

Service design and participatory design: time to join forces?

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ABSTRACT

We address the theme of “participation(s) otherwise” by bringing forward what we see as an opportunity to combine existing participatory and service design approaches to participation in the way they weave connections between design, IT, digitalization and democracy, focusing on the context of the public sector. This is a context where participatory design, despite interest and projects, has not been widely adopted. However, service design, the ‘new kid on the block’, is establishing itself by very pragmatically addressing the emerging need for people-centered design approaches in organizations, including in the public sector. Service design might at first be easily dismissed by participatory design because of what may seem a superficial take on people-centeredness and its links to business-centered interest in ‘design’. With this exploratory paper, we emphasize what both disciplines can learn from one another and propose that participatory design and service design join forces in expanding notions of participation and addressing the challenges of digitalization in the public sector.

CCS CONCEPTS

• **Human-centered computing** → Interaction design; Interaction design process and methods; Participatory design.

KEYWORDS

Services, service design, participation, public sector

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1 INTRODUCTION

Drawing rough brushstrokes, one can say that Participatory Design (PD) started with a focus on countering the forcing in of new information technology systems unto workers by management (see e.g. [7]). The first PD projects of the '70s in Scandinavia were collaborations with trade unions and workers in various industries (see the NJMF, Demos, DUE, and UTOPIA projects; [65]). These early projects fostered the belief in the right of workers to express themselves and have a voice in the design of IT that was to become part of their workplace, not leaving these decisions to management only. They also aimed to put this view of democracy into practice through education in technical terminology as well as situated-based actions in the work environment, thus allowing for participation through empowerment and mutual learning. The role of the newly devised PD tools and techniques was important because they would allow for developing alternative visions about technology, grounded in the expertise and needs of workers. [61] PD later spread to contexts other than the workplace, where the empowerment of citizens, patients, or vulnerable groups with respect to technology have been deemed important. But if we look at the world today, even in the same Scandinavia of the above-mentioned projects, we still find that the push for IT from the top is still there, in various context including corporations and the public sector. The PD approach to democracy and IT has not yet gone mainstream.

There is much talk today about digitalization, digital transformation, and digital services – with IT infrastructure supporting them often remaining ‘hidden’ in the background. Everything can now be interpreted through a service-dominant perspective; Vargo and Lusch [72] define every economy as a service economy. Even software is turning into a service and the term “Software As A Service” refers to subscribing to software services rather than buying and owning one’s own software or a license for it (SaaS; see e.g. [69]). This focus on services has opened the door for a new discipline, Service Design (SD), at the intersection of service science, business and management, and design ([30]; [29]). Capitalizing on placing the customer at the center of the experienced service [60], and riding on the wave of “design thinking” in management and business ([26]; [31]; [32]), the practice of SD now claims a strong people-centeredness as one of its defining selling points ([64]; [29]). SD has lately been relatively successful in introducing a people-centered design approach to organizations, including in the public sector ([67]; [42]; [4]), by providing an array of suitable tools and techniques, many of which are stemming from PD [64].

PD, on the other hand, has remained academic, focused on projects, with challenges regarding scale and replicability, and despite some successes, far from mainstream implementation ([35]; [25]). Moreover, even if there are several references to PD explorations in the public sector spanning through the years (see e.g. [53] for an overview), PD has not entered the mainstream there either. At most, mundane references to PD superficially exist through the spread of its tools and techniques [56], now adopted by SD and introduced to the public sector but without the legacy of PD regarding democracy and IT, nor PD's current concerns in adapting this legacy to the present (e.g. [3]). Despite its recent interest in people-centered design, the public sector is not addressing the connection established by PD between the design of IT (and by extension digitalization), empowerment and democracy [53]. Even in digital forerunning countries like the Scandinavian ones, marginalization is occurring because of top-down digitalization: not everyone is able to receive services through the imposed digital solutions [57].

With this paper, we address the theme of “participation(s) otherwise” by bringing forward what we see as an opportunity to combine existing PD and SD approaches to participation in the way they weave connections between design, IT, digitalization and democracy, focusing on the context of the public sector. This is a context where SD is now leading the way. SD might at first be easily dismissed by PD because of what may seem a superficial take on people-centeredness and its links to business-centered interest in ‘design’. We want to propose what might seem a provocative and unorthodox suggestion for PD, namely that SD, with its currently more established position in the public sector, might open doors for a ‘PD sensitivity’ of sorts to infiltrate the public sector. SD could be seen as a chance to advance PD to the mainstream – particularly in bringing forward its objective of political activism [3]–, building on the groundwork already done by SD in having successfully argued for the relevance of human-centered design and introduced the tools and techniques of PD. We are aware of Bannon et al.’s warning of romanticizing early PD [3] but we still find relevance in PD’s core values of democracy and empowerment and its political drive [20]. A general alliance between SD and PD has already been suggested before by Holmlid [24], who highlighted three key themes present in both fields: user involvement, co-operation, and emancipation. In this paper we continue with these themes but focus on how SD might answer some of PD’s challenges in terms of scaling up and addressing different organizational levels, as well as allowing for PD to ‘learn from the ground’, and better articulate its contribution to the contemporary public sector. Additionally, PD would be relevant for SD in bringing a certain sensitivity as well as rich history in questions of participation; allowing people to have a genuine say in the shaping of the digital landscape of the future, particularly the array of digital services being put into place in the name of a better and more efficient public sector.

We base our research on literature in both fields, but as this constitutes our first exploration, we have kept it limited to a mostly European perspective - hopefully triggering further research to include other perspectives globally. We proceed first with an overview of SD and the understanding of participatory approaches in this field. We then move to presenting the service perspective in PD. Afterwards, we highlight the current shift towards people-centeredness in the public sector and the say SD has made its move there. Finally,

we end with a discussion on what can each field learn from the other, especially regarding concerns prevalent in the public sector.

2 FROM SERVICE DESIGN TO PARTICIPATORY APPROACHES

SD is a relative newcomer to the design fields. After being introduced in the 80s in marketing studies ([59]; [60]), SD has been steadily used in management as an approach to support customer relationships and to more granularly assess quality ([36]; [54]) and in engineering as an integral part of a total design to control production processes [23]. In parallel, a group of design researchers started using the term to refer to those design processes oriented towards ideating, defining and developing services [39]. This initial work was systematized for the first time by Pacenti [52] who qualified SD as the design of service interactions. Inevitably, the link between service and interaction design suggested a deeper exploration of the relation between the two activities, also supported by a number of practitioners coming from the Interaction Design School in Ivrea [71]. This initial work expanded also with the contribution of other practitioners and SD consultancies [64]. Since then, there has been continuous growth in the number of higher education programs dedicated to SD [6].

The convergence between marketing, management and design originates in the progressive consolidation of a perspective that considers services as a fundamental activity of economic exchange [72]. Norman and Ramirez [50] pointed out that value is not an intrinsic property of products, nor is it generated by the service provider, but it is, in fact, the result of participatory dynamics involving a constellation of actors, including users or service customers. This brings forward an understanding of participation where users/customers are creating value by aggregating resources, such as products, infrastructures and knowledge, that are produced by many different actors [72]. In this perspective, service providers and even designers are no longer providing value, but rather value propositions that can only become real value once such proposition is integrated into the moment and context of use. Vargo and Lusch [73] put users (the beneficiaries) at the center of the process of value creation and generate a point of convergence for several design positions, that acknowledge the beneficiaries’ knowledge as design knowledge. Drawing connections to design, Manzini [40] highlights that design capability is not only a characteristic of expert and trained designers, but it is also a diffuse attitude, that relates to the problem-solving capabilities of individuals and collectives. The recognition of design as a diffuse capability is in fact questioning the role of (professional) designers, in a context in which the process of value production is mainly led by users and their diffuse design capability. In this context, the role of expert designers is no longer to create value, but rather to support the capabilities of users and communities to define their own solutions (and even their own needs) and to engage them in a participatory process of value co-creation. It is worth noticing that the process of value co-creation differs from that of co-design, as it includes any act of creation that is shared among multiple actors, not only co-design activities. Users/beneficiaries are no longer to be considered as passive value receivers, but rather as active partners in the process of value creation ([50]; [72]).

On the more practical front of design, SD has adopted co- and participatory design approaches, inviting stakeholders to take part in design activities, borrowing the toolkit of PD. At the same time, SD's aim for a systemic perspective – allowing for zooming out and in between the service as a whole and specific touchpoints ([30]; [9]) – provides a more expanded toolkit, with tools for mapping ecosystems, stakeholders, user journeys, and whole systems [63] thus offering possible pathways for expanding the scale of design and contribute to democratic infrastructure and governance [43].

3 THE SERVICE PERSPECTIVE IN PARTICIPATORY DESIGN

A search for the terms “service” and “service design” in articles in the Proceedings of the Participatory Design Conference (as available on <http://pdcproceedings.org/> and covering 1990-2018) shows that references to these terms are few (n=18 for “service and n=7 for “service design” / workshops, industry papers and doctoral consortia descriptions were left out). The first explicit references to service date back to 1998 and 2000 with examples of PD projects in collaboration with Swedish municipalities ([55]; [18]). These examples take a PD perspective to understanding and proposing participatory design activities in the design of municipal services. The link to the inherent quest in PD to connect questions of technology and democracy is apparent in the context of these studies, which is the digitalization of public services aimed at facilitating interaction between citizens and authorities. Ranerup [55] reports on an attempt at using online discussion fora between citizens and politicians, and Ekelin [18] (later also [17]) reports on projects set up in the context of the “one-stop shop” idea for bringing together various public services under one roof - an idea popular in the '90s in municipalities in Denmark and Sweden. This interest of PD in public services and their digitalization continues on, with reported research on collaborations with municipalities or other public bodies (e.g. [10]; [16], see also e.g. [53] for a recent account reported elsewhere than in the PDC proceedings). Another branch of interest in public services is apparent in projects dealing with healthcare services (e.g. [11]; [44]; [74]). Other examples in PD literature refer to services in a commercial or industrial setting ([51]; [70]; [62]; [8]; [21]; [27]; [22]; [48]; [19]), or not for profit one ([37]; [76]; [49]). Even though services are recognized as a relevant context for PD, there is still little in terms of referencing the SD literature and explicitly stating the relevance of an SD approach. Sangiorgi and Clark [62] make use in their 2004 PDC paper of the SD vocabulary, referring to Shostack's work and “service encounters”. They also refer to the partnership between “service users” and “suppliers” in the “co-production of services”. Blomberg et al. [8] also use the SD terminology of “touchpoints” and “service delivery”. Hedvig et al. [21] present their use of SD tool, such as the double diamond as a process for design. Going beyond the mere use of the SD vocabulary, Moll [44] is one who argues for the relevance of SD's proposition of value co-creation. Patients are here seen as “co-creators of the health care service”. This is a different positioning than what participatory design has had, where the patient (or other future users of technology) would be invited to the design of the technology. As Moll says, the SD lens allows for reconceptualizing the work

of patients as that of service value co-creation. This dimension of value and its co-creation is also brought up by Grenville [19].

In sum, when services are brought up in PD literature, it has been mainly through an interest in taking a PD approach in projects relating to public services and their digitalization, with little reference to SD literature. In the few examples where explicit references to SD are made, it is in bringing up either some of the specific vocabulary of SD, or the specificity of a value co-creation approach. However, one has to look elsewhere for further reflection on the possible links and complementarity between the service dominant logic's understanding of value co-creation and collaboration in design activities ([75]; [34]) we will return to this aspect in our discussion.

4 THE PEOPLE-CENTERED APPROACH IN THE PUBLIC SECTOR: SD LEADING THE WAY

Digitalization has become an important driver for the public sector, where platforms or more generic IT solutions are the core interfaces between citizens and public service providers. The drive for efficiency and savings in the public sector as well as the need for ways to address ever increasingly complex problems have found an echo in the promises and arguments now made by business consultants regarding the value of design [58] which can be traced back to the infatuation of the business world with “design thinking” [26]. SD has been able to enter the public sector by providing design tools and a people-centered approach to address innovation.

At the same time, an increasing number of public organizations have aimed to provide a more participative democracy when it comes to policy making as well as digital service offering [5]. A link has been established in connecting people-centered design and wider societal and policy-level concerns, such as through early initiatives by the UK's Design Council, with the work of Hilary Cotnam and the Red Group [15], and also the experiments in DoTT07 [66]. Later on, special labs catering for governments and municipalities (e.g. Mindlab in Denmark, Experio lab in Sweden, or La 27eme Région in France; see e.g. [42] as well as in-house units in governmental organisations in several countries (e.g. Inland lab within the Finnish Immigration Service) have consolidated the relationship between citizen participation and the design of services ([47]; see [12] for examples from the US). In these labs, many of the tools of SD are being experimented with for engaging people in design processes aimed at service innovation, increasingly even extending the object of design to include the co-design of policy [4]. A wealth of online resources for civil servants have also emerged and provides them with collections of design-based methods and tools e.g. the Government Digital Services in the UK and the Civic SD toolkit in the US – vaguely echoing PD's early efforts at education.

One may ask then how come SD was quicker to establish a foot in the public sector than PD has ever done? It is hard to find specific answers without a more in depth and extended research. One can nonetheless speculate that the focus on the digitalization of services in the public sector rather than on IT as such might have had a role to play, making the object of design services and not information systems. Furthermore, SD, with one foot in business and management, has been able to use the right words to communicate with

the public sector, and be adopted in public innovation processes. This success might also depend on the very well packaged set of tools that along the years the SD community of practitioners has built and on the misconception that it is sufficient to know the tools to build design capability into the public sector.

5 DISCUSSION: EXPANDING UNDERSTANDINGS OF PARTICIPATION

Within SD, new approaches with affinities to the democratic stance of PD have already emerged. In the context of cities, for example, the need for more holistic solutions to urban problems, together with a reaction to a technically-driven approach to such problems have resulted in calling for more intense engagement of citizens, with the aim of activating their individual and social capabilities [14]. This approach has been associated with social innovation experiments to defend social contexts from the disaggregation and isolation brought about by technocratic and neo-liberal policies [41]. Here, SD has been looking directly at participatory practices that include societal concern and the attention to democracy that is in the genetic code of PD. The public sector is therefore the ground on which SD and PD practices are converging.

Both PD and SD have contributed to small scale interventions, experiments, living labs, but are also looking at the challenges that a larger scale perspective would pose to the disciplines. SD has focused on different strategies for amplifying local changes into larger governance or institutional changes. Manzini and Rizzo [41] for instance, propose strategies that combine small participatory experiments and framework projects, whereas Morelli ([45]; [46]) proposes an analysis of the small-scale ecosystems created by local participatory initiatives, to suggest a scalability by nodes - i.e. based on the reproduction of small ecosystems.

The move beyond limiting participation only to the design of a specific object of design, is also well exemplified by the appropriation of notion of value co-creation. Within PD, we have already seen with Moll [44] how this notion allows for a reconceptualization of what collaboration and participation mean. The focus is no longer solely on the shared activities of design but on considering stakeholders beyond the ones taking part in collaborative design activities; on the integration of resources brought in by all stakeholders, and on the value experienced by joining in [34]. The notion of value co-creation also brings forward the understanding that “structures and ecosystems are multilayered and often nested”, and can be seen at the micro, meso, and macro levels [38]. The notion of co-creation of value has also been explored in the context of governance: Torfing et al. [68] for example, refer to co-creation in this context as a process engaging various stakeholders (officials, citizens and others) around a shared problem, challenge or task, enhancing the production of public value. PD can learn from SD by interacting with this understanding of participation inherent to the SD logic – especially as applied in governance – and consequently be able to better address concerns of scale and reach, including working across different organizational levels [13]. What does this mean for designers then? By introducing concepts from PDs own scholarship, such as infrastructuring in design, which highlights relational ontologies and “heterogeneities and complexities as well

as scaling along multiple dimensions” [28] even richer understandings of participation can start to unfold by interrogating designers’ positions in participatory processes as dynamically situated and in dynamic movement [1].

Finally, in terms of tools, SD tools are well equipped to map the multilayered, multi-scale interactions, such as journey, ecosystem, and stakeholder maps, and which might be useful for PD to embrace. However, as Agid and Akama [2] warn us, these very tools are often only used as quick ways to “fix” or “pin down” what are very messy realities into ordered interpretations. In their PD-based critique they call for more fluid approaches that would take into account the “emergent” – complex socio-material arrangements that are in the making. Here again – also in e.g. [33] – exchange between SD and PD offer glimpses of the fertile ground for research and practice that allows expanding the understandings of participation in terms of scale, scope, tools, roles, and sensitivities.

This paper has just scratched the surface when it comes to the potential for SD and PD to join forces in the context of the public sector. We are aware that many researchers already operate in both fields and that our attempt has been to make some connections more explicit. We invite the PD community to take SD seriously: SD has entered the public sector and now is the chance for PD to make an alliance with SD. Such an alliance will benefit PD in acknowledging and combining different understandings of participations, as related to objects of design, stakeholders, and tools. It will also strengthen emerging approaches in SD in the public sector, which are inspired by PD’s democratic more nuanced understandings of participation, rich with PD’s history, when it comes to digitalization, thus addressing current concerns with how it is still put in place in a top down manner. Finally, we hope to inspire members from both communities to complement our own western-centric view with insights from other geographical and cultural contexts.

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