

Service designers on including stakeholders in service prototyping

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Abstract

Services are by nature co-created. They are produced and consumed simultaneously through interactions between customers and service providers. The professional design of services is also highly associated with co-creation, which is evident in the sparse service design literature. This paper reveals what designers say they do to involve different stakeholders in the process of prototyping services. The main data source is interviews with designers from design agencies that work exclusively or partially with service design. The paper focuses on the questions of “who is involved in creating prototypes”, “who evaluates the prototype” and how “the clients [of the design agencies] are involved”. A distinction is made between different types of involvement based on previous literature that characterise different roles and perspectives on inclusion in design. Results show that most of the agencies involve others besides the design team in the creation and evaluation of prototypes. The primary stakeholder in co-creation is the client. End customers are involved also but for the most part, both clients and customers have the role of subjects or informants rather than partners in the creation of prototypes. The evaluation of prototypes follows the same pattern, and a key aspect to some of the agencies is that the client is involved, as a domain expert. The question of who authors prototypes, and implications thereof, is raised and further discussed.

Keywords

Service Design, Service Prototyping, Co-creation, Co-design, Design practice, Interviews

Introduction

Contemporary service design is described as a collaborative and inclusive practice. Surprisingly, research in academic contexts about the practice of service design has not dealt much with the co-designing approaches associated with the field. Most knowledge about co-creation approaches in service design practice so far has been shared by service design practitioners or other, non-academic associations, and largely focused on the early stages of the design process. In order to increase the understanding and knowledge about co-creative practices, a closer examination of designers' own account of how different stakeholders are involved in service design, in this case in the context of prototyping, was performed. Hence, this paper will report on what service designers say they do to involve different stakeholders in the process of prototyping services. Service

designers in this paper are mainly consultants with the common denominator that they say they work exclusively, mainly, or, in some cases partly with service design. Previous research has shown that service designers' characterisation of their prototyping practice is collaborative [3]. This paper asks in what way and how this collaboration is carried out by looking at the same interview material, but focusing on understanding who is involved in creating prototypes, who evaluates the prototypes and how the clients [of the design agencies] are involved. In addition, the methods and approaches that the designers report that they use are compared with frameworks from other research on co-design and involvement.

Theory

On a general level, service design can be said to refer to the process of creating preconditions for a mutually favourable interaction between customers and service providers. Services are on-going and highly enactive, which makes services as design materials very flexible and dynamic [16]. A way to improve service experiences is considered to be to involve stakeholders to a larger extent in the design process.

Bradwell & Marr [6] discussed the advantages of a co-design approach like this:

“if people participate [in service design] they are more likely to understand the difficulties in delivery, to sympathise with providers when things go wrong, and to complain in a more informed and constructive manner. Furthermore, user engagement ./ is likely to reduce design errors, and the costs associated with those errors.” [6, p. 14]

The concept of co-creation is sometimes used in contrast to other approaches such as genius design or expert design where the designer can be seen as a black box with an opaque process that does not include others; only the result of the process is visible. The roles of clients and users in such approaches are constrained to that of passive informants or sources of inspiration that act as a target for design activities. This role however, is slowly changing. Designers increasingly involve non-designers in their practice, and academically there has been increased interest in cooperative design practices, resulting in publications, e.g. on how to involve stakeholders to improve design outputs, conditions for making involvement possible, etc [7,20,13,15]. This trend is often attributed to the influence of participatory design [5,10,11,17] which fundamentally changed the relation between designers and stakeholders in the 1960s and 1970s [24]. In 2006, Sanders [24] opened the first issue of Design Research Quarterly by characterising design and design research suggesting that:

“the line between product and service is no longer clear ./ the action now is in the fuzzy front end of the design development process with a focus on experiential rather than physical or material concerns; the action in the fuzzy front end is all about new ways to understand and to empathize with the needs and dreams of people.” [p. 1]

The response from service design, to the question of how to understand and empathise with the needs of people, partly came in the form of co-creation and co-design approaches. The steps of the development of user involvement from participatory design to service design have been described [17], arguing that:

“[participatory design and service design] base their argumentation on emancipatory objectives; be they democratic, power-driven or sustainability-laden. Both set up and

organise co-operative approaches. And finally, both use engaged involvement and pluralistic participative techniques to operationalize these.” [p. 10]. Though a word often thrown around, the meaning of co-creation is still not clear and there is some confusion about how it is actually done [25]. The think-tank Demos have produced a number of helpful texts on this topic, and provided what they call a definition of co-design with the main claims related to participation being that it is; collaborative, transparent in regard to methodology, continuous in regard to participants and welcoming input from a multiplicity of viewpoints [6]. This paper touches upon the issues of what kind of collaboration is involved in service prototyping, the continuity of participants and the number of different stakeholders involved. The claim that the process needs to be transparent is often mentioned in literature and the reason given is that in order to collaborate effectively, all involved stakeholders need to have access to similar information and a common understanding of the activities and their purposes [1,6,14].

There are many different ways of involving stakeholders, and in different design fields this is intimately related to underlying assumptions within the fields. Sanders [26] has created a map showing how different design approaches and mindsets relate to each other by placing them along two intersecting dimensions. The end-points of the mindset dimension are *expert*, where users are seen as subjects or reactive informants, and *participatory* where users are considered partners or active co-creators. Using a perpendicular dimension of approaches from research-led to design-led, Sanders was able to map out most of the more prominent design research fields and show that there are many roles for – and ways of including – users in design today [26, p. 13-14]. In this paper, the mindset dimension polarising user involvement into **subjects** and **partners** will be used to describe some of the reported practices. To describe and understand the way that the informants in this paper say they involve stakeholders, Holmlid’s [17] conceptualisation is also used to provide a description of inclusion in service design. The next sections will look at what service design literature says about Holmlid’s [17] perspectives on different ways of including stakeholders in the design process; **objectives, approaches** and **techniques**.

Objectives

The objectives in design reside on a strategic level which influences all other decisions in projects. For instance, design agencies might consider democratic motivations and flat power hierarchies as their main motivator in co-creation. Holmlid [17] calls such objectives emancipative. As in the participatory design literature, there are typical expressions of emancipative objectives in service design literature. “No, design is not serving people today. Design is serving markets, not people. Design is serving the needs of companies, not people. And as a result, consumerism is out of bounds.” [25, p.28]. Another example can be found in the working definition of co-design from Demos; “Co-design shifts power to the process, creating a framework that defines and maintains the necessary balance of rights and freedoms between participants. There is equality of legitimacy and value in inputs from all those involved, whether suggestions entail large- or small-scale changes. This combination of controlled abrogation of power by those with whom it usually rests, and the concomitant

empowerment of those in a traditional 'client' role, serves to create a sense of collective ownership." [6, p. 17]

This is also where Sanders' distinction between users as partners and users as subjects [25] come in. This paper does not view this as a dichotomy where stakeholders must be either or. Most of the time there are probably many different degrees of involvement and different ways of inclusion within companies and within projects. Users (or customers) that are incorporated as longlasting active co-creators in design is an expression of an emancipative view of partnership. If on the other hand the main assumption is that design is best done by designers, and users should be left with the role of reactive informants, that is an expression of a certain strategic mindset. These objectives also affect the approaches used on a tactical level.

Approaches

Cooperative and non-cooperative approaches can be the result of different objectives. The approaches reveal themselves in the activities carried out by design agencies on a tactical level. An expression of a cooperative approach can be described like this: future dementia care should include the experiences of people with dementia and their families by ensuring: "[they] are not just listened to, but are fully engaged with the design and delivery of services to secure improved outcomes." [28, p. 190].

Many different texts have been published displaying various kinds of cooperative approaches in service design projects. Most notably perhaps the two do/think-tanks RED and Demos, which have contributed to applied research of methods and strategies for participation [29,6,8,9,22]. Design for services is also academically associated largely by co-creation, which is evident in service design literature. Most examples of high level cooperative approaches come from public sector or research projects. Most informants in this paper however work – at least to a large extent – with private companies and clients with the goal of making profit.

Techniques

The approaches chosen by designers also manifest in the techniques they use. When looking through the eyes of co-creation the different techniques of involvement used on an operative level is interesting. For instance, a number of trends in current service design research have been identified [4]. One such trend is design techniques with a number of different outputs, one being research related to the bigger trend of co-creation [23,19,2]. Other examples include [21,18]. Qin Han [14], in her dissertation, discussed why service design is suitable for collaborative approaches and the extent to which users are involved in service design projects.

"The user-centred nature of service systems provided a suitable environment for designers to experiment with tools and techniques generated in areas such as Experience Design, Emotional Design, and Design Ethnography with service users in a real world context. Traditional design techniques such as visual narratives, storytelling and modelling, together with new methods such as role-playing and body-storming, become important means to help both users and the design team to easily engage with each other in generating and testing ideas for future scenarios." [14]

This paper will reveal what techniques are being used by service designers.

Method

The paper is based on interviews focusing on how service design practitioners prototype services. In all, six interviews were conducted and agencies were chosen from four countries; 2 Nordic, 2 from the United States and 2 from the Netherlands. The criteria for choosing the agencies for the study were that they should have long experience within service design (5+ years). To have a representative group, companies of varying sizes were chosen. Subsequently, 3 micro (less than 10 employees) 2 small (less than 50 employees) and 1 medium (less than 250 employees) were chosen. As involvement traditions vary, choosing companies from different countries secure the inclusion of different perspectives. The average interview took 74 minutes and they were conducted over phone on two occasions and Skype on 4 occasions. Numbers from #1 to #6 in the presentation of results and in the discussion represent the individual respondents. The informants were not told before that the topic of the interview would be prototyping and the interviews started with some more general questions about their backgrounds, typical processes and idea generation.

Results

The analysis in this paper focuses on parts of the interviews; the questions of “who is involved in creating prototypes”, “who evaluates the prototype” and how “the clients [of the design agencies] are involved”. The data will also be compared to the different ways of inclusion described in the theory chapter. This will make it possible to say something about the approaches that are described by the informants.

Involvement roles, types, and techniques

The designers talked about how they work and, in a sense, also how they want to be perceived; “based on how we work, and how we want to work, we constantly want to involve our customers in the process” #2. Many of the design agencies expressed a willingness to involve different stakeholders and some more explicit strategies to inclusion was mentioned, as in “what we know, as completely central to idea generation, is that the closer to the core team you work, the bigger the potential to generate good ideas that can be done” #1. Or, highlighting the distribution of resources and involvement as in “usually, I think half of the time, we can create a prototype ourselves, the other fifty percent we actively make use of the users” #4.

<i>Stakeholder</i>	Designers	Clients	Frontline staff	Specialists	Customers	<i>Total</i>
<i>Prototype stage</i>						
Creation	6	4	1	2	2	15
Evaluation	6	5	0	2	2	15
<i>Total</i>	12	9	1	3	4	

Table 1: Roles of the involved stakeholders in prototyping services

Regarding the view of these stakeholders as being partners or subjects, the degree of involvement, in the design process, the following data was gathered. In several cases

the interviewee did not clearly state a partner or a subject view, and these have been classified in Table 2 as exposing an in-between view. The only occurrence of an answer exposing a view of the stakeholder as a partner was an answer describing the collaboration with a client.

Table 2: Type of involvement in service prototyping.

<i>Degree of involvement</i>	Partner	In-between	Subject	<i>Total</i>
	1	5	10	16

The informants were also asked which techniques they use in the later stages of their projects (Table 3). The category names are a result of a categorisation made by the authors. The names of techniques have not been changed in any way and are presented as they were reported by the informants.

Table 3: Techniques used in later stages of design processes. Bold words also mentioned in [27].

Workshop methods	Visualisations	Other	Technology interfaces
card sorts	storyboards	personas	wireframes
create storyboard	customer journey	narratives	mock-ups
future exercises	movies	photos	
envisioning exercises	scenarios	interviews	
paint the picture in words	user journey maps	customer journey lab	
games	service blueprint		
role playing	sketches		
bodystorming	visualisations		
	touchpoint sketches		

Discussion

On the objectives level – the level of strategic design decisions – it can be said that the designers have intentions of including stakeholders to a larger extent than they actually can, because of economical constraints and the expectations that their clients have.

Most of the informants express a wish, or try to convey an image of collaborative approaches such as in:

“we work really closely with our clients and try to involve them ./ It’s not like they give us an assignment and then we return to [our office] and then work for six weeks ./ and then return to uncover the finished product” #2.

They also expressed more of an expert design view though: “not that [customers] necessarily have to do everything but they should be aware of what’s happening and feel that ‘this is a good step to take’” #2.

Given that involvement and emancipative objectives have played an important role for the establishment and growth of the field of service design, few informants expressed such views. A hint of such an emancipative objective was expressed by two of the informants. They said that an important part of their work was to educate their clients, so

that eventually they will be able to direct and perform the service design processes themselves “we build this iterative system ./ and teach the client how to do it” #5. The general attitude expressed in the interviews was that inclusion and co-design approaches are desirable but not always feasible. The problems with including clients come from their expectations and conceptions about design. Clients of the informants are many times not familiar with service design and want more traditional design approaches. Those that do know about service design are still not prepared to put in time and money for a collaborative project. One informant reported that clients sometimes refuse to take part in the process. Another problem that was mentioned was that projects are not anchored at the right level of service companies, making it impossible to work collaboratively.

Approaches

When it comes to the approaches at a tactical level, prototyping in service design seems to be quite a conventional design discipline where stakeholders are involved mostly as subjects and not as partners. In fact only one answer can be attributed to a view of an external stakeholder as a partner in prototyping (see Table 2). To many of the informants the boundaries and definitions of service prototyping is not well defined or developed [3]. In the material used here, this affects how the informants report on who is involved in what activities during prototyping, and to what extent. The participation is evenly divided between creation and evaluation of prototypes, which is a signal that the interviewees might not in practice distinguish between roles, expertise, partnership and resources in the different stages. Partners in the design process contribute with questions and agendas to a larger extent than subjects who merely confirm or disconfirm ideas or answer questions. The following quote illustrates a view of stakeholders as subjects:

“we work quite a lot with showing ./ prototypes to users and we do that because we do the design work and are not ./ we get wiser from talking to users and get more secure in our recommendations, so when it's more about how the design should be carried out it is- we often have quite strong recommendations based on our own experience” #6.

Objectives-approaches mismatch

Interestingly a pattern appeared showing that most of the time co-creation was mentioned in relation to the client and not the customer/user. From the interviews it is thus gathered that in service design today, the main stakeholder is the client. When discussing the roles of different stakeholders, the informants talked mostly about the clients, and not so much about the customers. Besides the designers, who were always included, the clients were the most commonly mentioned stakeholder, both in creation and evaluation of prototypes (9 times). Customers were only mentioned 4 times – as many times as specialists were mentioned. In order to get new perspectives, which is crucial with a prototype [6], one informant (#3), said that they use designers to evaluate the prototypes that have not been involved in the creation of the prototypes. They also try to involve people from other industries in the creation of prototypes, for the same purpose. Though a lot of service design literature from companies, showing cases, project an image of service design as a highly inclusive, collaborative and emancipative

practice, little evidence of such approaches could be found. The description of co-design as an activity where co-creation is about teaching the people who work at the point of service delivery to prototype and empowering them as co-creators [12] was recognised to some extent in the interview material. But the reported practice related to prototyping mainly indicates a classic role of stakeholders as informants. The fact that the service provider actually delivers the service, and thus is a part of the service experience explains to some degree the necessity to work and collaborate closely with the client. Sometimes, with inclusion exclusion follows, and some actors were actually mentioned as explicitly excluded from prototyping. These were, on single occasions specialists, actors, special teams and “not the same as the ones who made the prototype” #3. Explicit mentions of exclusion were rare though. One informant explained that many times they actually want to work more closely with the client but that clients are used to working in other ways or that they simply don’t have time to be part of the process. The informants also said that they need to adjust their prototypes according to the needs of various audiences and to how informed different groups are. Despite this, they also said that there is no real difference between internal prototypes, which are used within companies, and external prototypes which are meant to be shown to other audiences. Many also said that prototypes are not used within the agency because the value comes from prototyping with other stakeholders. It was interesting to see that different stakeholders are involved to such large extent in the creation of prototypes. This issue of authorship – of who makes the prototypes – is important for inclusion, since the power to contribute to content affects both the feeling of inclusion and the acceptance of the final prototype. To conclude this section; primarily the client is involved, and more as a partner, while customers are seen as subjects or passive informants.

Techniques

On the operative level, different techniques for involvement are used. The techniques in table 3 were mentioned in response to the question “which design tools do you use after user data has been collected in a typical project?” 8 of the 24 mentioned techniques were typical workshop methods, not necessarily used to involve people but more collaborative than other groups of techniques such as visualisations and technology interfaces. The fact that there are so many visualisation-techniques mentioned is interesting since the question regarded the later stages of design processes. Segelström & Holmlid [27] have asked about techniques used in the early stages and 12 of them (bold in Table 3) were also mentioned in this material. A lot of the workshop methods were not part of Segelström & Holmlid’s material, which is not surprising. Techniques such as interviews and personas do of course imply (in most cases) that other stakeholders are involved, but the role can hardly be said to be that of a partner, but rather as an informant or a subject. The large number of visualisation techniques mentioned can perhaps be attributed to a general focus within the service design field on the early research stages and visualisations. There are also many techniques developed for idea generation within design and it is likely that more techniques have been developed to facilitate that part of design than later stages such as prototyping and implementation.

Conclusions

This paper has revealed what designers say they do to involve different stakeholders in the process of prototyping services. The main contributions are that inclusion many times means the involvement of stakeholders as subjects rather than partners and that the client is the most involved stakeholder. Many times a wish to involve people to a larger extent is expressed but not necessarily feasible, i.e. the objectives are many times emancipative but economic realities and client expectations interfere. Both creation and evaluation or prototypes are done together with others than the design team only. Techniques for involvement mostly come in the form of workshop methods. Many techniques used by the informants in the later stages are typical research visualisation techniques. For service design to live up to the ideals or standards of the field, it needs to be emancipative in regard to involvement. One perspective that has not been prioritised in this context in the literature is the perspective of who creates and authors prototypes. There are three aspects of this potentially important perspective – one is what associations the evaluators of prototypes have in relation to the author of the prototype, the second is the possibility for users/customers to take part in the creation of prototypes, and the third is related to organizational matters such as design management, ownership and resources. If the designer is associated with the company for which the prototype is constructed, users or other stakeholders that evaluate it might adjust their feedback depending on power relations, ill-will/good-will, personal gains, fears, and so on. In this sense the associations between the author of a prototype and the evaluator is crucial to the level of success of the prototype. Including key stakeholders as authors of prototypes, or other artefacts, arguably empowers them and increases their feeling of commitment. This might be one of the reasons that service designers seem to involve the client more than the end customers in their projects, since their businesses depend on the positive experiences of clients firstly. A final remark concerning the practice of service prototyping is that since service design is cross-disciplinary and relies heavily on co-creation approaches, a lot of people need to be able to take part, evaluate, and understand the design process. To be emancipatory in their involvement approaches, designers need to think about the ramifications of decisions they make in projects. Techniques they decide to use and approaches to the expertise and knowledge possessed by other stakeholders will affect the outcome and satisfaction of a service.

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