The last channel is Spotify, **which aim is to deliver experts' interviews in a different and more interactive way to final users.**

6.3.4 Spotify

The last channel is Spotify, which **aim is to deliver experts' interviews in a different and more interactive way to final users** (Figure6.25). Service design experts' interviews are released every two weeks, to keep the podcast updated.

Despite the small degree of customization, **the podcast version still allows Spotify' users to organize audio material by groups.** For this reasons, all the interviews are clustered by location of interviewed people in order to let users better search for experts they would like to listen to or someone from their same context of reference (Figure6.26).

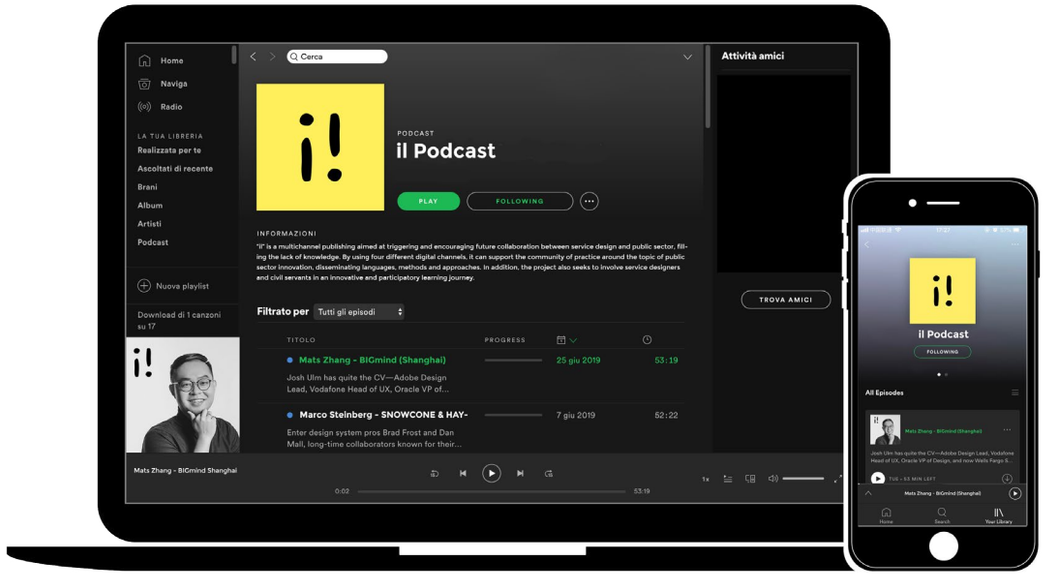
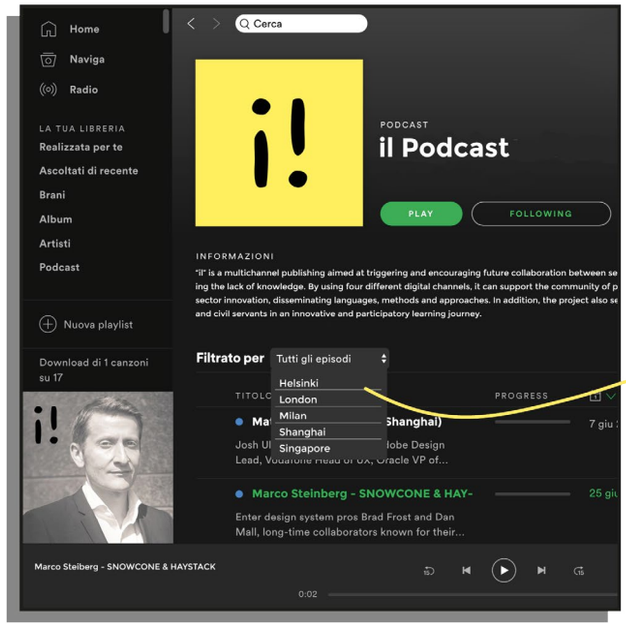


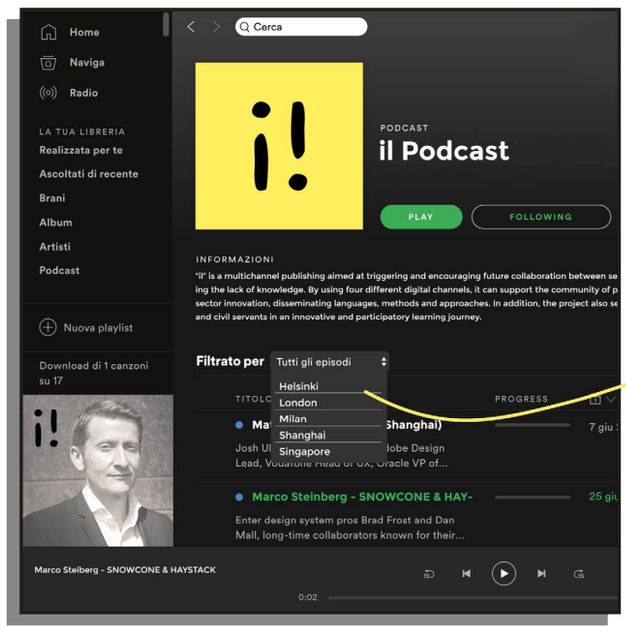
Figure6.25 Spotify podcast: homepage. Source: the author.



Interviews filter: it is possible to listen to interviews choosing the location of experts

Figure6.26 Spotify podcast: interviews filter. Source: the author.

The interviews preview presents the expert's name and a short description or quote from the respondent (Figure 6.27) and they all lasts around fifteen minutes to maintain the learning process quick and do not overcome the 'attention spam' limit.



Interviews filter: it is possible to listen to interviews choosing the location of experts

Figure6.27 Spotify podcast: interviews preview. Source: the author.

The entire structure of the ‘il podcast’ can be visualize in a sort of navigation tree as shown in the Figure6.28.

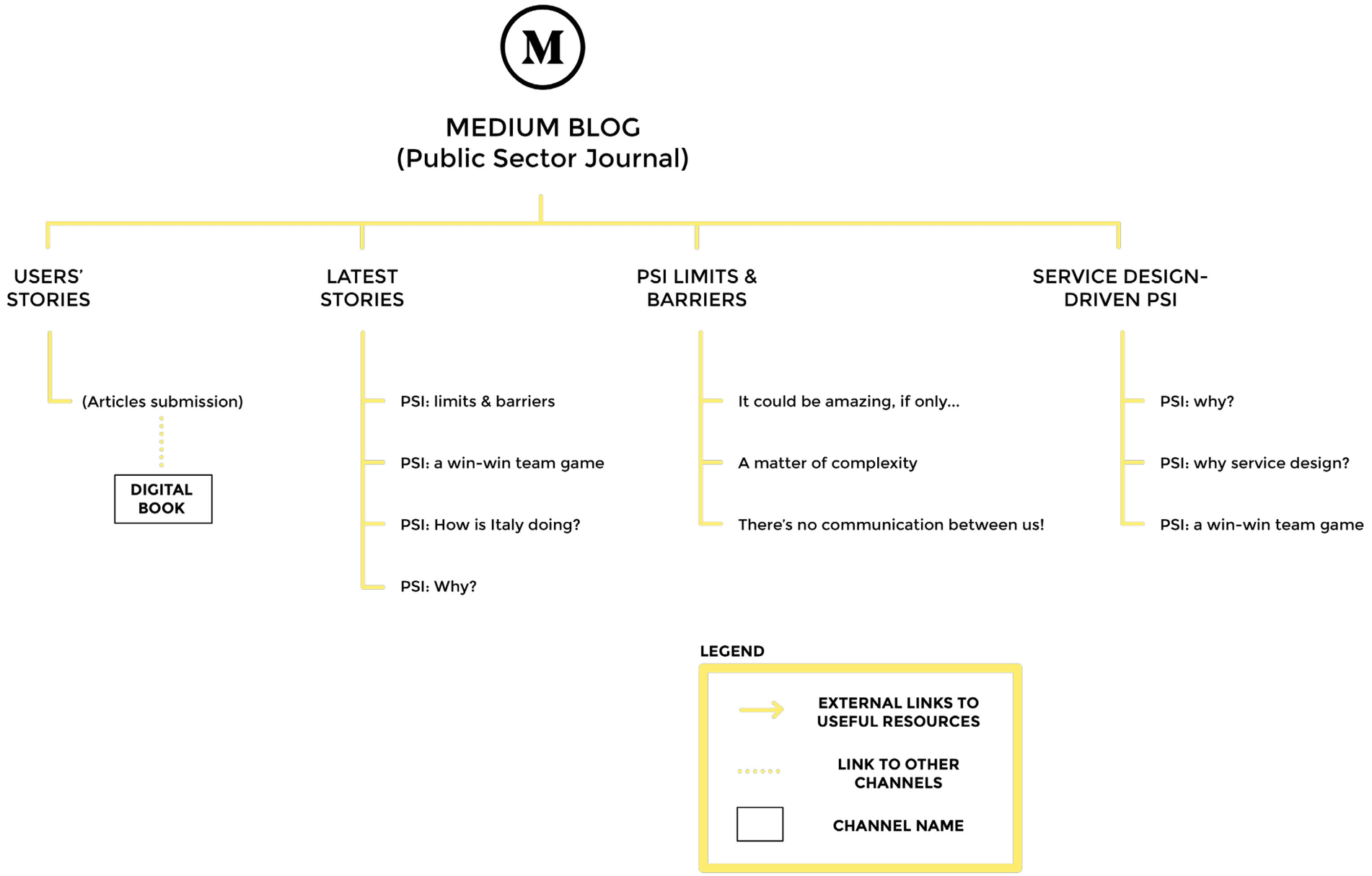


Figure6.28 Spotify podcast: structure. Source: the author.

6.4 Actors and users

Starting from the first stakeholders map, the author developed the final and more detailed version of the actors map organizing it into core target group, secondary actors and tertiary actors (Figure6.29).

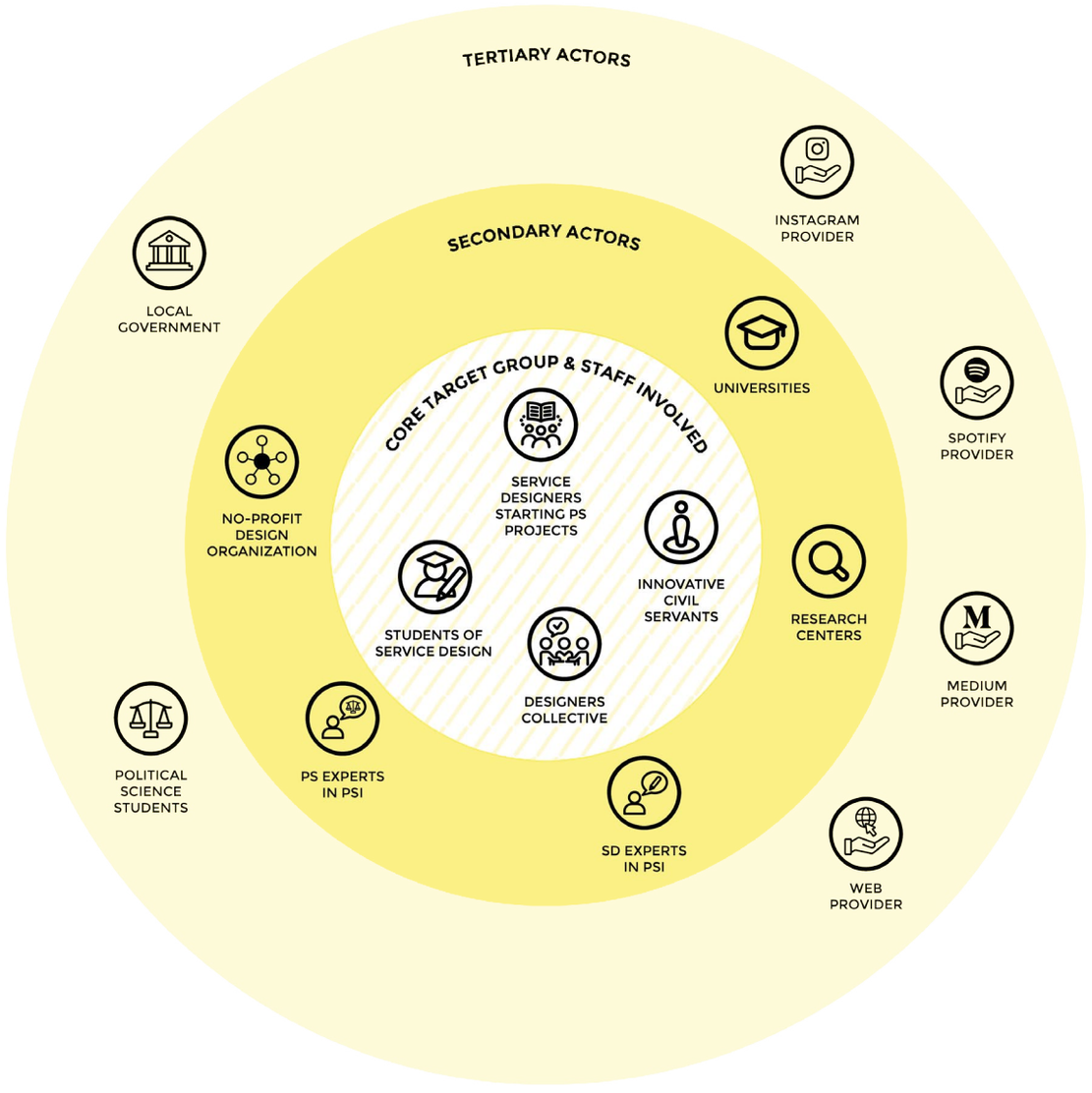


Figure6.29 il: actors map. Source: the author.

Once gathered by the author through a series of meetings and co-creation sessions, the collective of designers - united by interest in the theme -, will collect and update the material for the publication.

The core target group represents all the users who are part of the so-called community of practice, thus those people who are interested in the topic and directly connected to the proposal.

As we already saw, they are **service design students, service designers starting now public sector projects and innovative civil servants**. Also the designers collective is linked to this area. In fact, once gathered by the author through a series of meetings and co-creation sessions, **the collective of designers - united by interest in the theme - , will collect and update the material for the publication.** In addition, the collective will be divided into four sub-groups, each of which will deal specifically with a channel. Students and designers involved in the collective will be in charge of providing all the information and resources needed for the publishing.

Secondary actors are those people who are somehow involved in the project. Public sector innovation experts belong to this group since they provide important resource for “il”, first of all the interviews and their experience. In the same cluster there are also universities, research centers and no-profit design organization that could be interested in the topic and eventually help to fund the project and its maintaining (particularly in terms of contents updates).

Finally, the last ring is connected to all the cannels providers, local governments (that can get in touch with the project and possibly be interested in learning more) and political science students (who could be willing to learn more about service design field).

The tool of the system map helped the author **visualizing the different relations between actors and three kinds of flows among them: information, material and financial.** The designers collective, the core target group and the experts are linked to the internal system of "il", while all the other actors are external stakeholders of the project. Service designers, students and civil servants together with governments and political-science students receive information and material from the five touchpoints. Public sector innovation experts give information and useful materials to the designers collective, who is in charge of translating everything into the five touchpoints. They in turn acquire information from the project' touchpoints (Figure6.30).

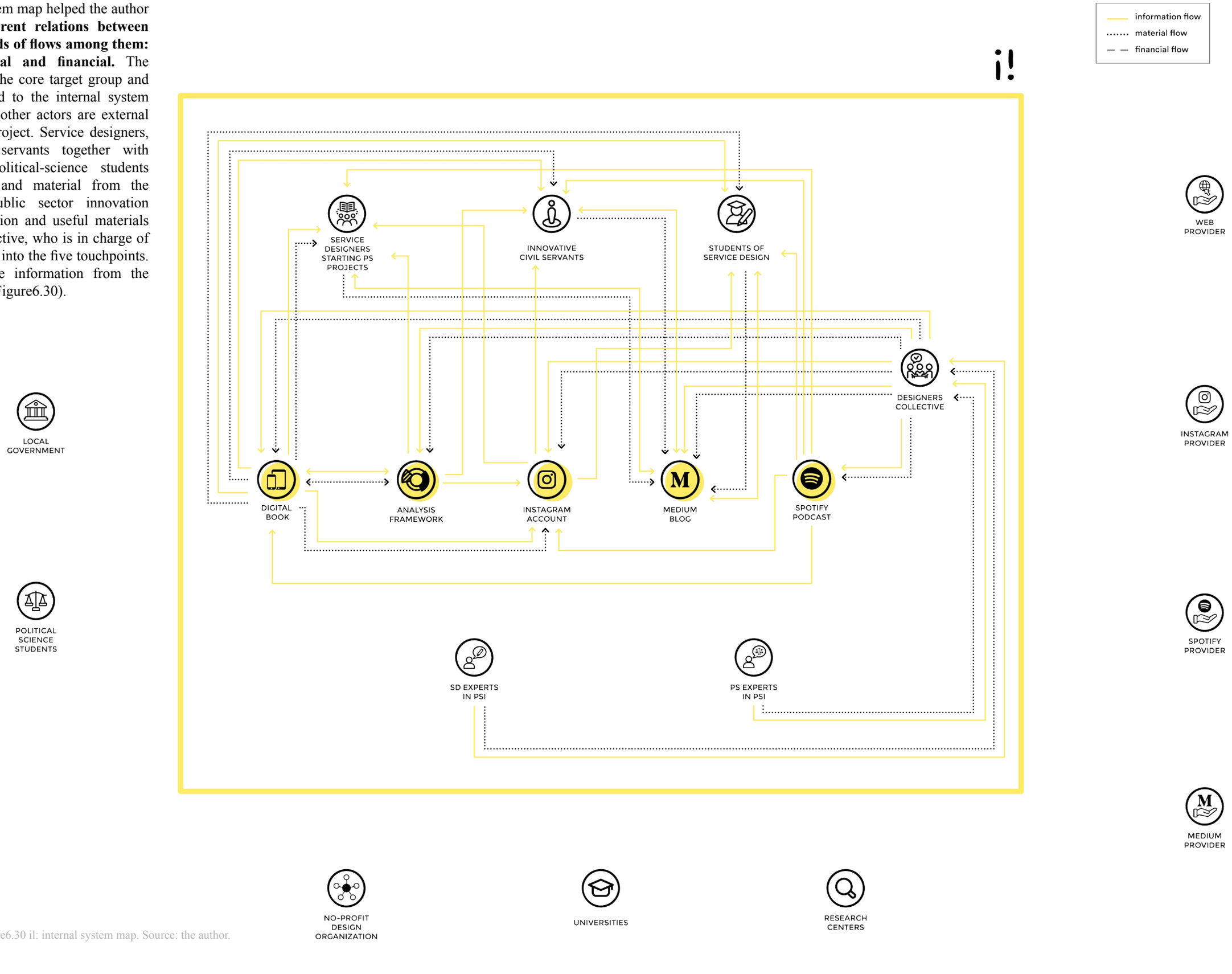


Figure6.30 il: internal system map. Source: the author.

No-profit design organizations give and receive information from the book, and acquire knowledge from the analysis framework and Instagram. In turn, they can finance or help the project maintaining together with universities and/ or research centers. However, the research centers do not contribute any information or material to the products: they only acquire data from the five touchpoints. Finally, the different providers contribute giving the ownership of the different channels: being open source and free, in turn they only gain data from the project (Figure6.31).

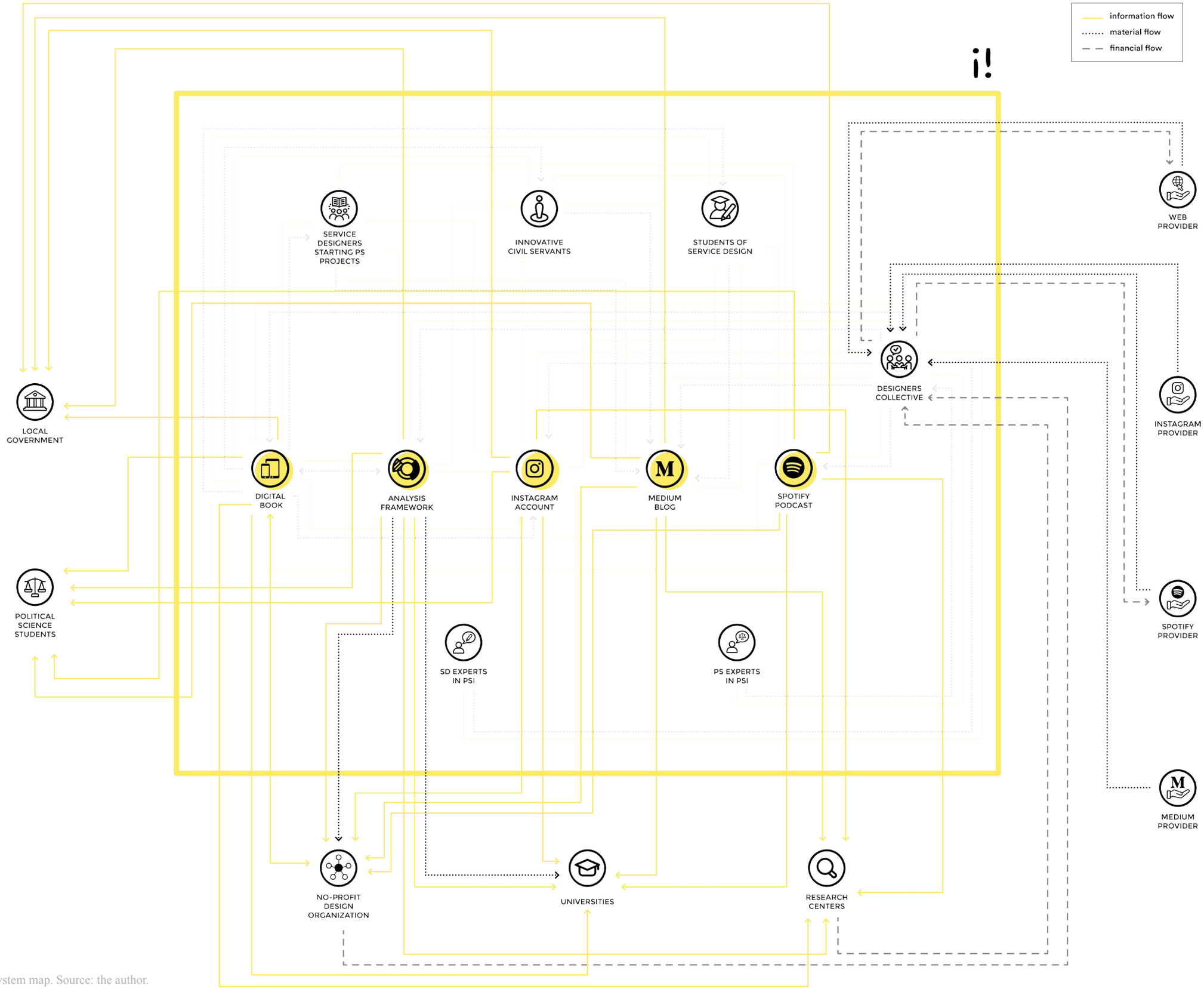


Figure6.31 il: external system map. Source: the author.

Finally, by **grouping together the various phases of the project, it is possible to visualize a summary blueprint that gives a final overview of the entire project.** Therefore it allows a visual analysis considering users, touchpoints, activities and different processes involved (Table6.2).

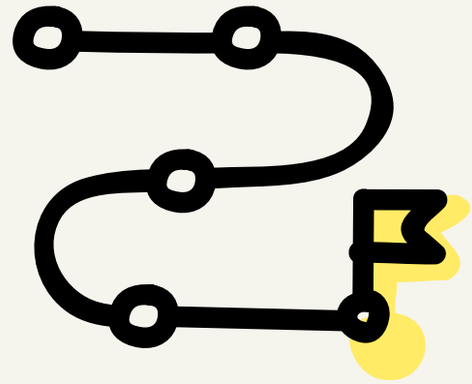
		knowledge	inspiring examples	useful resources	participation	experts' voice
USERS	SERVICE DESIGNERS STARTING PS PROJECTS	• Read the digital book and learn basic info about PS • Use the framework as a support for learning • Learn important terms linked to the PS in the dictionary	• Take inspiration from existing projects, to replicate good examples • Discover successful service design methods used by others	• Exploit existing resources to support projects and researches on PSI • Exploit suggested readings to deepen the knowledge about the topic	• Be actively involved in co-creation prototyping session • Share stories and opinion about the topic on the Medium blog • Suggest terms for the dictionary	• Listen to experts' sotories to gain inspiration and important points of view
	INNOVATIVE CIVIL SERVANTS	• Read the digital book and learn basic info about SD • Use the framework as a support for learning • Learn important terms linked to the SD in the dictionary	• Discover inspiring PSI examples from pioneer countries • Learn how SD can be successfully applied to PS challenge	• Exploit suggested readings to deepen the knowledge about the topic	• Share stories and opinion about the topic on the Medium blog	• Listen to experts' sotories to gain inspiration and important points of view
	STUDENTS OF SERVICE DESIGN	• Read the digital book and learn basic info about service design-driven PSI • Use the framework as a support for learning • Learn important terms	• Use case studies as an additional way of learning • Discover successful service design methods used by others and projects	• Exploit existing resources to support researches on PSI • Exploit suggested readings to deepen the knowledge about the topic	• Be actively involved in co-creation prototyping session • Share stories and opinion about the topic on the Medium blog	• Listen to experts' sotories to gain inspiration and important points of view
FRONT OFFICE - TOUCHPOINTS	DIGITAL BOOK	• Digital book with three chapters • SD and PS collaboration framework • PSI dictionary	• Embedded projects inside the texts (case studies table and link)	• Analysis framework • Suggested readings and templates/ tools linked to the texts	• Possibility to suggest new terms for the PSI dictionary	
	ANALYSIS FRAMEWORK	• Help the learning process • Database of useful information for the two fields	• Data and key concepts from case studies linked to the framework	• Starting point for new project and research • Practical tool to support researches	• Replace author's findings • Participate at the development of the framework	• Experts experience and opinion shared as data
	INSTAGRAM ACCOUNT	• Book chapters into the account' highlights • Key data in the post	• Picture and short description in the highlights • Pictures in the post	• Saved as collection into the account' highlights • Short presentation and quotes as post	• Instagram direct to get directly information about "il" and the whole project	• Experts' presentation in the account'post • Quotes shared as post
	MEDIUM BLOG	• Articles from experts and people interested in the topic		• Suggested readings and templates/ tools linked to the texts	• Call to write articles and share stories about the topic	• Quotes embedded inside texts
	SPOTIFY PODCAST	• Experts' experience and knowledge				• Podcast with experts interviews
BACK OFFICE	DESIGNERS COLLECTIVE	• Collect all the relevant material • Merge different sources and organizes the sections • Translate the information into simple texts and graphics	• Look for inspiring and successful examples • Divide case studies by category and present them • Link projects to texts and other informations	• Search useful resources (tools, templates,etc.) that can possibly support the users • Collect interesting readings to deepen the learning	• Organize, plan and structure activities with users (co-creation and prototyping sessions) • Curate the article submission and publication on the blog	• Identify experts and contact them • Lead interviews, organize the results and translate them into findings and useful data for users
TO DEVELOP		• **Collect more information about the public sector field**	• **Increase the number of case studies connected to the channels**	• **Improve the variety of resources** • **Share more resource for the learning about PS**	• **Involve civil servants in co-creation and prototyping sessions**	• **Identify and interview civil servants expert in PSI**

Table6.2 il: project blueprint. Source: the author.

7 Conclusion

Going back to the three research questions posed in the introduction, this thesis has explored the intersection between service design discipline and the phenomenon of the public sector innovation, highlighting the role of service design and the main limits and barriers that regards the ongoing phenomenon.

Although the author succeeded in finding satisfying answers to the starting research questions and several points of this study have been proved, it still represents an open research that needs further experimentation to be implemented.



7.1 General outcomes

Going back to the three research questions posed in the introduction, **this thesis has explored the intersection between service design discipline and the phenomenon of the public sector innovation, highlighting the role of service design and the main limits and barriers that regards the ongoing phenomenon.** In particular, this last point represented the premise for the following design phase that aimed at finding a solution to fill the existing gap between theory and practice.

The whole study evolved step by step, merging theoretical analysis and practical work. After having set the driving research questions, the author undertook a literature review to understand the existing state of the art and look for existing gaps. Among all the findings, this stage of the research pointed out the presence of an existing gap between theory and practice in the panorama of the service design-driven public sector innovation. Motivated to understand the causes of this gap and existing limits and barriers that the design discipline faces approaching the public sector field, the author planned a series of interviews with experts located in different contexts and with various backgrounds. The heterogeneity of the interviewees allowed the comparison between different opinions and points of view and the consequent gathering of useful findings that amplify the results of the initial desk research. The key element that supported the beginning of the design phases has been the discovery of one of the main cause of the knowledge gap between the two fields: the lack of knowledge. This issue developed on different aspects such as a weak education system, the lack of awareness and the absence of a shared terminology system, driven the following concept phase toward the development and test of the final design solution.

Before moving to the design phase, the author decided to recap all the research. Thus, both to draw a final visualization of the research findings and to create a useful tool to support future studies and projects on the same topic, the author designed the **'SD and PS collaboration framework'** built upon the central question of *"Where, why and how is service design collaborating with the public sector?"*. The analysis of the three dimensions – where, why and how – embodied the representation of the current service design-driven phenomenon together with the related contexts, opportunities, practices, examples and issues. This stage represented a pivotal moment to summarize all the key points of the study and move forward to the following phase.

To propose a solution able **to fill the knowledge gap, the author came up with the idea of a multichannel publishing, to trigger a new participatory learning system and inspire future collaboration between service designers and civil servants.** The three co-creation sessions represented a pivotal moment to involve users and test their interest in the topic and the linked proposal. The activities also made the author gathering key insights that were after turned into the design proposal that has been tested and prototyped with users.

The final proposal brought together all the findings of the previous step, that have been translated by the author into a practical solution to enhance the community of practice around the topic of the service design-driven innovation.

This thesis has explored **the intersection between service design discipline and the phenomenon of the public sector innovation**, highlighting the **role of service design and the main limits and barriers** that regards the ongoing phenomenon.

To fill the knowledge gap, the author came up with the idea of a multichannel publishing, to trigger a new participatory learning system and inspire future collaboration between service designers and civil servants.

7.2 Future steps

Although the author succeeded in finding satisfying answers to the starting research questions and several points of this study have been proved, **it still represents an open research that needs further experimentation to be implemented.** The main barriers for the thesis development were the little time and the linked impossibility to reach experts from the public sector field.

Thus, the biggest weakness of the project is the little amount of information (particularly referred to the practice side) connected to the public sector sphere. Indeed, right now the project is mainly service design-oriented, due to the competences of the author, the material of the desk research and the background of the experts interviewed. Moreover, also the participatory aspect of the project has been developed only with service designers. In a hypothetical future roadmap, the author would like to actively involve civil servants in the process, both during co-creation and testing phase (Figure7.1).

Finally, other possible improvements could be the involvement in the process of service design practitioners and students coming also from other locations. In this way, it could be possible to globally involve people belonging to the core target group and create a repository of knowledge at a larger scale.

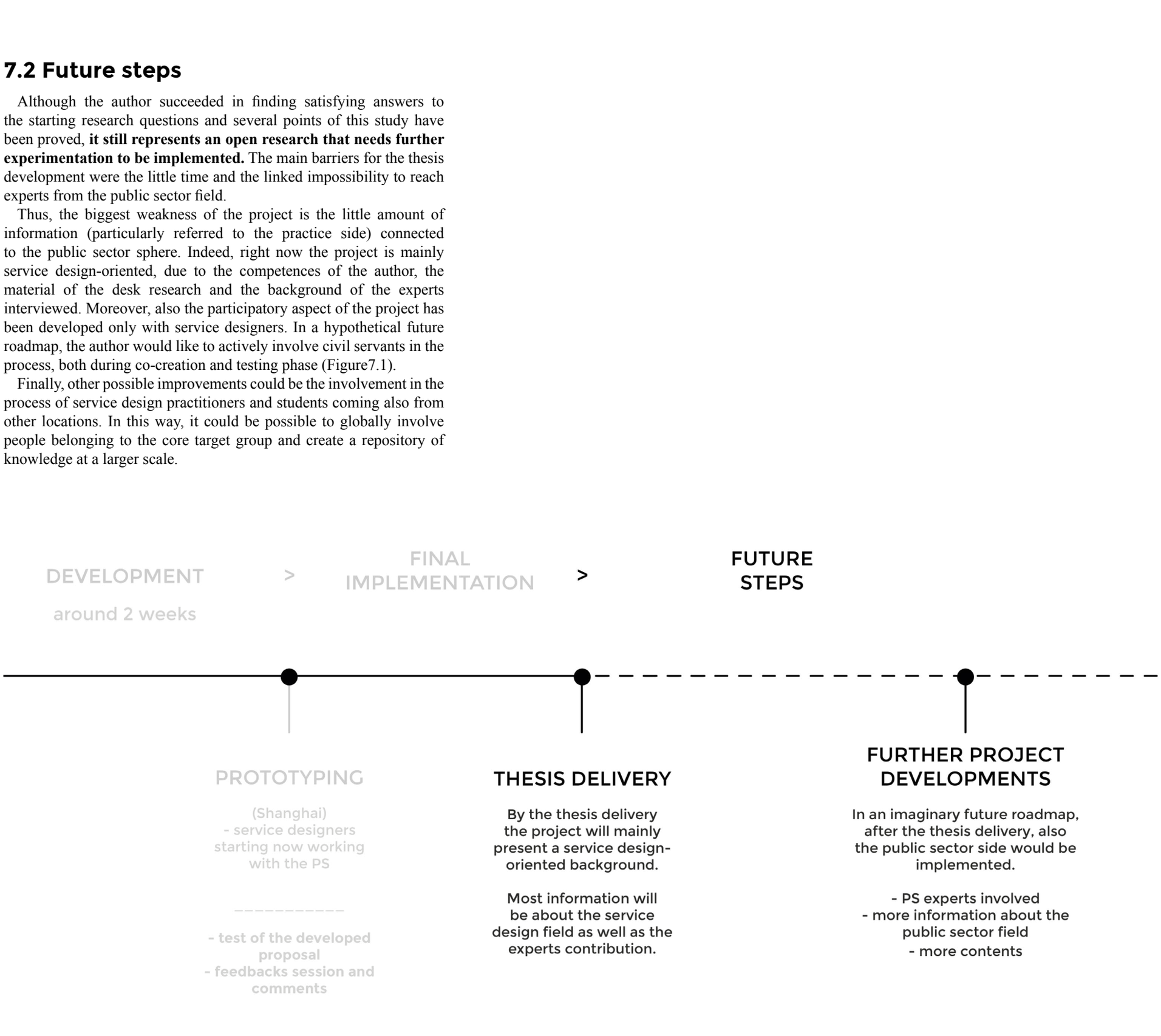


Figure7.1 Project future roadmap. Source: the author.

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List of figures

List of tables

POLITECNICO
MILANO 1863