This is the authors' version of:

Joanna Saad-Sulonen, Amalia de Götzen, Nicola Morelli, and Luca Simeone. 2020. Service design and participatory design: time to join forces?. In Proceedings of the 16th Participatory Design Conference 2020 - Participation(s) Otherwise - Vol. 2 (PDC '20: Vol. 2), June 15–20, 2020, Manizales, Colombia. ACM, New York, NY, USA, 6 pages. https://doi.org/10.1145/3384772.3385133

Service design and participatory design: time to join forces?

Joanna Saad-Sulonen

Digital Design Department, IT University of Copenhagen, Copenhagen, Denmark, jsaa@itu.dk

Amalia de Götzen

Service Design Lab, Aalborg University, Copenhagen, Denmark, ago@create.aau.dk

Nicola Morelli

Service Design Lab, Aalborg University, Copenhagen, Denmark, nmor@create.aau.dk

Luca Simeone

Service Design Lab, Aalborg University, Copenhagen, Denmark, lsi@create.aau.dk

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

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

1

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 peoplecenteredness 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 for abetween 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 Cottam 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 neoliberal 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 sensitivitie.

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.

REFERENCES

[1]Agid, S. (2016). "...It's your project, but it's not necessarily your work...": infrastructuring, situatedness, and designing relational practice. In Proceedings of the 14th Participatory Design Conference: Full papers - Volume 1 (PDC '16). Association for Computing Machinery, New York, NY, USA, 81-90. DOI:https://doi.org/10.1145/2940299.2940317

[2]Agid, S. and Akama, Y. (2018). Dance of designing: Rethinking position, relation and movement in service design. In Proceedings of ServDes

[3]Bannon, L., Bardzell, J., & Bødker, S. (2018). Introduction: Reimagining Participatory Design—Emerging Voices. ACM Trans. Comput.-Hum. Interact., 25(1), 1:1-1:8. https://doi.org/10.1145/3177794

[4]Bason, C. (2014). Design for Policy (1 edition). Farnham, Surrey, England; Burlington, VT: Routledge.

[5]Bason, C. (2017). Leading Public Design: Shaping the Next Governance Model. 1st ed. Bristol: Policy Press.

[6]Becermen, B., & Simeone, L. (2019). Exploring the landscape of service design education: A preliminary review of current programmes in higher education. International Association of Societies of Design Research Conference 2019.

[7]Bjerknes, G., & Bratteteig, T. (1995). User Participation and Democracy: A Discussion of Scandinavian Research on System Development. 7,

[8]Blomberg, J., Cefkin, M., & Rankin, Y. (2010). Mapping and Visualizing Service Provider and Client Interactions: The Case for Participation. Proceedings of the 11th Biennial Participatory Design Conference, 294-296. https://doi.org/10.1145/1900441.1900515

< Copenhagen, Denmark: Linköping University Electronic Press.

[10]Botero, A. and Saad-Sulonen, J. (2010). Enhancing citizenship: the role of in-between infrastructures. In Proceedings of the 11th Biennial Participatory Design Conference (PDC '10). ACM, New York, NY, USA, 81-90. DOI=http://dx.doi.org/10.1145/1900441.1900453

[11] Bowen, S., Dearden, A., Wright, P., Wolstenholme, D., & Cobb, M. (2010). Participatory Healthcare Service Design and Innovation.

Proceedings of the 11th Biennial Participatory Design Conference, 155-158. https://doi.org/10.1145/1900441.1900464

[12]Buchanan, C., Amatullo, M., & Staszowski, E. (2019). Building the Civic Design Field in New York City. Diseña, (14), 158-183. https://doi.org/10.7764/disena.14.158-183

[13]Bødker, S., Dindler, C., & Iversen, O. S. (2017). Tying Knots: Participatory Infrastructuring at Work. Comput. Supported Coop. Work, 26(1-2), 245-273. https://doi.org/10.1007/s10606-017-9268-y

[14] Concilio, G. and F. Rizzo (2016). Human Smart Cities, Exploring the Interplay Between Design and Planning. Switzerland, Springer International Publishing.
[15]Cottam, H. and C. Leadbeater (2004). Open Welfare: designs on the public good. London, British Design Council: 7.

[16]Dalsgaard, P. (2010). Challenges of Participation in Large-scale Public Projects. Proceedings of the 11th Biennial Participatory Design Conference, 21–30. https://doi.org/10.1145/1900441.1900445

[17] Dittrich, Y., Eriksen, S, and Hansson, C. (2002). PD in the Wild; Evolving Practices of Design in Use. In PDC 02 Proceedings of the Participatory Design Conference, T.Binder, J.Gregory, I.Wagner (Eds.) Malmo, Sweden,

```
[18] Ekelin, A. (2000). Mapping out and constructing the needs—A pilot study of on-line public services and citizens involvement | PDC. Retrieved
from https://ojs.ruc.dk/index.php/pdc/article/view/216
```

[19] Grenville, D. (2014). Using a Service Design Perspective to Create an Employee Community of Practice. Proceedings of the 13th Participatory Design Conference: Short Papers, Industry Cases, Workshop Descriptions, Doctoral Consortium Papers, and Keynote Abstracts - Volume 2, 145-149. https://doi.org/10.1145/2662155.2662236

[20] Halskov, K., & Hansen, N. B. (2015). The diversity of participatory design research practice at PDC 2002-2012. International Journal of Human-Computer Studies, 74, 81–92. https://doi.org/10.1016/j.ijhes.2014.09.003

[21]Hedvig N. K. Iipito (Mendonca) and Izak Van Zyl. 2014. Youth empowerment: the role of service design and mobile technology in accessing

reproductive health information. In Proceedings PDC - Volume 2 (PDC 14), Vol. 2. ACM, New York, NY, USA, 103-106. DOI=http://dx.doi.org/10.1145/2662155.2662176

[22]Heikkinen, T., Soini, K., & Dhima, S. (2012). Outlining a Participatory Approach for Using Building Renovation Momentum for Wider Effects. *Proceedings of PDC-Volume 2*, 113–116. https://doi.org/10.1145/2348144.2348180

[23] Hollins, G., Hollins, B. (1993). Total Design: Managing the design process in the service sector. London: Pitman.

[24]Holmlid, S. (2009). Participative, cooperative, emancipatory: From participatory design to service design. 1st Nordic Conference on Service Design and Service Innovation, Oslo, Norway.

[25]Iversen, O. S., & Dindler, C. (2014). Sustaining participatory design initiatives. CoDesign, 10(3–4), 153–170. https://doi.org/10.1080/15710882.2014.963124

[26] Johansson-Sköldberg, U., Woodilla, J., & Çetinkaya, M. (2013). Design Thinking: Past, Present and Possible Futures. Creativity and Innovation Management, 22(2), 121-146. https://doi.org/10.1111/caim.12023

[27] Johnson, M., & Hyysalo, S. (2012). Lessons for Participatory Designers of Social Media: Long-term User Involvement Strategies in Industry. Proceedings of PDC - Volume 1, 71-80. https://doi.org/10.1145/2347635.2347646

[28] Karasti. H. (2014). Infrastructuring in participatory design. In Proceedings of the 13th Participatory Design Conference: Research Papers -Volume 1 (PDC '14). Association for Computing Machinery, New York, NY, USA, 141-150. DOI:https://doi.org/10.1145/2661435.2661450 [29]Kim, M. (2018a). An Inquiry into the Nature of Service: A Historical Overview (Part 1).

[30]Kimbell, L. (2009). The turn to service design. in Julier, G. and Moor, L. (editors) (2009), Design and Creativity: Policy, Management and Practice, Oxford: Berg, pp.157-173.

[31] Kimbell, L. (2011) Rethinking Design Thinking: Part 1, Design and Culture, 3(3): 285-306.

[32] Kimbell, L. (2012) Rethinking Design Thinking: Part 2, Design and Culture, 4(2):129-148.

[33] Kimbell. L. and Blomberg, J. (2017). The object of service design. In Sangiorgi and Prendiville (eds.) Designing for service. Key issues and directions.London: Bloomsbury.

[34] Kinnula, M., Iivari, N., Isomursu, M., & Laari-Salmela, S. (2018). 'Worksome but Rewarding' -Stakeholder Perceptions on Value in Collaborative Design Work. Computer Supported Cooperative Work (CSCW), 27(3), 463–494. https://doi.org/10.1007/s10606-018-9328-y [35]Kyng, M. (2010). Bridging the Gap Between Politics and Techniques: On the next practices of participatory design. Scandinavian J. Inf. Systems, 22. 5.

[36] Levitt, T. (1976). The Industrialization of Service. Harvard Business Review, September.

[37] Luke, R., Clement, A., Terada, R., Bortolussi, D., Booth, C., Brooks, D., & Christ, D. (2004). The Promise and Perils of a Participatory Approach to Developing an Open Source Community Learning Network. Proceedings of PDC - Volume 1., 11-19. https://doi.org/10.1145/1011870.1011873

[38] Lusch, R. F. and S. L. Vargo (2014). Service-Dominant Logic. Premises, Perspectives, Possibilities, Cambridge University Press.

[39] Manzini, E. (1993). Il Design dei Servizi. La Progettazione Del Prodotto-Servizio, in Design Management, 4, 7–12.

[40] Manzini, E. (2015). Design, when Everybody Designs. Cambridge, Massachusetts, London, England, MIT Press.

<bib id="bib41"><number>[41]Manzini and Rizzo (2011), "Small projects/large changes: Participatory design as an open participated process". CoDesign, 7 (3-4), 199-215.

[42]Manzini, E & Staszowski, E. (2013). Public and Collaborative. New York, NY: DESIS Network.

[43]Margolin V (2012) Design and democracy in a troubled world. Lecture at the School of Design, Carnegie Mellon University, 11 April 2012 [44]Moll, J. (2010). The Patient As Service Co-creator. Proceedings of the 11th Biennial Participatory Design Conference, 163–166. https://doi.org/10.1145/1900441.1900466

[45] Morelli, N. (2015a). Designing for Few, Scaling Up for Many. Participatory Innovation Conference (PIN-C), The Hague, The Netherlands, The Hague University of Applied science, Syddansk Universitet.

[46] Morelli, N. (2015b). "Challenges in Designing and Scaling Up Community Services." The Design Journal 18(2): 269 - 290.

[47]Mulgan, G., & Albury, D. (2003). Innovation in the public sector. London: Innovation in the Public Sector, Strategy Unit, Cabinet Office. [48] Mørch, A. I., Engen, B. K., & Åsand, H.-R. H. (2004). The Workplace As a Learning Laboratory: The Winding Road to E-learning in a

Norwegian Service Company. Proceedings of PDC - Volume 1., 142–151. https://doi.org/10.1145/1011870.1011888

[49]Nicholas, M., Hagen, P., Rahilly, K., & Swainston, N. (2012). Using Participatory Design Methods to Engage the Uninterested. Proceedings of PDC- Volume 2, 121-124. https://doi.org/10.1145/2348144.2348183

[50]Normann, R. and R. Ramirez (1994). Designing Interacting Strategies. From Value Chain to Value Constellation. Chichester, Wiley.

[51]Orr, J. E. (2000). Lessons from Frankenstein on Technology and Society | PDC. Retrieved from https://ojs.ruc.dk/index.php/pdc/article/view/203

[52]Pacenti, E. (1998). Il progetto dell'interazione dei servizi: un contributo al tema della progettazione dei servizi:. PhD, Politecnico di Milano. [53]Pilemalm, S. (2018). Participatory Design in Emerging Civic Engagement Initiatives in the New Public Sector: Applying PD Concepts in

Resource-Scarce Organizations. ACM Trans. Comput.-Hum. Interact. 25, 1, Article 5 (January 2018), 26 pages. DOI: https://doi.org/10.1145/3152420

[54] Ramaswamy, R. (1996). Design and management of service processes. Reading, Mass.: Addison-Wesley.

[55]Ranerup, A. (1998). Can Internet Improve Democracy in Local Government? | PDC. Retrieved from

https://ojs.ruc.dk/index.php/pdc/article/view/164

[56]Sanders, E B.-N., Brandt, E, and Binder., T. (2010). A framework for organizing the tools and techniques of participatory design. In

Proceedings of PDC 10. ACM, New York, NY, USA, 195-198. DOI=http://dx.doi.org/10.1145/1900441.1900476 [57]Schou, J., & Hjelholt, M. (2018). Digitalization and Public Sector Transformations.

[58]Sheppard, B., Sarrazin, H., Kouyoumjian G., and Dore F. (2018). The business value of design. McKinsey quarterly. October 2018 report.

[59] Shostack, G. L. (1982). How to Design a Service. European Journal of Marketing, 16(1), 49–63.

[60]Shostack, G. L. (1984). Designing services that deliver. Harvard Business Review, 62(1), 133–139.
[61]Simonsen, J. and Robertson. T. (2012). Routledge International Handbook of Participatory Design. UK: Routledge.

[62]Sangiorgi, D., & Clark, B. (2004). Toward a Participatory Design Approach to Service Design | PDC. Retrieved from https://ojs.ruc.dk/index.php/pdc/article/view/336

[63] Stickdorn, M. and Schneider, J. (2010). This is Service Design Thinking. The Netherlands: BIS publishing.

- Sibi d="bib64"><number>[64]Stickdorn, M., Hormess, M., Lawrence, A. and Schneider, J. (2018). This is Service Design Doing. Applying Service Design Thinking to the Real World. CA: O'Reiley Media Inc.

[65] Sundblad, Y. (2009). From Utopia 1981 to Utopia 2008. In Binder, T., Löwgren, J., & Malmborg, L. (Eds.), (Re) Searching the Digital Bauhaus (pp. 13-41). London: Springer.

[66] Thackara, J. (2007). Would it be Great if. London, Dott07 final report.

- [67] Thorpe, A., Prendiville, A., & Oliver, K. (2016). Learning Together by Doing Together Building Local Government Design Capacity Through Collaboration with Design Education. In ServDes 2016 (pp. 500–505).
- [68] Torfing, J., Sørensen, E., & Røiseland, A. (2019). Transforming the Public Sector Into an Arena for Co-Creation: Barriers, Drivers, Benefits, and Ways Forward. Administration & Society, 51 (5), 795-825. https://doi.org/10.1177/0095399716680057
- [69] Turner, M. and Budgen, D. and Brereton, P. (2003) 'Turning software into a service.', Computer., 36 (10). pp. 38-44.
- [70]Törpel, B. (2000). Self-employed Labor meets Codetermination Participatory Design in Network Organizations. PDC 2000 Proceedings of the Participatory Design Conference. T. Cherkasky, J. Greenbaum, P. Mambrey, J. K. Pors (Eds.) New York, NY, USA cbib id="bib71">cnmber>[71]Vanderbeeken, M. (2008) "The Interaction-Ivrea Offsprings" in Core 77, https://www.core77.com/posts/11512/The-Interaction-Ivrea-offspring, Accessed on the 25.11.2019

- [72]Vargo, S. and R. Lusch (2004). "Evolving to a new dominant logic for marketing." *Journal of Marketing* **68**: 1-17. [73]Vargo, S., L. and R. Lusch, F. (2008). "Service-Dominant Logic: Continuing the Evolution." *Journal of the Academy of Marketing Science* **36**:
- [74]Villalba, C., Donovan, J., Jaiprakash, A., Askew, D., Roberts, J., Russell, A., ... Hayman, N. (2018). Data Timelines As Paths of Expression for Organizational Reflection in Healthcare Participatory Design. *Proceedings of PDC- Volume 2*, 12:1–12:6. https://doi.org/10.1145/3210604.3210611
- [75]Wetter-Edman, K., Sangiorgi, D., Edvardsson, B., Holmlid, S., Grönroos, C., & Mattelmäki, T. (2014). Design for Value Co-Creation: Exploring Synergies Between Design for Service and Service Logic. Service Science, 6(2), 106–121. https://doi.org/10.1287/serv.2014.0068 [76]Zewge, A., Dittrich, Y., & Bekele, R. (2014). Software Designing Methodology for ICT4D Domain. Proceedings of PDC-Volume 2, 237-241. https://doi.org/10.1145/2662155.2662244