The 10 years Naples Forum on Service - Proceedings

Gummesson, E., Mele, C., Polese, F. (Eds.) (2019), Service Dominant Logic, Network and Systems Theory and Service Science: Integrating three Perspectives for a New Service Agenda.

ISBN: 978-88-31622-19-6

Book of abstracts

List of full papers

Barile S., Piciocchi, P., Saviano, M., Bassano, C. Pietronudo, M.C., Spohrer, J. C. - "Towards a new logic of value co-creation in the digital age: Doing more and agreeing less"

Barile, S., Saviano, M., Di Nauta, P., Caputo, F., Lettieri, M. "A systems based interpretative framework for approaching exaptation and bricolage in decision making and value co-creation"

Cellary, W., Freund, L. E., Kwan, S. K., Leitner, C., Spohrer, J.C. - "The Human-Side of Service Engineering: Advancing Technologies Impact on Service Innovation"

Chou, H. H., Mei, H. L. - "Orchestrating to shape a service ecosystem: An empirical investigation"

Corsaro, D. - "Sales Transformation and new paths of value co-creation"

Fischer, R., - "Sustainability and DIY as emerging factors for online service offers"

Gangi, F., Daniele, L. M., - "Crowdfunding as value co-creation model: theoretical constructs and empirical evidence"

Hajinejad, N., Gauser, T., Koehler, D., Giegler, F. - "Mor(e)ph: embodying business key figures in a data sculpture"

Hasenknopf, H. - "Coaching as central element of a new Didactics of Higher Education"

Iandolo, F., Loia, F., Fulco, I., Vito, P. - "Merging vSa and SS. An ABSA for Smart Tourism Ecosystem"

Kustrak, K. A., Patrício, L., Holmlid, S. - "Change in meaning and service innovation: a design research contribution to the S-D logic"

Lappalainen, I. - "Logistics Robots as an enabler of hospital service system renewal?"

Löbler, H. - "Comparing the adaptive capacity of service ecosystems"

Lyons, K. - "Analyzing Social Platforms in Value Cocreation Exchange"

Mason, M., Ciani, S., De Nisco, A., Napolitano M. R., Oduro S. - "A Segmentation Approach to Country Image. A study on Perception of Italy across seven Emerging Markets"

Meierhofer, J., West, S. - "Service value creation using a digital twin"

Nuutinen, M., Valkokari, K., Malmelin, N., Malmelin N. & N., Jutta - "Beyond Industry 4.0 - seeking for the philosopher's stone"

Ojuri, O., Mills, G., Pryke, S. - Don't make value co-creation ambiguous, social networks simplify it
Panetti, E., Ferretti, M., Parmentola, A., Sabetta, A. - "Exploring network configuration in service ecosystems. Evidence from Southern Italy"

Pieper, L., - "Association Memory: Prototype and evaluation of a new creativity method in the context of divergent and convergent approaches for application in business as well as a teaching concept"

Quero-Guervilla, M. J., Diaz Mendez, M., Gummesson, E. - "Co-patenting and co-ownership as drivers for university business innovating The case of public universities in Spain"

Sahhar, Y., Loohuis, R.P.A., Henseler, J.- "How Service Providers Manage the Customer's Service Value Experience throughout the Customer Journey: A Multiple Ethnographic Study"

Sangiorgi, D., Carrera, M., Lucchi, F., - "Co-designing innovation labs for service ecosystem change"

Saviano, M., Barile, S., Cosimato, S., Zanda, S., Morgante, M., Perillo, C. - "Co-creating Inter- and Transdisciplinary Knowledge for Sustainability: First Insights for the Cosmetic Industry from a Service & Systems View"

Saviano, M., Del Giudice, M., Pironti, M. Caputo, F. - "Open Innovation and Industry 4.0: the new frontiers for value co-creation?"

Sawatani, Y. "Innovation of service system by human-centered design and effectual evolution: Hypothesis development and case verification"

Sirianni, C.A., Carrubbo, L., Megaro, A. - "Innovation and viability in the retail service ecosystem: nudges from DITRON's history and evolution"

Sorrentino, A., Ferretti, M., Risitano, M., Del Chiappa, G. - "The value of perceived servicescape in the leisure cruise experience"

Spurrell, M., Araujo, L., Proudlove, N. - "Five Principles for Supporting Value Based Healthcare"

Tossavainen, P. J., Luojus, S. - "Service logics and service design intertwine in the new management competences"

Walletzky, L., Carrubbo, L., Mouzhi, G. - "Exploring complex service design: Understanding the Diamonds of Context"

Warg, M., Zolnowski, A., Frosch, M., Weiß, P. - "From Product Organization to Platform Organization – Observations of Organizational Development in the Insurance Industry"

Weiß, P., Zolnowski, A., Warg, M., - "Building Systems of Engagement to overcome the challenges of digital transformation"

Zagel, C., Grimm, L. - "Using Modular Method Cards for Competency-Oriented Teaching in Academia"

Copyright © 2009-2020 **SIMAS di Salerno for Naples Forum on Service** - All rights reserved

ShinyStat™

CO-DESIGNING INNOVATION LABS FOR SERVICE ECOSYSTEM CHANGE

The case of mental healthcare Co-Labs

Daniela Sangiorgi[1], Marta Carrera[1], Fabio Lucchi[2]

1. Department of Design, Politecnico di Milano, Italy
2. DSM-Unità Operativa di Psichiatria 23, ASST Spedali Civili di Brescia

ABSTRACT

Purpose: There is a growing interest in the role played by Public Innovation Labs, research labs *"set up to change both the mindset and the practices of identifying problems and of developing solutions within their agencies*" (Junginger, 2014: 65). Given the mixed signs of success and failures, studies have been looking into their characteristics (Schuurman & Tõnurist 2016; McGann, Blomkamp & Lewis, 2018), the role they play to transform innovation practices (Carstensen & Bason 2012; Kimbell, 2015); and their potential to enhance co-creation, experimentation and learning (Thenint, 2009), but little has been said on how they should be set up to achieve so. This paper aims to illustrate the initial stages of setting up an innovation lab, as a precondition for the transformation of complex service ecosystems (Vargo & Lusch, 2011), such as in the case of mental healthcare.

Design/Methodology/approach: This paper will illustrate the first step of an action research project toward the establishment of 3 Recovery Co-Labs in the Lombardy region in Italy. The set-up of the labs has been planned in three main stages: a preliminary research, 4 co-design workshops, prototyping and specifications. The preliminary research consists in a literature review on innovation labs, an in-depth study of 3 key exemplars, and a collaborative mapping of local resources facilitated by a team of sociologists. The collected data then informed a common co-design workshop to elaborate on possible scenarios that was then declined into 3 dedicated workshops in each location; short experience prototypes were then conducted to experiment with activities and draw specifications for the design of spaces.

Findings: The role of service design (SD) is generally associated with how Innovation Labs operate for public service innovation, while this paper will illustrate and discuss how SD has been used to: 1) Engage, activate and test the roles of the core teams of the developing labs; 2) Familiarise and test SD as a process against existing practices and working models; 3) Reveal and expose some of the existing values and assumptions across the multiple partners; 4) Experiment with and test ways to favour the emergence of opportunities for co-creation.

Research limitations/implications: The set-up of the 3 labs is the first step of a wider transformational project aiming to lead mental healthcare toward a community-based psychiatry. This paper will be able to discuss initial findings and a developing theoretical framework to be further tested as the project evolves.

Practical implications: This paper will provide an initial guide for public sector managers aiming to establish innovation units and build design capabilities in their organisations as a way to initiate system change.

Originality/value: Studies are exploring SD as a transformational practice (Sangiorgi et al., 2019) contributing to complex service system change (Sangiorgi, Patricio, & Fisk, 2017), but there is no research on how SD can forge innovation units to lead the transformation of service ecosystems.

Key words: mental healthcare, service design, innovation labs, service ecosystem change

Introduction

In recent years, mental healthcare has been under pressure to substantially change its practices, contexts and models of care, following the initial push of de-institutionalisation - meaning the move from the long-stay in psychiatric asylums to more distributed and community-based solutions for patients with severe mental health conditions (Tomes, 2006). The transition toward deinstitutionalization, in US and Western Europe, created the need for a more "balanced care" approach, "whereby frontline services are based in the community with back-up from hospitals, which provide a limited amount of acute inpatient care" (McDaid & Thornicroft, 2005: 6). Nowaday national mental healthcare systems still need to find the right mix of services and an effective mode of coordination among self care, informal community care, primary care mental health services, community mental healthservices, psychiatric services in general hospitals, long stay facilities and specialised services (World Health Organization and World Organization of Family Doctors, 2008). In this situation, with the endorsement of WHO, the model of the Italian mental health department stemmed out from the Trieste experience (Rosen et al., 2012) and, more in general, from the Italian experience of community care has been considered as a good practice to promote continuity of care through case-management and a range of coordinated services. The rise of providers not in the public realm and consequently non gerarchically connected with public mental health departments, introduces though the issue of the governance of mental health systems in its many forms and outcomes.

Also, balancing institutional care with community-based support programs represents an effort to keep together within the same conceptual framework the traditional bio-medical model, based on interventions to overcome or reduce symptoms and disabilities, and the Recovery vision that gives more importance to people's assets, choices and capabilities (Anthony, 1993). This is proving difficult as a Recovery orientation challenges traditional patient-clinician roles, by bringing together both professional and lived experience expertise in a process of co-production that supports people with mental health concerns to identify and manage their own health and social care needs (Phillips, Sandford & Johnston, 2012).

Finally the provision of care and support for wellbeing transcends the borders of traditional care services, as determinants of health are not anymore only associated to individual caracteristics, but include social, cultural, economic, political and environmental factors, calling for a multi level, multi actor and life course approach that goes beyond institutional mental healthcare services (WHO, 2014). Nothwistanding the enormous improvement that has been made in terms of stigma reduction and cultural acceptance of any forms of diversity, mental health and mental illness are still sorrounded by inner fears and social prejudices that, more or less explicitely, ask mental health services to act also as controllers of behaviors that could be linked to psychiatric disorders.

Changing mental healthcare is therefore required at multiple levels, as it demands to transform relationships and care programs for individuals; it asks to re-orient services, professional practices and users' attitudes toward recovery and co-production; it needs to promote cooperation and integration of care stimulating inter-organisational and cross-disciplinary initiatives at the system level; while it urges policy makers and society at large to create the conditions for social inclusion and for a mental health friendly environment. Understanding and approaching change at these different levels, require a theoretical framework that can capture these different dimensions and levels, with the final aim to create value for the final users and their recovery journey.

With this paper, the authors interpret mental healthcare systems and their need for change at multiple levels, adopting the service ecosystem perspective derived from the Service Dominant Logic theory (Vargo & Lusch, 2011), while reflecting on the adoption of collaborative design approaches as a mean to inform institutional change (Vink, Prestes Joly, Wetter-Edman, Tronvoll, & Edvardsson, 2019). This study is looking in particular into the collaborative design process used to establish an innovation lab in the Eastern Region of Lombardy (Italy) with the aim to activate novel approaches and governance models able to lead toward a community-based and recovery

oriented psychiatry. After introducing the concept of service ecosystem and its application for mental healthcare, we will review the emergent role of co-design and innovation labs for service ecosystem change to then summarise and reflect on the project experience.

A service ecosystem perspective on mental healthcare

The Service Dominant Logic (SDL) has already been proposed as a new lexicon for the healthcare environment to help reframing a perspective that is highly reliant on technical expertise and on professional providers exchanging goods for defined health outcomes to passive consumers (Joiner & Lusch, 2016). SDL considers service as the dominant form of exchange, intended as the application of the knowledge and skills (also called operant resources) of one actor for the benefit of another (Maglio & Spohrer, 2008); it regards value as always co-created, thanks to the integration, exchange and application of public, private or personal resources from different interacting actors, recognising so the collaborative nature of value (Vargo & Lusch, 2008). In this sense value is proposed by one or more service providers, but only finally determined and evaluated by users in their own social context and life (Chandler & Vargo, 2011). Instead of focusing only on "value exchange" between the service provider and service users, a SDL suggests the importance of "value in use" bringing service user experiences to the fore, and in particular of "value in context" going beyond the dyadic interaction between the service firm and user, and taking advantage of the social, environmental and governmental surroundings (Vargo, Maglio, & Akaka, 2008).

This paradigm shift well fits with the call for a transition from a bio-medical and clinical perspective of recovery in mental healthcare, to a social and personal one (Chamberlain, 1990). The Recovery concept values the lived experience and the active role and contribution of patients, relatives and other actors to care and rehabilitation plans, therefore recognising the need to reintegrate the voices and resources of the only people that can actually evaluate and determine the value of healthcare provision, the patients. As implicit in the recent views on patient centred care, patients bring their own and personal sense of value, that might transcende adherence with medical decisions and include a wider set of actors and factors (Joiner & Lusch, 2016). Moreover, as implicated by the need to balance institutional with community-based resources, for mental healthcare is fundamental to recognise the collaborative nature of value co-creation (Vargo, Maglio, & Akaka, 2008).

To acknowledge the influence of the wider service context on customer experiences and the creation of value, current SDL frameworks take a service ecosystem perspective, that includes and complements the service encounters (firm to user interaction) or servicescape (physical and social environments) perspectives (Akaka & Vargo, 2015) of traditional marketing studies. Service ecosystems are defined as "relatively self-contained self-adjusting systems of resource-integrating actors connected by shared institutional logics and mutual value creation through service exchange" (Lusch & Vargo, 2014: 161). A service ecosystem perspective acknolwedges the phenomenological nature of experiences that are influenced by the socio and cultural contexts where they happen, going beyond the dyadic exchange between the firm and the user, to consider the various forms of interaction and resource integration occurring between various actors. In the healthcare environments a "S-D logic replaces the linear tightly linked system of suppliers of products with a value constellation of other cocreating actors, forming a health ecosystem. This includes family, friends, and alternative health care providers as well as a host of wellness services." (Joiner & Lusch, 2016: 32)

Service ecosystems have a dynamic nature, not being preexisting or fixed, but continually formed and reformed through the enactment of practices (Akaka & Vargo, 2015). In particular the service ecosystem perspective identifies institutions and institutional arrangements (such as households, organisations, or nations), as constraining and guiding how the actors can exchange and integrate resources and therefore co-create value. Institutions represent socially constructed laws, norms, values and moral codes as well as the cultural beliefs and cognitive models, frames and schemas

that can guide social action (Scott, 2011), the so called "rules of the game" (North, 1990). As service ecosystems embed micro (e.g. household and organisations), meso (e.g. industries or communities), and macro (e.g. nations, societies, global markets) levels of contexts (Chandler & Vargo, 2011), their service to service exchanges are affected by nested levels of institutional arrangements and their norms. It is possible therefore that while acting and interacting within complex ecosystems such as mental healthcare ones, conflicts might arise amongst the different actors that should co-operate to support individual recovery journeys. Even within the single departments of mental healthcare, various service units (community centers, daily centers, residential services or acute units within hospitals) embed and enact differents roles, norms and cultural beliefs, while operating within the same regulatory framework. This is the cause for potential conflicts and divisions, but it is also viewed as the potential for invididual actors to be creative and work toward the reconfiguration of existing practices (Koskela-Huotari, Edvardsson, Jonas, Sörhammar, & Witell, 2016).

Being the constant and self-adjusting encounter between different resource integrating actors that have different understanding and experience of value, service ecosystems are constantly adjusting and developing, resulting as the combinatorial evolution of different kinds of resources (Vargo, Wieland, & Akaka, 2013). At the same time, as actors and practices are affected and influenced by institutions, to initiate innovation requires the so called "institutional work" meaning "the purposive action of individuals and organizations aimed at creating, maintaining and disrupting institutions" (Lawrence & Suddaby, 2006, p. 215). Institutional work can happen if the challenging new practices are balanced by the maintenance of traditional ones, to give a sense of security and trust (Koskela-Huotari, Edvardsson, Jonas, Sörhammar, & Witell, 2016); also driving forces for institutional reconfigurations can be the inclusion of new actors, the redefinition of new roles and the reframing of resources, intended as new meaning, new resources or new knowledge (ibid).

In mental healthcare for example this is manifesting in the introduction of peripheral recovery oriented services and practices within mental healthcare organisations, that while introducing novel modes of co-creating care with patients, they sit aside with other more traditional practices. Examples are the introduction of new roles such as the expert patients or new actors, such as parents associations, or the development of novel co-produced services, such as the Recovery Colleges or patient-led welcome desks, that are gradually being introduced aside with more traditional clinical service practices.

A growing interest on which kinds of practices are informing innovation at the ecosystem level, has raised attention to the potential contribution also of design approaches (Vargo & Lusch, 2016), as described in the following section.

Co-design and innovation labs for service ecosystem change

Collaborative design approaches have their roots in participatory design and its original intent to make innovation processes more democratic (Shuler & Namioka, 1993), engaging workers in the co-design of new technologies (Bannon, 1991). Once co-design exited the sole field of ICT design and trade union movements, it widened its realm of applications, but maintaining the "design by doing" approach, enabling people to contribute to the innovation processes, by making co-design activities familiar, fun and "hands on" (Bannon, 1991). Recently co-design has been entering the public arena of designing for public services and social innovation (Ehn, 2008); given the co-produced and interactive nature of service provision, co-design approaches have played a fundamental role in service design from its onset (Meroni & Sangiorgi, 2011; Holmlid, 2009).

In the field of healthcare in particular, co-design consists in patients and carers working in partnership with staff to improve services (Donetto, Pierri, Tsianakas, & Robert, 2015). As it challenges traditional power relations in service provision, co-design has been considered as a fundamental element for the establishment of full co-production (Boyle & Harris, 2009) and co-

creation (Cottam & Leadbeater, 2004; Freire & Sangiorgi, 2010). The relevance of co-design for co-production in healthcare is associated in particular with its inherent notions of "equality, equal contribution, and mutual respect" that are "proving difficult to establish in health care contexts where traditional roles of provider and recipient of care are clearly demarcated" (Donetto, Pierri, et al. 2015, 14). At the same time these approaches can shed light to existing dynamics and mental models, that can be challenged in the iterative co-design process of learning by doing (Vink, et al. 2017). This is true also in the specific setting of mental healthcare where collaborative approaches of service design are increasingly implemented at different levels of this complex system (Sangiorgi et al., *forthcoming*).

Co-design approaches have been introduced in healthcare organisations, often via the establishment of design labs, operating as change agents in the public sector (Schuurman & Tõnurist, 2016). In the context of healthcare innovation labs have been defined as "*temporal entities, within organisations that utilise design knowledge and capacity to enhance innovation processes"* (Romm, 2017). Public Innovation Labs are studied as a mean to change both the mind-set and the practices with which public organisations identify problems and develop solutions (Junginger, 2014: 65). They are considered as "safe" spaces for creativity and experimentation, that introduce novel approaches for systemic innovation that differ from the daily routine practices of service delivery and management (Carstensen & Bason, 2012). Often hosted within dedicated physical or virtual spaces, innovation labs facilitate innovation projects engaging multiple partners, from private and public sector, and from different disciplinary fields enhancing the potential for co-creation, experimentation and learning (Thenint, 2009). Associated to exploratory and innovation actions, they support organisational learning in the initial stages, acting as "vanguard projects" that need then other approaches to move toward innovation exploitation and scale (Kimbell, 2015).

While most of these approaches and labs have been focused on changing individual services and organisations, only very recently attention has been directed to the need to transform wider service ecosystems. An interesting debate and experimentations have been developed around the concept of People Powered Health by NESTA[1], pointing toward the need to use co-design and co-delivery at all levels of the healthcare system: at the individual service user level, the whole services level, and the local healthcare system level (Nesta, 2013). In Service Design research there is also a growing interest on complex service system and service ecosystems, to explore how service design processes can operate at multiple levels (Patrício, Fisk, Cunha, & Constantine, 2011), approach system change starting from very different sociological paradigms (Sangiorgi, Patricio, & Fisk, 2017), or explore strategies to scale up solutions (Morelli, 2015). While addressing issues of wider systems transformation, service design has been referring and integrating already concepts coming from the SDL (Wetter-Edman et al., 2014).

Particularly relevant for this paper is the recent proposal of the concept of service ecosystem design, promoting the convergence between service research, service design and systemic design (Vink, Tronvoll, Edvardsson, Wetter-Edman, & Aguirre, 2017). Service ecosystem design has been defined as "a process of ongoing, collective designing that involves actors in creating, disrupting, and maintaining institutional arrangements to enable value-in-context" (p. 4). Starting from this perspective, the role of service design is to stage aesthetic experiences through co-design methods that help to enhance the reflexivity of participating actors, to learn about the situation and reframe it to transform it (Vink, Prestes Joly, Wetter-Edman, Tronvoll, & Edvardsson, 2019).

Given the role played by design labs in facilitating co-creation of sustainable solutions to healthcare challenges (Frencha, Teala, & Raman, 2016), questions are still open on how they can become an engine for wider transformations. The following section will summarise the initial stages of a project that is aiming to establish co-labs within mental healthcare, to reflect on how co-design can guide their development toward service ecosystem change.

[1] http://www.nesta.org.uk/project/people-powered-health

Transforming a mental healthcare ecosystem in Italy: an action research project

This paper will illustrate the first step of an action research project titled Recovery.Net funded by Cariplo Foundation[2], that is working toward the development of a Recovery oriented and community-based psychiatry in the East of Lombardy region in Italy. Starting from the recognition of the limitations of the current mental healthcare system and at the same time of a wide range of available resources and assets, partners with different roles and mission in mental health and public services joined together to design a project that could bring on the same ground recovery and ways of collaborative working among users and services aiming to test a pathway toward the transformation of the current practices. The project brings together a wide array of partners: two mental health departments of the cities of Brescia and Mantova, three universities representing the fields of design, sociology and psychology, two cooperatives, three family associations and a theatre company. The main objectives of the project are: 1) to activate and create synergies amongst the territorial resources of Lombardy and develop the necessary competences and tools to experiment and evaluate a model of psychiatry oriented toward recovery and co-production, active on the territory and based on the community; 2) to support the creation of regional and local forms of network governance able to manage care paths centred on people, co-produced and integrated in the territory.

Given the complexity of transforming and re-orienting the service ecosystem toward a recovery oriented and community-based psychiatry, the project has been conceived from its start as a multilevel process, simultaneously operating at the micro (co-production of the individual treatment plan), meso (service and organisational change toward recovery and co-creation), and macro (cultural change in society and informing policy making) levels. As a fundamental mechanism for the realisation of these objectives, one of the main actions of the project consists in the set-up of three innovation labs in the three main territories (cities of Brescia, Mantova and Castiglione delle Stiviere) of the project. The innovation lab has been originally intended as the activation – within the participants' organisations – of competences, spaces and permanent practices leading toward co-design, co-production and co-evaluation of care paths, services and initiatives oriented toward the principles and ideals of Recovery.

This paper is summarising the first stage of this action, consisting in the co-designing and setting up one of these labs in the city of Brescia as facilitated by the design team of the Department of Design of Politecnico di Milano. We use this experience to reflect on the potentials and challenges of guiding change at the ecosystem level, and how co-designing can play a fundamental role.

Methodology

In order to address the aim of the project while reflecting on the nature and effectiveness of the co-designing approach to inform service ecosystem change, the team applied an action research methodology implying: 1) a collaborative and participative relationship between researchers and contextual actors (Whyte, 1991); 2) a continuous reflection on action (Schön, 1983); 3) a strong bond between theory and practice; 4) and a cyclic and emerging process of planning, acting, observing, and reflecting (Swann, 2002).

The process has been originally planned in four main stages: a preliminary research, 1 common co-design workshop, 3 local workshops, followed by prototyping and specifications. This plan has then been partially changed and adapted given the emergent nature of the collaboration and the results of the ongoing search and negotiation for potential spaces to host these labs (see figure 1).

[2] http://welfareinazione.fondazionecariplo.it/it/project/recoverynet/33/

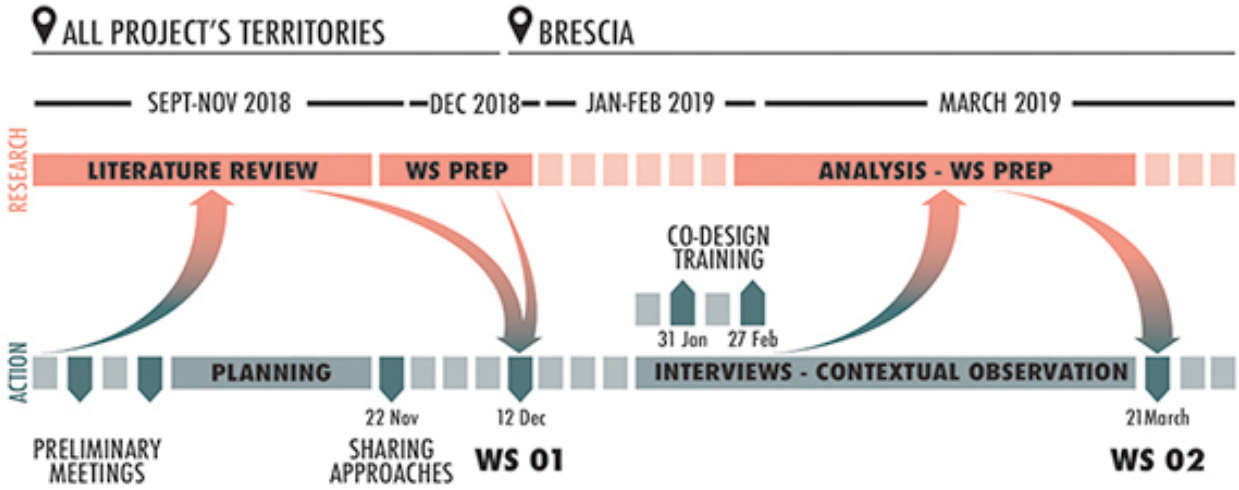

Figure 1. co-design process for the set-up of the co-lab in Brescia

The preliminary research consisted in planning meetings, a literature review on innovation labs, and an in-depth study of 3 key exemplars. The collected data then informed a common co-design workshop to elaborate on possible scenarios to be declined for each location; in the case of the city of Brescia, the choice of a potential space in a peripheral and challenging area of the city, led to the need to conduct a collaborative field research in to the area, mapping and interviewing key actors and local residents. This field research has therefore been summarised and used as data for a local co-design workshop to revisit the original scenarios addressing the needs and resources of the specific location. Finally, at the current stage of the process, the scenarios have been visualised and shared across the project community to gain feedback, and presented at the opening of a theatre festival partly hosted in the future lab location. This led to a strategic conversation with local associations and the city council to gain approval for the access and future management of the physical space of the lab. The following sections will detail these different stages of the process, while table 1 provides a list of participants for each specific activity.

Phase	**People involved**		**No.**
Workshop 01		3 patients 3 patients' relatives 1 Mental Health doctor 8 caregivers (supervisors, nurses, social workers) 11 Local Actors (social workers of social cooperatives and associations, volunteers of family member associations, a theatre company member)	26
Fieldwork	Co-lab team members	2 Mental Health Department patients 1 Mental Health Department patients' relatives 3 Mental Health Department caregivers	6
	Interviewed	A staff member of a local open centre for elderly people A staff member of the local associations' centre The founder of a local cultural association with focus on holistic wellness A staff member of a social cooperative with focus on social housing A staff member of a social cooperative with focus on children and youth inclusion A member of the sewing group for foreign women A staff member of a charity association A member of the local walk group for elderly people The president of the local neighborhood council An inhabitant of the tower A sociologist, professor at the local university A music teacher A volunteer at the local Italian Associations for Christian Workers A staff member of the local community hub A nurse at the local Mental Health Department	15

Workshop 02		6 patients 2 patients' relatives 1 Mental Health doctor 11 caregivers (supervisors, nurses, social workers) 8 Local Actors (social workers of social cooperatives and associations, volunteers of family member associations, a university professor)	28

Table 1. participants for each main stage of the co-design process

Preliminary research and conversations

The first step for the establishment of the innovation labs, consisted in preliminary conversations with the key actors of the project to reflect on how to support the process of co-designing each individual lab. Specific sessions to gather preliminary visions for the lab and to understand the current activities were conducted as a starting point to map the existing resources and to activate relations. This also helped to identify who was able to actively contribute in the design research activities, establishing a smaller group responsible for the development of the labs.

Moreover, in preparation of the co-design sessions, a specific meeting was organised to share operational and design approaches: participants reflected on how decisions and processes were currently managed, who was involved and the roles and capabilities needed. This phase helped to align knowledge both on the participants and design team sides.

Desk research on Innovation Labs

A desk research was conducted as a preliminary literature review on Innovation Labs that led to the identification of three main lab categories, according to their role in enhancing co-design and innovation: Innovation Labs, intended as safe spaces working mostly on service innovation within organizations (Carstensen & Bason, 2012); Living Labs, experimental spaces operating in real contexts and working with several local actors from the territory (Schuurman & Tõnurist, 2016); and Community Hubs, intended as multifunction urban spaces managed with and by local communities promoting social inclusion and cultural activities (Bagnall, et al., 2018). Starting from this classification, the design team identified key qualities for each category and collected several examples to inform the design process; furthermore, a semi-structured interviews with a key member of three representative labs was conducted: Malmö Living Labs in Sweden; La 27e Région in France; Punti di Comunità in the North-East of Italy.

First co-design workshop

A first co-design workshop was held in December 2018 involving 26 participants including doctors, caregivers, patients and expert patients from mental health services and social actors from local associations of the 3 territories involved in the project. The aim of this event was to envision possible ideal scenarios for the future labs starting from what emerged during the desk research. The session was articulated in the following steps:

1. An icebreaking activity in which each participant was asked to place a sticker with its own name on its territory of reference and tracing lines of connection with the people with whom they already cooperated, creating a map of relationships;
2. A presentation of the 3 types of labs with some illustrative case studies and user stories;
3. A scenario development activity in four groups, where participants had to position selected representative case studies cards in a map with three polarities (i.e. innovation labs, living labs or community hubs) to help position and define the key qualities of their ideal co-lab;
4. A storyboarding activity where participants had to imagine practical activities the lab could do;
5. Groups presentations of their ideal lab as developed in the workshop.

Figure 2 and 3: Polarity map for scenario development, with case study cards & Storyboard

The four scenarios that emerged from these activities were:

- *The co-lab as a place of discovery and experimentation of wellness*: Alongside physical and mental health, the co-lab promotes the value of social health intended as the ability to form satisfactory interpersonal relationships with others through the development of transversal skills such as relational approach, communication skills, use of an accessible language, etc.;
- *The co-lab as a co-living space*: sharing a space, and doing together help to better know each other, and overcome stereotypes and fears. This lab is a non-partisan place with the aim of stimulating a renovated debate with the territory and institutions on mental health;
- *The co-lab as a co-design space*: learning about people's needs helps to generate new ideas and initiatives, imagined by the community for the community. The co-lab becomes the space where these new ideas take shape, are shared and tested with different actors in the territory;
- *The co-lab as a place of generative paths and positive contamination*: the encounter between diverse resources and needs favours the emergence of new opportunities in a generative way through innovative methods and tools.

Contextual research

In parallel to the definition of the design intervention each territory has been in charge to identify the future possible location of its own lab. In the specific case of Brescia, this resulted in the identification of a peripheral area of the city, called San Polo, the most populous area of the Eastern district of the city, with over 20.000 inhabitants. San Polo is a very controversial and multifaceted neighbourhood, known for hosting problematic cases of fragility - individuals and families, with a high percentage of foreigners and migrants - in high council houses (called "towers"), with the consequent concentration of very active social cooperatives and associations dealing with the criticalities of the area such as children education, social inclusion, or poverty. Beyond the "towers" San Polo is characterized by terraced villas owned by middle class families, inserted in a green context. The neighbourhood is also well known for being very polluted because of a large steel factory and the proximity with highways. Towers are seen as a reality apart from the neighbourhood, both from a demographic point of view and from the feeling of the residents. The project identified one of these towers (called Torre Cimabue) – and specifically some spaces in its first floor - as the possible location for the new co-lab. The Cimabue tower is owned by the Brescia municipality and managed by ALER, the regional residential building company. There are 188 apartments of which 150 are inhabited and about thirty vacant for legal recoveries. The population of the tower is varied: elderly people living here for decades; foreign families with many children; housing for social service; a set of apartments for mental health patients managed by a social cooperative.

During a 2-month collaborative contextual field research in San Polo, the local co-lab research team, supported by the design team, was in charge of exploring the neighbourhood identifying key actors to interview and conducting some visual ethnography. A two-day training programme was also organised to introduce participants to the methodology and the analysis of the collected data. The research group - composed by 2 design team members, 3 caregivers from the local mental health department, a family member and 2 patients - divided in mixed couples and supported by tools such as an information sheet, an interview guide and a neighbourhood map, conducted 15 interviews with the purpose of collecting and mapping the context, existing experiences and needs of those who live the district and the Cimabue tower. People interviewed included: key actors working in the Cimabue tower; key actors working in the San Polo district; residents of the neighbourhood and the Cimabue tower. In parallel the research team carried out a contextual observation to collect impressions and photos of the spaces emerged during the interviews. Interviews and photos were shared in an analysis session with the design team to identify the crucial characteristics of the neighbourhood. Opportunities and design challenges were identified as the starting point to imagine the role of the local lab.

Figure 4 and 5: San Polo Cimabue Tower & residential houses

Second local co-design workshop

The following workshop, in March 2019, involved 34 participants from the Brescia area - including doctors, caregivers, patients, expert patients from mental health services and social actors from local organisations - divided in 4 groups, with the aim of revisiting the original common scenarios emerged in the first workshop, addressing the needs and resources of the specific location of San Polo. As a starting activity, the groups were introduced to the context by the research team that presented the highlights of the research including the challenges and opportunities of San Polo, supported by photographic material. Then, the four groups had to choose the most relevant scenarios for the area and were asked to adjust those visions to address both the needs of Recovery.Net project and the qualities of the local area. Using co-design tools such as “challenges and opportunities cards” or “actor cards” to inform their imagination, groups had to describe the future lab in terms of values, activities, and main participants.

The emerged scenarios included:

- *The co-lab as a caring place:* here the interests and individual capabilities of local actors and users are integrated to reactivate and take care of people and the spaces of the Cimabue tower and of the surrounding neighbourhood;
- *The co-lab as a place for encounters and bottom-up generative contaminations*: here mental health patients, inhabitants of the tower and the neighbourhood can learn and exchange knowledge acting as an informal living room, where everyone feels welcomed;

- *The co-lab as a place for policy and cultural change in the city of Brescia*: here service users and citizens are protagonists and mental health is a transversal value that connects multiple sectors of intervention in the community;
- *The co-lab as a place that promotes social health*: here active citizens, and mental health patients are trained to become facilitators to promote social health, engaging San Polo neighbourhoods and the existing local organisations.

Scenarios presentation and round table

Finally, at the current stage of the process, the scenarios have been visualised and shared across the project community to gain feedback through an offline and online survey, and they have been presented at the opening of a theatre festival, partly hosted in the future lab location and organised by the theatre company partner of the project. These actions and a constant dialogue with institutions and local organisations led to a round table with the local associations: this brought to the drawing up of a common letter with proposals addressed to the city council to ask access and future management of the lab's space.

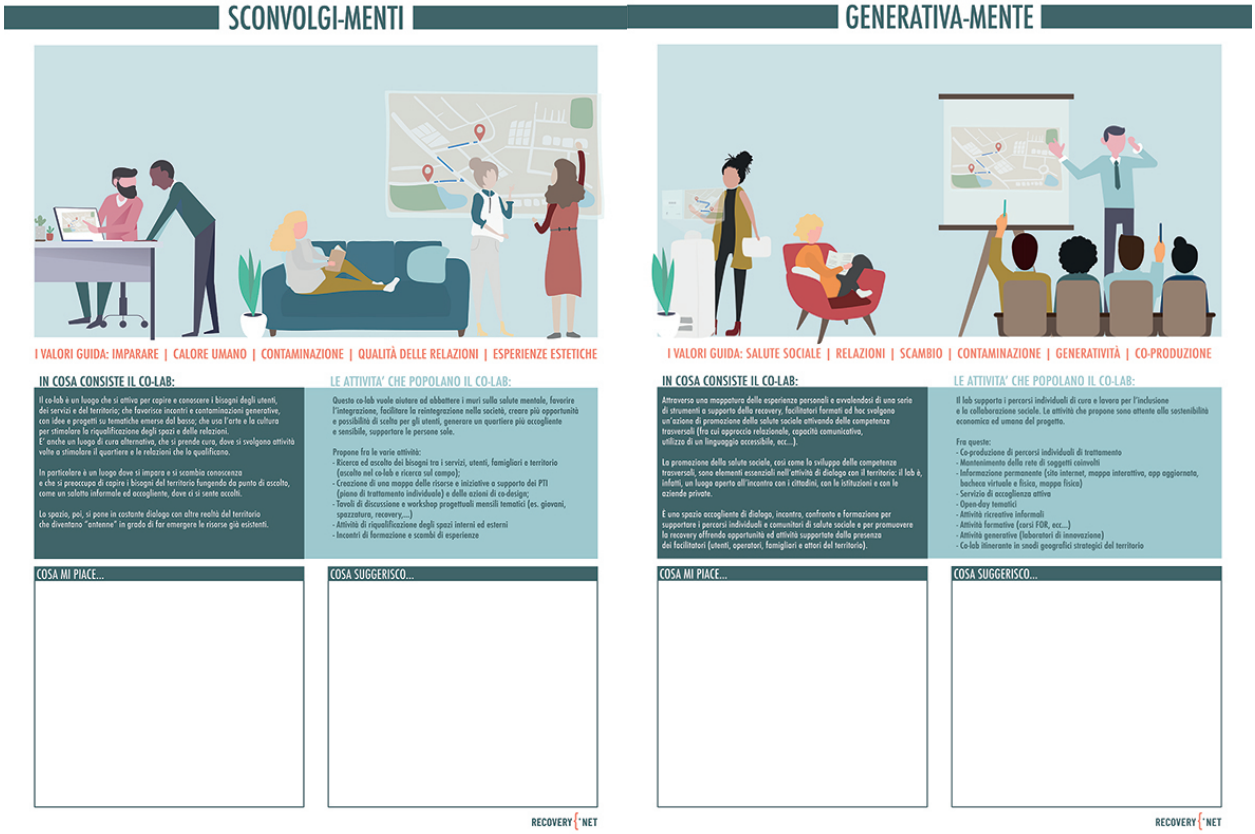

Figure 6 & 7: examples of posters to visualise and gather feedback on the scenarios

Contribution and Discussion

The process as it has been described, is an ongoing conversation that is gradually converging a very diverse set of partners and local actors to imagine how the future lab could operate and what it could represent for the territory of Brescia. These conversations, enabled by a co-design approach, led to the access to a new space opening up a dialogue with different local associations. The co-design process seemed to work at different levels:

1) *arise the collective awareness on the status quo, the need and potential for transformation*: the initial conversations from the collaborative writing up of the research proposal itself, and the initial meetings to consolidate the need, aim and vision for the project were a fundamental stage

to arise a collective awareness on the why and the aim of Recovery.Net that meet and embrace the diversity of the individual needs and perspectives of each project participant;

2) *enhance the ability to see existing resources, their use and integration as a potential for change and development*: as also suggested by SDL, resource-integration practices can be re-combined to form dynamic networks and systems (Chandler & Vargo, 2011). The field research and an ongoing resource mapping process of Recovery.Net are a fundamental activity to identify new resources or see existing ones from a different perspective as a source for "generative contaminations" where needs and capabilities can meet in novel ways;

3) *support the ability to imagine and discuss possible futures*: the desk research on the different kinds of labs and their operational model, has been used to help participants to support the imagination, move beyond existing perceptions and open up the possibilities. Case studies and examples from diverse fields oriented the conversations, while co-design methods provided the structure to think and represent new stories and complex ideas. Also visualisations of the developed scenarios, supported the sharing of results with a wider community, again enhancing the strategic conversations with the local associations and the city council;

4) *keep the conversations open to avoid falling back to existing "rules of the game"*: the constant challenge in this process was the risk to let stronger voices or existing ways of doing and relating, to come back and to re-settle the emerging practices to the status quo; this was felt particularly evident when having to bring the future scenarios in a round table to find a general agreement with the local neighbourhood associations and with the city council to gain the access to the space. The scope of this co-design process then is not only to guide the imagination for the future co-lab, but it is in particular to establish collaboration and co-creation as a core ability of the lab to be able to bundle and re-bundle resources in novel ways to better address the needs of patients' recovery journeys.

Co-designing the mental health labs are therefore operating as a prototype for their future operation, testing the ability, the resistances and the potential of working together in different ways, to form an environment that fosters connectivity and integration among mental health service providers, aligned with a systemic understanding of mental healthcare transformation: *"such an initiative should be regarded as an iterative process, a service always in ongoing development, which will require refinement and adaptation both to local contexts and dynamically over time."* (Ellis, Churruca, Braithwaite, & Jeffrey, 2017: 4)

Acknowledgments

This paper is based on an ongoing project called "Recovery.Net" that is funded as part of the Welfare in Action program of Cariplo Foundation (http://welfareinazione.fondazionecariplo.it). Cariplo Foundation is amongst the most important philantropic associations in the world with more than 1000 funded projects every year with 150 ML euros for the no-profit sector and the big challenges of the future.

Bibliografia

Akaka, M. A., & Vargo, S. L. (2015). Extending the context of service. *Journal of Services Marketing, 29*(6/7), 453–462.

Bagnall, A.-M., South, J., Di Martino, S., Southby, K., Pilkington, G., Mitchell, B., . . . Corcoran, R. (2018). *Places, spaces, people and wellbeing: full review.* Leeds: What Works Centre.

Björgvinsson, E., Ehn, P., & Hillgren, P.-A. (2012). Agonistic participatory design: working with marginalised social movements. *CoDesign: International Journal of CoCreation in Design and the Arts, 8*(2-3), 127-144.

Boyle, D., & Harris, M. (2009). *The challenge of co-production. How equal partnerships between professionals and the public are crucial to improving public services.* London: NESTA.

Chamberlain, J. (1990). The ex-patients movement: where have we been and where are we going? *The Journal of Mind and Behaviour*, 111, 323–336.

Carstensen, H. V., & Bason, C. (2012). Powering collaborative policy innovation: Can innovation labs help? *The Innovation Journal: The Public Sector Innovation Journal, 17*(1), 2-25.

Chandler, J. D., & Vargo, S. L. (2011). Contextualization and Value-in-Context: How Context Frames Exchange. *Marketing Theory, 11*(1), 35-49.

Cottam, H., & Leadbeater, C. (2004). *HEALTH: Co-creating Services.* London: Design Council.

Donetto, S., Pierri, P., Tsianakas, V., & Robert, G. (2015). Experience based Co-design and Healthcare Improvement: Realizing Participatory design in the Public Sector. *The Design Journal, 18*(2), 227-248.

Ehn, P. (2008). Participation in design things. *Proceedings of the 10th Anniversary Conference on Participatory Design*, (p. 92–101). Bloomington.

Ellis, L. A., Churruca, K., & Braithwaite, J. (2017). Mental health services conceptualised as complex adaptive systems: what can be learned? *International Journal of Mental Health Systems, 11*(43), 1-5.

Frencha, T., Teala, G., & Raman, S. (2016). Experience Labs: co-creating health and care innovations using design tools and artefacts. *Proceedings of DRS 2016, Design Research Society 50th Anniversary Conference.* Brighton.

Freire, K., & Sangiorgi, D. (2010). Service design and healthcare innovation: from consumption to co-production to co-creation. *Nordic Service Design Conference.* Linköping: Linköping University Press.

Holmlid, S. (2009). Participative, co-operative, emancipatory: From participatory design to service design. *First Nordic Conference on service design and service innovation*, (p. 1-14).

Joiner, K. A., & Lusch, R. F. (2016). Evolving to a new service-dominant logic for health care. *Innovation and Entrepreneurship in Health, 3*, 25-33.

Junginger, S. (2014). Towards Policy Making as Designing: Policymaking beyond Problem-solving and Decision-making. In C. Bason, *Design for Policy* (p. 57-69). Gower Publishing Limited.

Kimbell, L. (2015). *Applying Design Approaches to Policy Making: Discovering Policy Lab.* Brighton: University of Brighton.

Koskela-Huotari, K., Edvardsson, B., Jonas, J. M., Sörhammar, D., & Witell, L. (2016). Innovation in service ecosystems—Breaking, making, and maintaining institutionalized rules of resource integration. *Journal of Business Research, 69*, 2964–2971.

Lawrence, T.B., and Suddaby, R. (2006). Institutions and Institutional Work. In S. Glegg, C. Hardy, T.B. Lawrence, and W.R. Nord, (Eds.), *Handbook of Organization Studies*, 2nd Ed. (pp. 215-254), London: Sage.

Lusch, R.F. and Vargo, S.L. (2014), *Service-Dominant Logic: Premises, Perspectives, Possibilities*. New York: Cambridge University Press.

Maglio, P.P. and Spohrer, J. (2008), Fundamentals of service science, *Journal of the Academy of Marketing Science*, 36(1), 18-20.

McDaid, D., & Thornicroft, G. (2005). *Mental health II Balancing institutional and community-based care.* Brussels: The European Observatory on Health Systems and Policies.

McGann, M., Blomkamp, E., & Lewis, J. M. (2018). The rise of public sector innovation labs: experiments in design thinking for policy. *Policy Sciences*.

Meroni, A., & Sangiorgi, D. (2011). *Design for Services.* Aldershot: Gower.

Morelli, N. (2015). Challenges in Designing and Scaling up Community Services. *The Design Journal, 18*(2), 269-290.

Nesta. (2013). *By us and for us: the power of co-design and co-delivery.* London: Nesta.

North, D.C. (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, Cambridge.

Osborne, S. P. (2017). From public service-dominant logic to public service logic: are public service organizations capable of co-production and value co-creation? *Public Management Review, 20*(2), 225-231.

Patrício, L., Fisk, R. P., Cunha, J. F., & Constantine, L. (2011). Multilevel Service Design: From Customer Value Constellation to Service Experience Blueprint. *Journal of Service Research, 14*(2), 180-200.

Phillips, P., Sandford, T. & Johnston, C. (2012). *Working in mental health: practice and policy in a changing environment.* London, Routledge.

Rosen, A., O'Halloran, P., Mezzina, R. (2012). International Trends in Community Mental Health Services. In: H. McQuistion, W. Sowers, J. Ranz, J. Feldman (eds.), *Handbook of Community Psychiatry*. New York: Springer.

Romm, J. (2017). *Spaces for Co-Designing Health and Care: Embedded Innovation Labs for Patient-Centric Healthcare Service Design*. PhD Project Proposal. Institutt for Design, Oslo, Norway.

Sangiorgi, D., Lima, F., Patrício, L., Prestes Joly, M., & Favini, C. (2019). A Human-Centred, Multidisciplinary, and Transformative Approach to Service Science: A Service Design Perspective. In P. P. Maglio, C. A. Kieliszewski, J. C. Spohrer, K. Lyons, L. Patrício, & Y. Sawatani, *Handbook of Service Science, Volume II* (p. 147-181). Cham: Springer.

Sangiorgi, D., Farr, M., McAllister, S., Mulvale, G., Sneyd, M., Vink, J., & Warwick, L. (forthcoming). Designing in highly contentious areas: Perspectives on a way forward for mental healthcare transformation. *The Design Journal*. Article DOI: 10.1080/14606925.2019.1595422

Sangiorgi, D., Patricio, L., & Fisk, R. (2017). Designing for interdependence, participation and emergence in complex service systems. In D. Sangiorgi, & A. Prendiville, *Designing for Service. Key Issues and New Directions* (p. 49-64). London: Bloomsbury Publishing Plc.

Schön, D. A. (1983). *The reflective practitioner - how professionals think in action.* Basic Books.

Scott, W.R. (2001), *Institutions and Organizations*, Thousand Oaks, CA: SAGE Publications Ltd.

Schuurman, D., & Tõnurist, P. (2016). Innovation in the Public Sector: Exploring the Characteristics and Potential of Living Labs and Innovation Labs, *Technology Innovation Management Review*, *7*(1), 7-13.

Shuler, D., & Namioka, A. (1993). *Participatory design. Principles and practices.* Hillsdale: LEA Publishers.

Slay, J., & Stephen, L. (2013). *Coproduction in mental health.* London: new economics foundation.

Swann, C. (2002). Action Research and the Practice of Design. *Design Issues, 18*(2), 49-61.

Thenint, H. (2009). *Labs for a more innovative Europe. Report.* INNO-GRIPS Global Review of Innovation Intelligence and Policy Studies.

Tomes, N. (2006). The Patient As A Policy Factor: A Historical Case Study Of The Consumer/Survivor Movement In Mental Health. *Health Affairs,* 25(3), 720-729.

Tõnurist, P., Kattel, R., & Lember, V. (2017). Innovation labs in the public sector: what they are and what they do? *Public Management Review, 19*(10), 1455-1479.

Tonurist, P., Kattel, R., & Lember, V. (2015). *Discovering Innovation Labs in the Public Sector.* Tallin: Norway: The Other Canon Foundation.

Vargo, S.L. and Lusch, R.F. (2008). Service-dominant logic: continuing the evolution, *Journal of the Academy of Marketing Science*, 36(1), 1-10.

Vargo, S. and Lusch, R. (2016). Service-dominant logic 2025, *International Journal of Research in Marketing*, 34(1), 46-67.

Vargo, S. L., Maglio, P., & Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal, 26*, 145– 152.

Vargo, S. L., Wieland, H., & Akaka, M. A. (2013). Innovation through institutionalization: A service ecosystems perspective. *Industrial Marketing Management, 44*, 63–72.

Vink, J., Prestes Joly, M., Wetter-Edman, K., Tronvoll, B., & Edvardsson, B. (2019). Changing the rules of the game in healthcare through service design. In M. A. Pfannstiel, & C. Rasche, *Service Design and Service Thinking in Healthcare and Hospital Management* (p. 19-37). Springer, Cham.

Vink, J., Tronvoll, B., Edvardsson, B., Wetter-Edman, K., & Aguirre, M. (2017). Service Ecosystem Design: Doing Institutional Work through Design. In E. Gummesson, C. Mele, F. Polese (Eds.) *Proceedings of the Naples Forum on Service*. June 6-9, Sorrento, Italy, pp. 1-15.

Wetter-Edman, K., Sangiorgi, D., Edvardsson, B., Holmlid, S., Grönroos, C., and Mattelmäki, T. (2014). Design for value co-creation: exploring synergies between design for service and service logic, *Service Science*, 6(2), 106-121.

WHO. (2013). *Mental Health Action Plan 2013-2020.* Geneva: World Health Organisation.

Who Health Organisation. (2014). *Social determinants of mental health.* Geneva.

Whyte, W. F. (1991). *SAGE Focus Editions: Participatory action research.* Thousand Oaks, CA: SAGE Publications Ltd.

World Health Organization and World Organization of Family Doctors. (2008). *Integrating mental health into primary care A global perspective.* Geneva: World Health Organisation.