

Creating Mock-ups of Strategic Partnerships

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Abstract: In addition to the application of traditional design competences, designers today need to develop new skills for dealing with social practices, intangible processes, and complex systems. This paper describes an example case in which design approach was applied to boost the innovation process in a knowledge-intensive public organization - the Finnish Institute for Occupational Health. We first introduce the background of the process mock-up workshop, then describe the objectives and the procedure of the workshop, and finally discuss the outcomes and impacts.

Key words: *prototyping, public services, workshop, partnership*

1. Introduction

Designing has expanded to new areas beyond creating artifacts, which include, for example, designing dynamic and networked services. Recently, design thinking and methods are being seen as also offering potential value for organizational design and change. Buchanan [3] envisioned a novel order of design in the designing of organizations, environments, and systems. He emphasizes however that “the expanded forms of design practice do not abandon the traditional concerns of form giving and making that have defined the design in the past. It is the concept of form that has grown more supple and complex, embracing the social and environmental context of design.” (p. 9)

Examples of novel applications of design skills and processes are service design and transformation design [4], i.e. design that addresses social topics and aims at enhancing collaboration between various disciplines and stakeholders by applying the user-centered design approach. The addressed topics include re-thinking health care, prison systems and rural transport. According to Burns et al [4], the approach is based on three core skills: looking at the topic from the end user’s perspective, making sense of problems and ideas through visualizing, and exploring and learning by building prototypes and mock-ups. In addition, one of the fundamentals in designing is the creative attitude that urges one to challenge the already existing. This attitude at its best, as noticed by Boland et al [2], can spread energy, and motivate and inspire the individuals involved.

A transformation is also taking place in many companies: Instead of manufacturing and selling products to customers, the objective in the service logic is “assisting customers in their own value-creation process” [15 p. 257]. In this transition, companies are developing the strategic collaborations and partnerships necessary for service co-creation. This appears how companies search for practices for client involvement in both the private and public sector. Many innovative organizations today are advocating co-creation. Windsor [16] describes co-

creation as a deep engagement with the internal team, or as engaging with customers and the culture in which they live. Successful cooperation and co-creation requires trust and engagement. Järvensivu and Nykänen [9], as an example of how the topic is addressed in the field of network management, suggest that trust is created through a process of negotiating common goals and values, realizing and organizing the network, communicating these goals, and identifying the roles of different players.

Although collaboration management has not yet been identified as a core competence of designers, we propose, that the designerly approach can support and drive the collaborative processes in organizations and networks. In addition to the application of the traditional design competences, this necessitates a development of new skills to deal with social practices, intangible processes and complex systems. In this article we aim to contribute to the development of these new competences by introducing an example case in which the designerly approach was applied in order to boost the innovation process in a knowledge-intensive public organization.

2) Public Organization meets Design

Public organizations today face the need to use design competence for public innovation. During the 2000s, the debate on innovations and innovation environments has expanded from a technological, closed intra-organizational or controlled network environment to social, service-oriented, user-driven, open environment innovation [e.g. 8]. The rise of service industries has opened up discussion on the need for innovations in traditional public organizations in which new hybrid forms of service production are increasingly taking place.

Strategic collaboration in R&D, and the co-development of products and services with key customers are increasing. Advanced firms actively engage in strategic partnerships, i.e. strategic alliances [7], joint ventures [6] or regional networks [11] for various reasons such as to acquire skills, to purchase or to acquire access to critical external resources, to receive benefits from another organization without owning it, to reduce risks, or to adapt to rapid technological or market changes. Strategic partnerships offer potential to public sector organizations in which partnering activity in general is a new phenomenon.

The public sector is seen as bureaucratic and reluctant to change [4], which makes it a challenging environment for renewal and innovation. From the point of view of the customers, the image of public services is still very often hierarchical, isolated and customer unfriendly. Public services, organizations and their practitioners face the challenge to become innovative, i.e. open to everyday-life customer initiatives and user experiences. This calls for a new type of expertise, expert identity and attitude change among public sector practitioners. Isolated, abstract and theoretical knowledge is no longer sufficient. Instead, more network-oriented, collaborative, service-like and co-creative identities and competences are needed [5]. In this change, design competence can first be used as a catalyst, and later possibly be taken into the organization as a strategic component.

2.1. The Case Context: Finnish Institute of Occupational Health

Next we will discuss a case in which design expertise was applied as a catalyst for exploring a phenomenon that was novel and unfamiliar to the organization. The organizational setting for the case is a public research institute that has recently undergone major organizational restructuring and also renewed its strategy. The Finnish

Institute of Occupational Health (FIOH) is a multidisciplinary organization that employs nearly 800 experts. One of FIOH's targets in its new strategy-building was to move from the implicit linear thinking of gaining societal effects through the dissemination of research results and the provision of services in separate processes, towards the explicit interactive model of developing and implementing innovations through various modes of activity in close collaboration with partners and customers. Research is now seen as only one mode of activity in the building of systemic effects through innovations. FIOH is no longer a single actor in its field of expertise; partners, customers and collaboration are now recognized as significant components for successful innovation.

The new strategy created a major change expectation in expert competence and identity compared to traditional research expertise. It became a remarkable learning challenge both to the management and the personnel of FIOH. Knowing this, FIOH management raised the question of how to organize, in practice, activities for innovation. How could they enhance innovation within the new organizational structure? They came up with an idea of a kind of venture organization within FIOH, referred to as the strategic Thematic Areas (TAs). Two pilot TAs were launched at the beginning of 2006, both of which already had considerable accumulated knowledge and permanent contacts with the main players in its sector. The TAs aim to make a major, novel contribution to the solution of particular needs or problems, i.e. the solution will be used by relevant societal partners and customers as part of their practices. The TAs can be interpreted as *purposeful, time-pressured innovation pilots*. That is, innovation can be deliberately enhanced and accelerated, at least partially, by managerial actions. The TAs' strategy plan included four broad phases: (1) planning, (2) start-up, (3) piloting and experimentation and (4) customer-driven redesign, and sustaining the innovation.

The context of designer intervention, that we called the 'partnership mock-uping workshop', is associated with the Good Indoor Environment Quality TA (GIEQ-TA). This is a multidisciplinary organizational unit led by the Director of the TA (MD, professor). The group comprised two originally separate groups within FIOH and included 22 highly educated people (many of them PhDs), including several natural scientists and engineers.

In order to accelerate innovation, a variety of expert competences were used for the benefit of the TAs. At the beginning of 2006, FIOH's Head of Research at the time (one of the authors) organized a small workshop in which external design experts (two of the authors) introduced methods and techniques for exploring and understanding user needs and user experience for product/service development. The Director of the GIEQ-TA was inspired, and later asked the same experts to help in planning how to approach one of the identified most important (yet anticipated) customers of the TA. The anticipated organization, SP, with whom the TA wished to build a partnership, can be seen as a significant strategic partner for both the TA and FIOH.

However, several questions arose. The potential common interest or the form of collaboration between the company and the TA were difficult to foresee. How to get the firm interested in collaboration, how to present the TA competences to the firm, how to open the negotiations and with what ideas? How to engage the whole group in customer-oriented thinking and acting? It was decided, together with the design experts, that a workshop for exploring the matter was needed in order to provide a safe setting in which the group can experiment and learn

the collaboration-building process together. The workshop took place during the start-up phase in the fall of 2006. Its aim was to explore what the strategic partnership could consist of and what form it could take.

3. Collaborative prototyping

Prototyping is extensively studied within design literature, and forms one of the key activities in product and interaction design practices. Prototyping is about choosing a focus, making design moves, and reflecting on the core components of designing [13]. Kelley [10] characterizes prototyping as acting, exploring and perhaps even failing before finding the answers. Prototyping is applied for idea generation, communication and testing [14]. Mock-ups, i.e. low-fidelity prototypes, articulate the form, scale and appearance of an idea, and they foster exploration and sharing. They can be applied to consider specific questions, to facilitate collaboration and to provide a hands-on feeling of the future product. The idea of building a strategic partnership, however, is a highly ambiguous whole, and hardly resembles traditional physical products. Kelley [10 p.36] claims, “You can prototype just about anything – a new product or a service, or a special promotion. What counts is moving the ball forward, achieving some part of your goal.” While prototypes concretize thoughts, make them visible and debatable, they also foster a playful exploration of getting the feeling of things [13].

The challenge in early design phases is ambiguity; what are the concrete moves to be made, what do the activities mean to the team, and what concrete results can these yield? Designing consists of identifying alternatives that are discovered through exploring problems and solutions which are strongly intertwined. Similarly, the collaborative mock-up of a complete process aims at substantiating the significant elements of the process and helping to outline the actions to be taken. Thus, the objective of the workshop is to provide a form for a process.

4. Partnership Workshop

A process mock-up workshop features three parts: contextualization, action, and reflection. Contextualization develops a shared understanding of why the workshop is organized, what the overall situation is, who are involved, and what the aims are. During the action phase, the workshop participants are encouraged to apply their knowledge, communicate, act, make decisions and produce a common vision of the potential solution. The workshop activities are captured on video, which is used to facilitate reflection on the process and the decisions that were made. The experience and the documentary support the team in planning the actual project.

The aim of the workshop organized at FIOH was to explore and develop the ideas of the strategic partnership. The workshop followed the idea of the user-focused collaborative prototyping of a process, which was piloted in concept design projects [1]. The workshop was planned using the design experts' earlier experiences but customized for this particular case in negotiations with the organizations' representatives.

The objective of the workshop was to make the first move from visionary words to a real life action plan. The organization and team members did not really have expertise in user-centred design mindsets or tools. The team realized however that it had to learn new strategies and practices in order to achieve a partnership with the key player. It had to be more than an expert institution; it had to be an attractive partner. The workshop's objective

was thus to uncover what a partnership could be about, what the process of identifying and encountering the partner would be, how to maintain the partnership, and furthermore, what shape the collaboration could take, what products, tools and methods would be applied. The workshop also aimed to support team building since the team had only recently been established. The Head of Research and nine team members, including the TA director, participated in the workshop.

The overall principles in the arrangements of the workshop were:

- 1) An authentic-like project organization was to be established, i.e. some participants were given specific roles such as the project manager, and an evaluator (called a financier)
- 2) Authentic-like deliverables were to be created in every phase, i.e. abstract discussion had to be turned into actions, documents and solutions
- 3) Situations were explored by acting out, and all roles were to be potentially based on “real” characters, such as the development manager of the partner company
- 4) All activities were constrained by strict time limits in order to force intuitive action
- 5) Strategic decisions were to be argued in front of a ‘financier’, and a refined focus was to be articulated during all these reviews, i.e. the exploration had to be turned into solutions and the reviews had to allow iterations.
- 6) Reflections were discussed with the help of the video documentary of the workshop and real plans were outlined based on these, i.e. the discussion enabled the team to open up the experiences for analysis and iteration.

4.1. The workshop process

The structure of the workshop was roughly the following: 0) introduction 1) warm-up, 2) forming the project plan, 3) context study 4) review, 5) envisioning the future, 6) review of results, 7) reflection. The director of the new GIEQ-TA explained the overall situation of the unit and the purpose of the workshop during the introduction. He also briefly described the approach that would be taken throughout the day and emphasized that they were all in the same situation, facing this novel challenge. The design experts then explained the day’s agenda and the materials for the workshop (e.g. hats for role playing). These pre-warm-up explanations aimed to create a motivating context and to positively affect the participants’ expectations of the workshop.

The target of the warm-up task was produce materials and insights that would contribute to the aims of the day. Two of the FIOH experts were pre-assigned to prepare to act as the manager and an expert from the anticipated partner organization. The warm-up session began with a presentation by these actors and 'their' organization. The group was then divided into three teams that acted out situations from three perspectives: The first team looked at the first encounter with the partner: They had to think about what ‘bait’ makes the partner interested in the partnership in the first place (figure 1). The second team considered the second encounter with the partner: They discussed what concrete activities they would be talking about in the second meeting. The third team started thinking forward, to what the situation would be in 10 years' time. They envisioned issues that would emerge and continue within an established partnership.

Through acting out the envisioned situations, the participants had to argue and improvise in real time, how they would establish the partnership, with whom they should start the discussions, and what they might expect from a

long-lasting partnership. This tuning in served to get the planning moving, and to establish an atmosphere in which the participants felt comfortable to play and laugh at themselves. It also aimed at aligning thinking towards the ambiguous challenge of developing partnerships.



Figure 1 and 2. Left: Acting out the first encounter with the expert and partner organization. Right: The ‘financier’ (with the businessman hat) reviews the project plan

After the warm-up, the participants were assigned specific roles and responsibilities. The project manager role was assigned to the TA director. In addition, the roles of a user study manager, a product manager, a competition manager, a theme manager, and the partner organization representatives were assigned. The objective of these roles was to coordinate responsibilities and to provide specific perspectives for the participants, from which to view the process.

The first assignment was to collaboratively create a project plan. Some of the participants were uncomfortable with stepping outside their normal expertise at this stage and complained that they could not follow what was happening and did not understand what they should be doing. The action was paused for discussing and reasoning the background and objectives of the designerly activities through examples. It was also emphasized that it is fine to feel confused, and that this in fact belongs to the exploration process. The participants were encouraged to trust that the exploration and the action itself will deliver clarity to the process and finally unveil the outcomes. In a matter of minutes, the project planning was in full operation and the ‘financier’ (FIOH's Head of Research) reviewed the accomplished plan (Figure 2), which was typed up as a realistic document.

Guided by the comments of the ‘financier’, the group moved ahead to study the context of the planned partnering project. The participants conducted fast-paced studies of the ‘competitors’ and their products and services. They also studied the ‘users/customers’ through improvised contextual interviews and observations (see Figure 3 and 4). The ‘theme manager’ was asked to state which areas of action appeared to have the most potential. The outcomes of these exercises were partly based on participants’ experience and knowledge, partly intuition and imagination. At this point, they were guided to step out of their normal practices of writing notes individually and were encouraged to apply methods that value visualizing and other effective means of communicating the outcomes, e.g. photographing, improvised role playing, writing and drawing on flip charts.



Figures 3, 4 and 5. Participants plan an imaginary workplace study; acting out and documenting situations in the envisioned study, and sharing and developing ideas

The results of this phase were then presented to all. The ‘financier’ reviewed the presented insights and ideas and outlined what the participants should be focusing on during the envisioning phase. The foci included the meaning of a network in partner orientation, the role of user/customer studies in understanding the partner and the network of clients behind its business. She encouraged “infusing product thinking into practice”: A way of describing the expertise of practitioners as shareable physical artifacts. The review was followed by a lively discussion, and finally two core directions were chosen: Firstly, the application of customer-centered design methods for understanding the partner, and secondly the meaning of existing networks of collaboration in property business, including planning, construction and renovation.

The group was again divided into two teams for brainstorming ideas. The participants individually wrote many solution ideas on sticker notes. These ideas were rapidly explained to others in each team, and listeners were encouraged to build on the proposed ideas. After the teams had further elaborated on the initial ideas, they were assigned to build a marketing campaign for their ideas. In this campaign, the teams were asked to consider the information and insights presented earlier during the day. The service or ‘product’ that the teams would be marketing was required to contain the “main driver” of the concept, the main functions and value of the concept, and a concretizing scenario of what would happen.

The workshop ended with the participants acting out their marketing campaigns and then discussing the lessons of the day. By this point, the uneasiness that some of the participants had expressed earlier was completely gone: They seemed to enjoy the acting and the role-playing. The human-centered attitude was strongly present in both of the presented concepts: The first presentation focused on the question of trust in face-to-face interactions with the partner. It illustrated solutions, such as education packages, for dealing with customers’ expectations and improving trusting relationships. The second presentation argued for a novel approach to customer understanding by paying attention to the requirements of the various user groups and by utilizing an interactive and collaborative application of 3D design tools.

The video documentary of the workshop was reviewed the next day. It created a vivid basis for a constructive discussion on the previous day’s activities, insights, and potential ideas for the actual process. The immediate feedback revealed that the day had served its purpose well. The participants pointed out that they had gained a clear picture of the potential partnership through the process, which they considered necessary for their progress. They also developed initial experiences regarding the possible tools and methods that might be employed during the next phases. Some of the methods that were tried out at the workshop, such as visits, interviews and observations could be implemented immediately.

5. Impacts and implementations: What happened next

The partnership workshop produced positive results. It built the participants' self-confidence as regards working with the anticipated partner organization. It may also have accelerated the establishment of project collaboration.

In fact, in 2007, FIOH and SP launched a development project in order to assess how health and safety aspects could be more effectively integrated into real estate management. SP has even defined indoor environment as one of their most important targets of development.

The aim of the development project is to analyze and develop practices for SP for managing and preventing indoor environment problems. The practitioners of FIOH and SP expect that, as the practices develop, a positive impact on the well-being of property users will be encountered simultaneously with improved customer satisfaction. The basic idea in the present project is to combine the recent research and development results found by FIOH and the practical experience of the experts in SP. The development phase began in 2008 and was implemented through using participative workshops. Cooperation between FIOH and SP on this project will continue until at least 2010.

Some challenges were also encountered. Although the partnership workshop was an important starting point for the process, since only half of the team participated in the workshop, it did not create a common base or framework for the whole unit. Secondly, although organizing similar workshops on a regular basis could support the demand for collaboration and teamwork, the unit is situated in various locations around Finland, and such demand is difficult to realize in practice. Furthermore, a team is not a stable unit, but dynamically changing, since work at FIOH is largely based on projects in which various expertise and resources are coordinated. Thirdly, the presented workshop was the first mock-up of the partnership. Now although the experimented relationship has been realized in practice, the realistic future level of partnership, as well as the future of the TA, remains to be seen.

Perhaps the most obvious evidence of the success of the workshop is the fact that the team has expressed interest in organizing a new workshop to tackle the situation they are currently facing. Although work began well with the collaborative partner, they are hesitant about how to move beyond the current level of collaboration. In the potential new workshop, the participants wish to create a new process mock-up to collectively evaluate the experiences of the current collaborative project, and to invite the actual partner organization's representatives to co-explore ways in which to proceed.

6. Discussion

Prototyping serves as a framework for the application of design competence in organizational change that is still a rather unfamiliar arena for designers. We have identified several elements in the partnership mock-up exercise that are worth discussing.

The case was an opportunity for design experts to test the approach and apply their expertise outside the product concept design context. Designers are skilled to move flexibly from one topic to another and to apply knowledge, tools, theories and ideas from various fields for their work. In this sense the experiment was not an exception. However, it was realized that it is extremely useful to know and to be able to communicate the background and reasons for utilizing the design approaches and processes in order to convince and motivate the stakeholders, and moreover, to translate the process and methods for novel usages. In addition, although the applied methods, e.g.

role playing, are often applied in design workshops, the designers need to be sensitive in identifying and interpreting the novel phenomena outside of their previous expertise. In this case for example, the prototyping material consisted of human interactions, not plywood or foam, and one of the design components that had to be discussed was body language in role-playing. The emphasis was in intangible processes with social and organizational components such as how to understand the strategic partnership, how approach the partner and what kind of knowledge intensive collaboration to offer. Moreover, developing the competences for facilitating and inspiring the co-creation process and the people in it requires personal qualities and well-tried practices (and novel courses in design education in order to realize them).

FIOH experts faced an unfamiliar situation in the workshop. They had to abandon their analytical expert identity and “civilized” meeting room behavior and throw themselves into a role-playing and exploration mode. They even had to reveal that they did not understand what they were supposed to do. Design process and the mode of fuzzy exploration can feel chaotic for someone unfamiliar with design, as Kelley has also noticed [10]. Based on the team’s feedback, facing the confusion and surviving with insightful results was rewarding. Going through this process enabled thinking outside of the box, and made them open to new opportunities and analogies.

The role-playing and the process of producing deliverables at a fast pace were part of the fuzzy exploration. Despite some confusion, the experts adapted their roles easily and in fact the whole workshop proceeded like a game, in which the participants improvised their lines by stating their status e.g. “From the perspective of SP’, I would like to point out ...” This attitude was already created at the beginning by the Head of Research acting as the financier and by the two “representatives” of SP. This was also partly because the key persons played along and inspired others to join the game.

In this case, the participants were motivated to try out the design process. Since they were highly educated experts they were also able to quickly observe the key elements, make outlines, and translate some of the design-related assignments into a language that was closer to their own field of competence. We are not claiming that such high expertise is always needed in similar processes, but we saw that this was an advantage in this case. However, personal motivation and motivating in different ways are necessary. In this case, the Director of the TA and the Head of Research played crucial roles, both of them highly engaged in the workshop activities and, moreover in the TA’s overall goal of achieving successful results.

Product design mock-ups are tangible. In this exercise, the concreteness was achieved by the casting of roles, seeking for meaningful and practical situations, functionalities, and human to human interaction in everyday life. In addition, the team was guided to concretize, make sense, and communicate through visualizations and acting out. The definition of the process’ mock-up’s design elements remains to be clarified outside of this paper. However, the mock-uping workshop covered the reasons for design prototyping mentioned earlier; idea generation, exploration, concretizing, and communication. During the exercise, the team learned to build the process, got 'the feeling' of the context, and through being engaged in different roles, exercised a human-centered approach that is extremely valuable in building trust and partnerships. Finally, the video documentary of the day serves as a reminder of the collaboratively created mock-up of the partnership process.

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