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Benefits of Co-design in Service Design Projects

Marc Steen[1,*], Menno Manschot[2], and Nicole De Koning[1]

[1] *TNO, Delft, The Netherlands*
[2] *Delft University of Technology, Delft, The Netherlands*

In many service design projects, co-design is seen as critical to success and a range of benefits are attributed to co-design. In this paper, we present an overview of benefits of co-design in service design projects, in order to help the people involved to articulate more precisely and realistically which benefits to aim for. Based on a literature review and a discussion of three service design projects, we identified three types of benefits: for the service design project; for the service's customers or users; and for the organization(s) involved. These benefits are related to improving the creative process, the service, project management, or longer-term effects. We propose that the people involved in co-design first identify the goals of the service design project and then align their co-design activities, and the associated benefits, to these goals. The paper closes with a brief discussion on the need for developing ways to monitor and evaluate whether the intended benefits are indeed realized, and the need to assess and take into account the costs and risks of co-design.

Keywords– Benefits, Co-Design, Service Design, Cases.

Relevance to Design Practice– An overview of benefits of co-design in service design projects is presented, in order to help the people involved to articulate which benefits to aim for.

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Introduction

Co-design is increasingly popular in many businesses and organizations (Binder, Brandt, & Gregory, 2008). However, co-design is sometimes used as a *buzz word* and it is not always entirely clear how co-design contributes to a service design project. The goal of this paper is to help the people who are involved in co-design to articulate more precisely and realistically which benefits to aim for, and to match these benefits to the goals of a service design project. We do that by identifying and discussing a range of possible benefits of co-design in service design projects.

Sanders and Stappers (2008) used the term *co-creation* to refer to "any act of collective creativity, i.e., creativity that is shared by two or more people", and used the term *co-design* in a more narrow sense to refer to the "collective creativity as it is applied across the whole span of a design process". In line with this use of these terms, we will focus on *co-design* in this narrower sense, that is, on creative cooperation during design processes—rather than on the *co-creation*, which also refers to creative cooperation during service delivery and usage, for example, to interactions between customers and service provider at service touch points. In *co-design*, diverse experts come together, such as researchers, designers or developers, and (potential) customers and users—who are also experts, that is, "experts of their experiences" (Sleeswijk Visser, Stappers, Van der Lugt, & Sanders, 2005)—to cooperate creatively. We will pay special attention to involving users and customers in the design process and putting their experiences central (Alam, 2002; Edvardsson, Gustafsson, Kristensson, Magnusson, & Matthing, 2006; Kujala, 2003; Muller, 2002; Sanders, 2000). Furthermore, we use the term *service design* to refer to the process of planning and organizing people, infrastructure, communication and material components of a service, with the goal of improving the service's quality, the interactions between a provider and its customers, and the customers' experiences (Mager, 2008).

This paper is based on the assumption that co-design is critical to service design because different perspectives, and a productive combination of different perspectives, are needed in order to understand both a service's demand side, i.e. users' and customers' needs, and its supply side, i.e. technologies and processes, in order to develop successful services. Businesses and organizations expect that co-design will deliver specific benefits and that these will help them to realize specific goals in their projects. The wide range of benefits can include improving customers' loyalty, reducing costs, increasing people's well-being, and organizing innovation processes more effectively. These examples illustrate that the benefits that are sought after by means of co-design can be very diverse.

Based on informal observation in diverse projects, we speculate that the people involved in co-design in service design sometimes fail to articulate precisely and realistically which

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***Corresponding Author:** marc.steen@tno.nl

specific benefits they aim to achieve. If there is a mismatch between the benefits of co-design and the project goals, there is a risk that the co-design activities produce fewer benefits than they *could* have realized—had the people involved articulated more precisely and realistically which benefits to aim for. Therefore, we propose that the people involved in organizing co-design in a service design project first identify the specific goals of the project as well as the possible benefits of one or more co-design activities, and then align these goals and these benefits.

In this paper, we will provide an overview of benefits of co-design in service design, which is intended to help the people involved with articulating more precisely and realistically which benefits they will aim for. In the next section, we review some literature on the benefits of co-design and user involvement. In the section after that, we present three cases of co-design in service design projects, in order to further explore possible benefits. After that, we present an overview of different benefits of co-design in service design. We close the paper by articulating conclusions and recommendations, and briefly discussing some ideas for future research.

Literature Review

Sanders (2002) distinguished three approaches to interacting with users and customers during a design process: ”say”, “do” and “make”, where “make” is associated with co-design. In interviews, one can listen to what other people “say” and interpret what they express. Through observation, one can watch what other people “do” and how they use products or services. And in creative workshops, people can jointly explore and articulate their latent needs and jointly explore and “make” solutions. The key benefit of such “make” or co-design approaches is that they help to organize joint creativity.

Kujala (2003) identified the following benefits of user involvement (based on cases of ICT systems design): higher quality of system requirements, higher system quality, a better fit between the system and users' needs, and improved satisfaction of users or customers. Alam (2002) similarly identified the following benefits of user involvement (based on cases of service design): development of differentiated new services with unique benefits and better value for users, reduced development time, education of users (about the use, attributes and specifications of a new service), rapid diffusion and better market acceptance, improved public relations, and better long-term relationships between service provider and customers.

In addition, Muller (2002) discussed various participatory design methods and practices (Schuler & Namioka, 1993) and articulated a range of benefits, such as: improving mutual learning and understanding, combining and integrating different people's ideas, enhancing communication and cooperation between different people, and joint creation of new ideas. Furthermore, Kristensson, Magnusson and Matthing conducted various experiments in which they invited “ordinary users” to generate ideas for innovative mobile ICT services (Kristensson, Magnusson, & Matthing, 2002; Magnusson, 2003; Magnusson, Matthing, & Kristensson, 2003; Kristensson & Magnusson, 2010). They found that “users” can generate ideas that are useful input for service innovation; their ideas are more innovative (”originality”) and better match users' needs (“user value”) than the ideas generated by professional developers. However, the professional developers' ideas are more technologically feasible (“producability”) than the ideas of “users”.

Several authors from the UK wrote about *co-creation* (Cottam & Leadbeater, 2004), *service design* (Parker & Heapy, 2006) and *transformation design* (Burns, Cottam, Vanstone, & Winhall, 2006), with special attention for public services innovation and cases in the health care sector. Cottam and Leadbeater (2004), for instance, quoted from an article in the *British Medical Journal* that stated that “the key to successful doctor-patient partnerships is to recognise that patients are experts too”—experts of their experiences, “their social circumstances, habits and behavior, attitudes to risk, values and preferences”—and that both types of knowledge are needed in co-design. Similarly, Parker, and Heapy (2006) advocated organizing cooperation between frontline professionals, who deliver the service, and the service's customers, who experience the service, because both their perspectives are needed for successful service design. Furthermore, Burns et al. (2006) discussed transformation design as a way not only to (re)design a service, but also to organize change processes and to promote creativity and innovation, so that the people involved can engage in continuous learning and innovating. Co-design approaches are critical in transformation design because they allow people to communicate and cooperate across disciplines and between organizations.

Roser and Samson (2009) identified the following benefits: access to customers' or users' experiences, which improves idea generation through shared knowledge, increased speed to market, better quality of products, higher satisfaction of customers and users, increased loyalty of customers and users, and lower costs. Furthermore, they identified several positive effects on the organizational level, for example: on “innovation practices and processes”, on the “quality and speed at which decisions are made in relation to the development and filtering of ideas”, and on the “creativity at individual and group level”. Roser and Samson also discussed ways to use the Internet to facilitate interactions

Marc Steen works as a senior scientist at research and innovation organization TNO (http://www.tno.nl) in Behavioural and Societal Sciences. He earned MSc, MTD and PhD degrees in Industrial Design Engineering at Delft University of Technology. He worked at Philips and KPN before joining TNO. His expertise is in human-centered design, co-design, open innovation, innovation management, service design and marketing strategy. One of his ways of doing research is by critically reflecting on innovation and design projects, through participant observation and reflexive practice.

Menno Manschot works as a design consultant and researcher in service design at the faculty of Industrial Design Engineering of Delft University of Technology. His research interests are in strategic design thinking, service design and people-centred design approaches. He is currently involved in a multi-year study on the strategic values of service design approaches for businesses and their clients. In addition to his research activities, Menno runs a consultancy in service design and collaborative innovation.

Nicole de Koning works as a senior consultant at research and innovation organization TNO (http://www.tno.nl) in Behavioural and Societal Sciences. She earned an M.A. degree in Cognitive Science at Radboud University Nijmegen. She worked at Baan and KPN before joining TNO. Her expertise is in human-centred design, co-design, innovation management, service design, customer experience and customer behaviour.

between a company and its customers, not only for the design and development phases, but also for delivery and usage, i.e. for co-creation. Using the Internet in such a manner provides additional benefits, such as being able to access and communicate with a relatively large number of people for relatively low costs.

Finally, Hoyer, Chandy, Dorotic, Krafft, and Singh (2010) recently reviewed a range of benefits of co-creation, categorizing them as improving *efficiency* or improving *effectiveness*. Efficiency can be improved, for instance, because users' input can partly substitute employees' input, and because co-creation facilitates continuous product or service improvements and reduces the risks of products' or services' failure. Effectiveness can be improved, for instance, because co-creation can help to develop products that better match customers' needs, resulting in more positive attitudes of customers towards products and services, and better relationships between the organization and its customers.

Cases of Co-design in Service Design

In order to further explore different types of benefits of co-design in service design, we will discuss three projects in which the authors were involved. The projects had different goals and different co-design approaches were followed, which enables us to discuss different types of benefits.

Case A: Co-design with Elderly People, to Develop Concepts for Health Care Services

This project, in the health care sector, aimed to develop and evaluate new service concepts, with the goal of helping people to better and more actively participate in their social networks. The main goal of following a co-design approach was to gain "insider knowledge" of the perception of elderly people regarding the development of their social networks as they grow older. Co-design was intended to counter people's tendency to overestimate their ability to understand elder people's daily lives, experiences and abilities (Hofmeester & De Charon de Saint Germain, 1999). A second goal was to improve the user value and the validity of the concepts that were developed.

Several co-design techniques were applied, aligning the benefits of co-design to the project's goals. In a first phase, a series of 17 guided interviews were conducted in two groups of people that were between 55 and 90 years old, from urban and rural communities, in order to jointly explore their ideas and perceptions of their social networks and the role these play in their daily lives. In a second phase, a study of their daily lives and routines was conducted, involving eight elderly people (from these 17 people), using diary studies over a period of four weeks. In a third phase, three elderly people (from these eight people) were invited to participate in a co-design workshop to validate the findings of the previous studies, and to identify ways in which they would like to be supported in actively participating in their social networks (See Figure 1).

The first goal, to gain insider knowledge, was achieved, because we made a number of observations that helped us to change some of our implicit assumptions about the ways in which elderly people participate in their social networks. For example, we had expected them to be more isolated than they were. This led to the identification of four new themes for further research. The second goal was to improve the value and the validity of concepts. Through co-design, we engaged in an ongoing dialogue with the elderly people that participated, which enabled us to jointly develop, verify and further develop ideas and themes, which helped us to generate valuable and validated concepts—more valuable and validated than concepts that would have been developed without interacting with users.

The process of co-design also yielded some unexpected benefits. First, the research results changed the implicit assumptions of the researchers. So, in addition to gaining new ideas or views, co-design can also help to change existing ideas or views. Other findings confirmed some initial ideas of the researchers, which helped them to feel that they were on the right track with their project. Furthermore, the validation of concepts

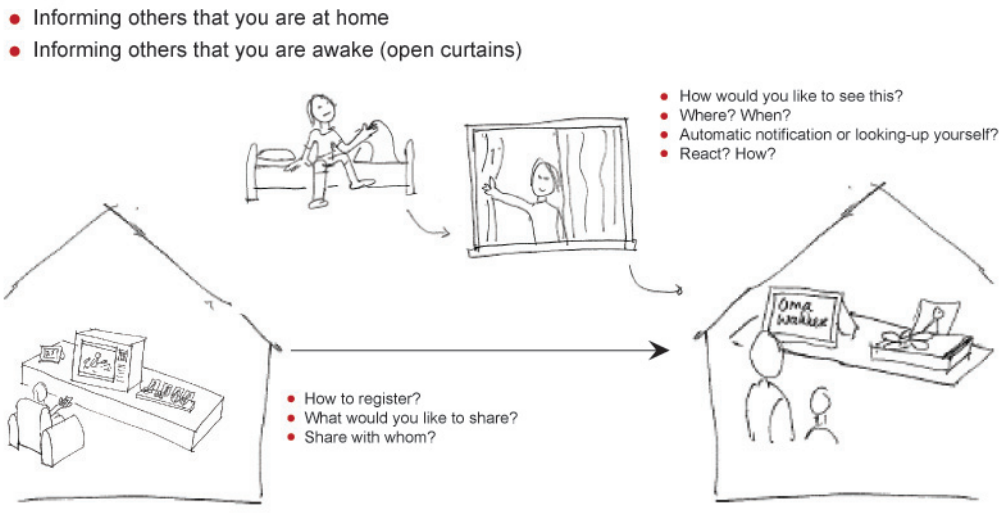

Figure 1. Example of one of the concepts that were developed.

by users, which was possible because some elderly people participated in three subsequent phases (interviews; diary studies; workshop), made the findings more convincing to people outside the project, who were not directly involved in the co-design process. Having validated the concepts enabled the researchers to more effectively present and communicate their findings and the service concepts to other people, such as project stakeholders.

The project also encountered some difficulties in the setting up and roll-out of activities. The main challenges were related to the targeted users, most of whom were of considerable age. A significant challenge lay in preparing the materials and methods in such a way that they would resonate with the participating elderly. A test sample showed that the purpose and way of working of the diaries needed some careful explanation. An additional measure was taken to do occasional checks by telephone with the participants, to verify if there was any confusion while doing the diary exercise.

Another challenge proved to be to retain a large enough user group over the envisioned series of activities. The project consisted of three stages of co-design activities, to be done with the same users, as the activities were closely linked to each other and built upon the generated materials. This proved to be a challenge, as many participants had to abandon the project prematurely for a variety of reasons. Part of this was because of the unavailability of the participants. Another factor was that the exercises were increasingly demanding for the participants in terms of time and attention, and participants were let free to opt out at any moment along the project.

Case B: Co-design with Children, to Generate Ideas for New Telecom Services

The commissioner of this project worked in a new business creation department of a large telecommunication services provider. He was looking for ways to stimulate creativity and innovation in his department and in the larger company, and developed the idea to organize co-design workshops in which children would generate innovative ideas for telecom services. He assumed that children are more capable of out-of-the-box thinking than adults (Druin, 2002), especially adults that have been working in the telecom industry for years. Furthermore, he would like to select some of the children's ideas as input for new business creation. Moreover, his idea was to invite children of the company's employees, so that these children's creativity might inspire their parents to think more creatively. In short, the intended benefits of co-design were: to generate innovative ideas as input for new business creation; and to improve some of the company's employees' creativity, via these employees' children's creativity.

We organized three workshops with a total of 50 children between seven and 10 years old. In these workshops, children worked in groups of approximately four children and one facilitator. The facilitators started with storytelling of adventures—time travelling to the future, flying to the moon, getting lost in a foreign country, or being in mediaeval times—and then invited the children to join the storytelling, and to generate ideas for "inventions" that the people in the stories would want to use or need to use. The children visualized their ideas first as drawings and then created models, using diverse materials, such as paper, cardboard, foam, cork, leather, and diverse plastic and metal parts (See Figure 2). At the end of each workshop, the children presented their "inventions", like they were in a children's TV show. We documented their ideas in colorful booklets with pictures of the drawings and models, sent these to the children as a souvenir for them, and to inform and inspire their parents. We also created compilations of the children's video presentations for the commissioner. Furthermore, we selected eight ideas for new business creation for the shorter term, such as a picture frame for video communication, a device for jointly making music while from different locations, a "hotline" between children and their parents, and a mobile buddy finder; and eight ideas for the longer term, such as wearable language translator, a device to touch things at another location, a hat that enables one to co-experience another person's experiences, and a pillow that produces pleasant dreams.

Figure 2. An impression of the workshops in which children generated stories, drawings and models.

The goal of generating ideas for new business creation was realized: the children generated out-of-the-box ideas that were assessed as innovative by the commissioner. In other words, the project's goal of generating ideas for new telecom services and the benefit of mobilizing creativity by organizing co-design workshops with children were aligned. However, the commissioner, who was also its main sponsor, was unavailable to organize follow-up activities because he got another job within the company and then left the company. It was difficult for the project team members to find a new supporter for the project. As a result, the children's ideas were not actually used for new business creation. The idea for the project was very much the idea of this commissioner. This was an advantage because the project had the commissioner's full support, but this also proved to be a weakness after he left the organization and the project failed to produce concrete follow-up activities.

The other goal of the project, namely to improve the creativity of the parents, is difficult to evaluate. We had ideas for distributing the booklets and video compilations more broadly within the company, but without support from the company, we could not do that. In other words, we were unable to organize

an effective process to involve the parents in the dissemination of the findings and ideas, and to monitor and evaluate whether and how the parents' creativity was influenced by their children's creativity.

Case C: Co-design with Employees, to Improve a Current Logistic Service

This project was commissioned by a company in the logistics sector. The company wanted to improve its service and customer process of ordering and first use of a post office box, as well as to improve customers' satisfaction with this service. The goal of organizing co-design was to foster commitment from the company's employees that are involved in the service design project to improve the customer processes. This was especially important given the fact that these employees are from different disciplines and different departments. Furthermore, it was important for the company that the employees of the service management department would also learn to apply co-design methods in future projects (See Figure 3).

We used a Customer Journey (De Koning, 2010) method to investigate and improve the customers' experiences. This method consists of three steps: 1) Measure; 2) Experience; and 3) Improve. The Customer Journey started with analyzing customers' experiences. Measuring the current customer experience and enabling the employees to experience their customers' experiences and emotions motivates them to improve the customer experience and to change their customer processes. In all three stages, co-design with employees is critical.

First, we cooperated with two service managers to analyze the current customer journey: What are the experiences of customers when they interact with the company? What are all the steps for ordering and first use, from a customer's perspective? What are the interaction moments, via a website, a contact center, brochures, or at a post office? This was a complex task since in large organisations there are often isolated departments ("silos"), in which employees tend to focus on only a part of the service or on internal processes ("inside-out thinking"). Only few people have an overview of the total customer experience. Together with two service management employees, we developed a way to measure customers' emotions during their customer journey. Since emotions influence behavior, an understanding of customers' emotions helps to assess which things go well and which issues need to be improved.

Based on customer experience measurements, we then designed a "teaser" for the employees that were involved in the post office box customer process. The ways in which we engaged them were intended to simulate the experiences that their customers go through. For example, we made it difficult for the employees to register for the workshop, similar to how they made it difficult for their customers to order their service. And we used formal language in our communication with them, to simulate their way of communicating with their customers. As a result, the employees felt the similar emotions as their customers, and they felt a sense of urgency to improve their service. Finally, we organized a workshop with all the employees that were involved

Figure 3. An impression of a customer's experience of using a post office box.

in the process: from call center agents to product managers. In this workshop, we jointly designed an improved customer journey, which was further developed in some smaller working groups.

The improved customer journey provides customers with an online tool that allows them to easily find and apply for a nearby post office box. This improvement was evaluated and significantly improved customers' satisfaction and their intention to recommend the service to others.

The goals of using co-design were realized. The quality of the service was improved and customers were more satisfied. Moreover, the commissioner was so enthusiastic about the Customer Journey approach that they integrated it into their standard ways of working, as a periodic check-up of their service. The employees learned to improve customer processes and were able to apply the method for themselves, and the involvement of people from different disciplines improved the organization's commitment to change.

Overview of Benefits

Based on the literature review and on the three cases, we identified a range of benefits of co-design in service design (See Table 1). We propose to order these benefits into three categories, the *columns* in Table 1: 1) benefits for the *service design project*; 2) benefits for the *service's customers or users*; and 3) benefits for the *organization(s)* that are involved. Additionally, we propose to order the benefits also into four categories, the *rows* in Table 1: 1) improving the *creative process,* for example, idea generation; 2) improving the *service*, that is, the outcome of the project; 3) improving *project management,* for example, in terms of business rationale*;* and 4) improving *longer-term effects,* for example, on the market or on society.

Benefits for the Service Design Project

Many businesses and organizations expect a wide range of benefits from organizing co-design, such as: improving the creative process, developing better service definitions, organizing the project more efficiently, and improving customers' or users' loyalty. Case A provides an example of how cooperation with

elderly people helped to develop a better understanding of these people's needs, and to jointly develop and validate concepts for new services. Case B provides an example of a similar benefit, that is, the development of out-of-the-box ideas by organizing co-design workshops with children. In Case C the co-design process with the service provider's employees delivered another, and rather immediate, benefit, namely: recommendations to improve the definition of an existing service.

Benefits for the Service's Customers

During a service design project, the actual service is not always already available, except in a project of re-designing an existing service. Therefore, customers are often not yet able to directly experience the benefits of co-design during the service design project. However, they are likely to experience benefits after the service is developed and provided. For example, in Case A the elderly people that cooperated during the co-design process may, in the future, experience the benefit of using a service that better matches their needs after the service is developed and becomes available. In Case C, for example, the benefit for customers and users is more immediate: they are likely to experience a higher quality of service.

Benefits for the Organization(s)

Organizing co-design processes can also yield benefits for the organization(s) that are involved, independent of the actual service design project. For example, organizing and participating in co-design can help an organization to foster creativity or to develop its capabilities to innovate. In Case B, one of the intended benefits of co-design was to promote out-of-the-box creativity within the organization, also outside the immediate context of the project. Case C provides two other examples of benefits for the organization: involving employees from different departments promoted communication and cooperation between them; and several employees learned to conduct co-design, from which they can benefit in future projects.

Table 1. Benefits of co-design in service design projects.

Benefits for the service design project	*Benefits for the service's customers or users*	*Benefits for the organization(s)*
Improving idea generation:		
• **Better ideas**, e.g. from customers or users [M; Cases A and B], with high originality and user value [KMM] • **Better knowledge about customers' or users' needs** [R&S; M], e.g. changing existing views or validating ideas or concepts [Case A] • **Better idea generation**, e.g. by bringing together customers, users and employees [S;C&L; P&H; M; R&S]		• **Improved creativity** [M; R&S; Case B] • **Improved focus on customers or users** [B] and, e.g. better dissemination of findings about customers' or users' needs [Case A] • **Better cooperation between** different people or organizations, and across disciplines [B; M; Case C]
Improving the service:		
• **Higher quality of service definition** [K; Case C] • **More successful innovations,** e.g. reduced product failure risk [H]	• **Better fit** between service and customers' or users' needs, and better service experience [K; H; Case A] • **Higher quality of service** [K; R&S; Case C] • **More differentiated service** [A]	
Improving project management:		
• **Better decision making**, e.g. quality and speed [R&S] • **Lower development costs** [R&S] • **Reduced development time or time-to-market** [A; H; R&S] • **Continuous improvements** [H]		
Improving longer-term effects:		
	• **Higher satisfaction** of customers or users [K; R&S] • **Higher loyalty** of customers or users [R&S] • **Educating users** [A]	• **More successful innovations**, e.g. rapid diffusion [A] • **Improved innovation** practices, processes and capabilities [B; R&S] • **More support and enthusiasm** for innovation and change [B] • **Better relations** between service provider and customers [A; H] • **Better public relations** [A]

Note: [A] Alam, 2002; [B] Burns et al., 2006; [C&L] Cottam & Leadbeater, 2004; [H] Hoyer et al., 2010; [KMM] Kristensson, Magnusson & Matthing, 2002; Magnusson, 2003; Magnusson, Matthing & Kristensson, 2003; Kristensson & Magnusson, 2010; [M] Muller, 2002; [P&H] Parker & Heapy, 2006; [R&S] Roser & Samson, 2009; [S] Sanders, 2000; Sanders, 2002.

In addition, we would like to note that the identified benefits relate to the benefits of organizing co-design during a service design project, and *not* to the benefits of providing (better) services. This remark may help to appreciate the relatively small number of benefits for the service's customers or users. There would have been a larger number if we had included the general benefits of providing (better) services. The entire process of developing and providing services is (or should be) oriented towards delivering benefits for customers and users. Furthermore, we found relatively a lot of benefits for the organizations involved that go beyond the immediate benefits for one specific project.

Moreover, we would like to draw attention to the fact that co-design can offer benefits to service design both in commercial sectors, such as financial services, and in not-for-profit sectors, such as health care (Mager, 2009). The types of benefits may appear to be rather different, especially in their different wordings. For a financial service one would speak, for instance, about numbers of *customers,* about improving *sales* and *profits*; whereas one would, for instance, for a health care service, speak about the number of *clients*, improving their *health* and reducing the *costs* involved. Despite these different wordings, we think that the benefits refer to the underlying concepts that are not very different for commercial or not-for-profit sectors: improving *services* and people's *experiences*. One may want to keep such translations in mind, in order to imagine benefits in not-for-profit sectors.

Ideas for Future Research

In order to further improve co-design practices in service design, there is a need for methods or tools to monitor and evaluate whether the intended benefits are actually realized. Roser and Samson (2009), for example, suggested articulating key performance indicators (KPI's) and monitoring the realization of these. They suggested a range of KPI's, such as: the amount of new ideas for products/services, the originality, value or realizability of these ideas, time to development of new ideas, time to market for new products/services or improvements, cost reductions, revenues, profitability and market share of the new/improved product/service, time to break-even for new product/service introductions, customer loyalty, and customer satisfaction.

Other topics that would require further research are the costs and risks of co-design. Obviously, there are costs involved in organizing a co-design process, in terms of people, time and money. One may argue that these costs are "paid back" by the benefits which co-design offers. But in a business context, it can be advantageous if both costs and benefits can be articulated in financial terms. Furthermore, there are risks associated with co-design. Hoyer et al. (2010), for example, discuss two types of risks. The first type is related to diminished *control* over the project, because other people, other departments or other organizations are involved (see also Roser and Samson's (2009) discussion of increased dependency on outside collaborators). The second type of risks is related to increased *complexity* of the project, because the objectives and interests of diverse people, departments or organizations must be managed and balanced, which can require extra coordination efforts (see also Roser and Samson's (2009) discussion of extra co-ordinating costs and the need for new management skills and different management styles).

Conclusions and Recommendations

In this paper, we identified three types of benefits of co-design in service design projects (Table 1):

- Benefits for the *service design project* itself*,* such as improving the creative process, developing better service definitions and organizing the project more effectively or efficiently;
- Benefits for the *service's customers or users,* such as creating a better fit between the service offer and customers' or users' needs, a better service experience and higher satisfaction;
- Benefits for the *organization(s)* involved, such as improving creativity, a focus on customers or users, cooperation between disciplines, and capabilities and enthusiasm for innovation.

Furthermore, we would like to recommend that the people involved in co-design—for example, researchers, designers, developers, managers and other stakeholders—first identify the desired goals of the service design project in which they will work and to which they will contribute, and also identify the intended benefits of their co-design activities, and then carefully align these goals and benefits—for example, by selecting appropriate co-design methods and applying these in ways that contribute optimally to the project. Additionally, we recommend that the people involved find ways to monitor and evaluate whether the intended benefits of co-design are actually realized in the project, and ways to take into account the costs and risks involved in co-design.

Moreover, it is interesting that we found relatively a lot of possible benefits for the organizations involved, and also positive longer-term benefits—more than we had expected. Based on this, we speculate that organizations are often not aware of these organizational and longer-term benefits of co-design. We therefore propose that the people involved in co-design—and, more specifically: the people involved in the decision making process of weighing the pros and cons of co-design, in assessing the costs and risks and benefits of co-design, and in defining the goals and scope and budget of co-design projects—draw attention to these "bonus" benefits, in addition to the immediate benefits in one project. In that sense, we believe that co-design offers many opportunities to further promote a focus on customers and users, to foster creativity and cooperation, and to improve organizations' innovation capabilities and practices.

For co-design efforts to be effective, that is, to deliver the intended benefits, it is important to select appropriate methods and ways of working, and to apply them appropriately. In the cases presented above, the methods and ways of working were tailor-made to match each service design project. This is a key challenge of co-design, because each choice regarding methods and ways of working can significantly affect the project's process and outcomes. It is critical to identify the appropriate people (for example, employees, customers, users), to involve them in appropriate stages and to give them appropriate roles in the project.

In order to better realize the potential of co-design, we propose that the people involved first identify the specific goals of the service design project and then match their co-design activities to these goals. Furthermore, we advocate documenting and disseminating the findings from co-design, within the organization(s) involved, in ways that engage relevant people, for example, those responsible for budgets and decision making, in order to improve the adoption and application of these findings. Moreover, we advocate documenting and sharing findings, also regarding methods and ways of working, within the organization(s) involved, so that these can be used in future projects. Such practices will help organizations to improve their capabilities to conduct co-design effectively, that is, to cooperate across disciplines and to cooperate with customers and users.

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