Strategic Partnership as a Design Challenge - Applying design competence to facilitate innovation-driven relationships and activities in public organization

Mervi Hasu

Tuuli Mattelmäki

Salu Ylirisku

University of Art and Design Helsinki, School of Design

The Finnish Institute of Occupational Health Helsinki, Finland mervi.hasu@ttl.fi

University of Art and Design Helsinki, School of Design Topeliuksenkatu 41 a A 00250 Hämeentie 135 C 00560 Helsinki. Finland tuuli.mattelmaki@taik.fi

Hämeentie 135 C 00560 Helsinki. Finland salu.vlirisku@taik.fi

ABSTRACT

In addition to the application of traditional expert competences, practitioners in service-intensive public organizations today must develop new skills for dealing with collaborative service concept development and various userdriven and customer-orientated participative work practices. This paper discusses an example case in which a design approach was applied to boost the innovation process in a knowledge-intensive public organization.

Keywords

Public services, prototyping, design workshop, partnership, co-creation, collaborative learning, activity theory

ACM Classification Keywords

H.1.0 Information Systems, Models and Principles, General

1. INTRODUCTION

Public organizations today are faced with using design competence for public innovation. During the 2000s, the debate on innovations and innovation environments has expanded from technological, closed intra-organizational or controlled network environment towards social, serviceorientated, user-driven, open environment innovation [e.g. 8]. The rise of service industries has also 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 obtain access to critical external resources, to gain

ECCE 2009, September 30 - October 2, 2009, Helsinki, Finland.

Copyright 2009 ACM 1-58113-000-0/00/0004...\$5.00.

benefits from another organization without owning it, to reduce risks, and 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. The image of public services is still very often hierarchical, slow, isolated, and customer Public services, organizations and their unfriendly. practitioners are being challenged to become innovative, i.e. open to everyday-life customer initiative 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 enough. Instead, more network-orientated, collaborative, service-like and co-creative identities and competences are needed [5].

Thus a major transformation is taking place in many companies: instead of manufacturing and selling products to customers, the objective in service logic is "assisting customers in their own value-creation process" [16 pp 257]. Many innovative organizations today are advocating cocreation. Windsor [17] describes co-creation as a deep engagement with the internal team or engagement with customers and the culture in which they live. Successful cooperation and co-creation requires trust and engagement. Trust can be created through e.g. a process of negotiating common goals and values, realizing and organizing the network, communicating goals and identifying the roles of different players [9].

The building, nurturing and management of collaborative relationships are becoming an invaluable competence and a prerequisite for co-creation. But how does a traditional expert organization become a collaboration-intelligent community? For top management this does not yet seem to be a relevant question: strategy is the guide, middle management is the implementer. We propose that a designerly approach can support and drive both the strategic and everyday-life collaborative processes in organizations and networks. In this article, we aim at contributing to the development of new competences by discussing an example case in which a designerly approach was applied to boost innovation processes in a knowledge-intensive public organization.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

2. CASE CONTEXT

We will briefly 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 Finnish Institute of Occupational Health (FIOH) is a public research institute which has recently undergone major organizational restructuring and renewed its strategy. It is a multidisciplinary organization that employs nearly 800 experts and has regional facilities around the country. The target of FIOH's new strategy was to move towards the explicit interactive model of developing and implementing innovations through various modes of activity in close collaboration with partners and customers.

The new strategy created a major challenge for the development of expert competence and identity compared to traditional research expertise. It became a considerable learning challenge to both the management and personnel of FIOH. The management raised the question of how to organize, in practice, activities for innovation. How could they enhance and accelerate innovation within the new organizational structure? They came up with an idea of a kind of venture organization within FIOH. Two pilot venture units were established at the beginning of 2006, both of which already had considerable accumulated knowledge and permanent contacts with the main players in their sector. The units aim to make a major, novel contribution to the solution of particular needs or problems within the society, i.e. the solution is to be used by relevant societal partners and customers as part of their practices. The units 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 strategy plan included four broad phases: (1) planning (idea formulation), (2) start-up, (3) piloting and experimentation, and (4) customer-driven redesign and sustaining of the innovation.

The context of designer intervention, which we called the partnership mock-upping workshop, is associated with the Good Indoor Environment Quality venture unit. It is a multidisciplinary unit led by the Director (MD, professor). The group was comprised of 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 units. At the beginning of 2006, FIOH's Head of Research (first author of this paper) organized a small workshop in which external design experts (the other two authors) introduced methods and techniques for exploring and understanding user needs and user experience for product/service development. The Director was impressed, and later asked the same experts for help in planning how to approach one of the identified, most important (yet anticipated) partners of the unit. This organization, entitled here "the Properties", can be seen as one of FIOH's significant and strategic partners.

However, several questions arose. The potential common interest or practical target as well as the form of collaboration between the company and the venture unit were difficult to envision. How to get the firm interested in collaboration, how to present the unit's competences to the firm, how to open the negotiations and with what kind of ideas? How to engage the whole group in customer-orientated 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 autumn 2006. Its aim was to explore what the strategic partnership could consist of and what form it could take.

3. COLLABORATIVE PROTOTYPING

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 enable exploring and sharing the form, scale and appearance of an idea. Mock-ups are applied to consider particular features, 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 when compared to traditional physical products. Kelley [10 p.36] advocates, "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, and make them visible and debatable, they also foster playful exploration to get the feeling of things [13].

Early design phases are often characterised as 'fuzzy' and ambiguous. The challenging questions are: what are the concrete moves to be made, what do the activities mean to the team and to the organization, and what concrete results can these yield. Designing is about identifying alternatives which are discovered through exploring problems and solutions that are strongly intertwined. Similarly, the collaborative mockupping of a complete process aims at discovering the elements of the process and helping to outline the actions to be taken. Thus, the objective of the workshop in this case was to give form to a process.

4. PARTNERSHIP WORKSHOP

The 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 and which organizations are involved, and what the aims are. During the action phase, workshop participants are encouraged to apply their knowledge, communicate, act, make quick decisions and produce a common understanding of the alternative solutions. 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 video material support the team in planning the actual project.

The aim of the workshop organized at FIOH was to explore and develop strategic partnership. The workshop followed the idea of a user-focused collaborative prototyping of a process, which was piloted in concept design projects [1]. The planning of the workshop was built on the design experts' earlier experiences of user-centred product concept design projects, but was 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- or customer-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. Team-building also needed support since the unit had only recently been established. The Head of Research and nine team members, including the Director, actively participated in the workshop.

The overall principles in the arrangements of the workshop were:

1) An authentic-like project organization is to be established, i.e. some participants were given specific roles such as Mr H, Project Manager and an evaluator (entitled financier)

2) Authentic-like deliverables must be created in every phase, i.e. abstract discussion has to be turned into actions, documents and solutions

3) Situations are to be explored by acting them out, and all roles should potentially be based on "real" characters, such as the development manager of the partner company

4) All activities are to be constrained by strict time limits in order to force intuitive action

5) Strategic decisions must be argued for in front of a critical 'financier', and a refined focus must be articulated during all reviews, i.e. exploration must be turned into solutions and the reviews must allow iterations.

6) Reflections are to be discussed with the help of the video documentary of the workshop and real plans are to be outlined based on these i.e. the reflective discussion enables the team to open up the experiences for analysis and iteration.

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 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. Then the design experts 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 video documentary of the workshop day was reviewed the next day. It created a vivid basis for a discussion on insights and potential ideas for the actual process. Immediate feedback revealed that the day had served its purpose well. The participants pointed out that through the process they had gained a clearer picture of the potential partnership, and considered this 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 to the partner's environment, interviews of the relevant actors, and observations of the work, could be implemented immediately.

5. THE NEXT STEP

In 2007, FIOH and the Properties launched a development project in order to assess how health and safety aspects could be more effectively integrated into real estate management. The Properties has even defined indoor environment as one of their most important targets for development. The development phase began in 2008 and was implemented by using participative workshops. The co-operation between FIOH and the Properties in this project will continue until at least 2010. Although the experimented relationship has now been realized in practice, the realistic future level of partnership, as well as the future of the unit, remains to be seen.

The workshop built the participants' confidence as regards working with the anticipated partner organization. It was, however, only the first mock up of the partnership. Perhaps the most obvious evidence of the value of the workshop is the fact that the unit has expressed interest in organizing a new workshop to tackle the situation that they are currently facing. They now have a good start with the partner but are hesitant about how to move beyond the current level of collaboration. In the forthcoming new workshop, the participants would like 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 potential ways in which to proceed.

6. DISCUSSION

For designers, prototyping serves as a framework for the application of design competence in organizational change, which is still a rather unfamiliar arena for them. Designers are skilled in moving flexibly from one topic to another and applying knowledge, tools, theories and ideas from various fields of their work. However, it was realized that it is extremely useful to know and be able to communicate the 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 the novel usages. In addition, the designers need to be sensitive in identifying and interpreting novel phenomena outside of their previous expertise. 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.

We suggest that in addition to the application of traditional design competences, designers need to develop new skills for dealing with social practices, intangible processes, and complex systems.

For the participants, prototyping serves as a collective learning activity [15] for the building of new expert competence and identity in organizational change. In the workshop, the experts faced an unfamiliar situation. They had to leave their analytical, individually-bounded expert identity and "civilized" meeting room behaviour and throw themselves into a collective role-playing and exploration mode. They even had to reveal that they didn't always understand what they were supposed to do. They needed to learn something that did not yet exist, in activity-theoretical terms; to move in the zone of proximal development [3] of the new expertise. Design process and the mode of 'fuzzy' exploration can feel chaotic for someone unfamiliar with design, as Kelley has also noted [10]. Based on the team's feedback, facing the confusion and surviving with insightful results was rewarding. Going through this process fostered "out of the box thinking", and being 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 to their roles easily and the whole workshop in fact proceeded as a play in which the participants improvised their lines by stating their status e.g. "From the perspective of the Properties', I would like to point out ..." This attitude was already created at the beginning by the Head of Research acting as the financier, and the two "representatives" of the Properties. Success was also partly because the key persons played along and inspired others to join the game. Most importantly, the Director learned as part of the team, as a genuine member and not as somebody who knows best.

The workshop was part of a series of events meant to encourage innovative activity. The top management expected remarkable results from the venture unit. 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. Although we do not expect that such expertise is always needed, personal motivation and motivating the team in different ways is necessary. The Director and the Head of Research played crucial roles, both of them highly engaged in the workshop activities and, moreover, in the unit'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, the seeking for meaningful 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 situations. During the exercises, the team learned to design the process together, "got the feeling" of the context, and through being engaged in different roles, exercised a human-centred 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.

Based on our experiences, we suggest that the design approach helps represent complex collaborative processes and strategic partnership-building as concrete practice. It encourages management to perceive collaboration as a multilevel activity which is performed by real-life people and groups at all levels of organizations and networks [15]. It can be used intentionally to help participants nurture partnership as a temporal, stepwise activity in which mutual learning needs to take place. Learning may concern the co-creation of a target and mission of partnership; its means, tools, rules, and working patterns, as well as emerging future forms of collaboration.

7. REFERENCES

[1] Battarbee, K. et al (2005) Looking beyond the product: design research in industrial and academic collaboration. Proceedings of Joining Forces Conference. UIAH, Helsinki.

[2] Burns, C., Cottam, H., Vanstone, C. and Winhall, J. (2006) RED PAPER 02: Transformation design. Design council. UK. [Online PDF] Available www.designcouncil.info/mt/RED/transformationdesign/ [accessed 10 July 2009]

[3] Engeström, Y. (1999) Innovative learning in work teams: Analyzing cycles of knowledge creation in practice. In Y. Engeström, R.Miettinen & R-L.Punamäki (Eds.), Perspectives on Activity Theory. Cambridge: Cambridge University Press, 377-404.

at

[4] Fuglsang, L. (2008) Capturing the Benefits of Open innovation in Public Innovation: a Case Study. Int.J. Services Technology and Management, Vol. 9, Nos.3/4..

[5] Fuglsang, L. & Sundbo, J. (2005) The Organizational Innovation System: Three Modes. Journal of Change Management, Vol. 5, No. 3, pp. 329-344.

[6] Grandori, A. and Soda, G. (1995) Inter-firm Networks: Antecedents, Mechanisms and Forms. Organization Studies, 16(2), pp.183-214.

[7] Håkansson, H. and Sharma, D.D. (1996) Strategic Alliances in a Network Perspective. In D. Iacobucci (Ed.), Networks in Marketing. London: Sage Publications. pp. 108-124.

[8] von Hippel, E. (2006) Democratizing Innovation. Cambridge: The MIT Press.

[9] Järvensivu, T. and Nykänen, K. (2008) Identifying basic elements of network management: Comparison between managing networks, Markets and Hierarchies. In Anttila, M. and Rajala, A. (eds) Fishing with business nets: keeping thoughts on the horizon Professor Kristian Möller. HSE print. [Online publication] Available at hsepubl.lib.hse.fi/FI/publ/hse/b90 [accessed 10 July 2009] Pp. 146-161

[10] Kelley, T. 2001 Prototyping is the Shorthand of Design. Design Management Journal vol 12, no3 pp 35-42.

[11] Perrow, C. (1992) Small-firm Networks. In N. Nohria & R.G. Eccles (Eds.) Networks and Organizations; Structure, Form and Action. Boston, Massachusetts: Harward Business School Press, pp. 445-470.

[12] Schlosser, A. E. (2003) Experiencing Products in the Virtual World: The Role of Goal and Imager in Influencing Attitudes versus Purchase Intentions. Journal of Consumer Research, vol. 30, no. 2, pp 184-198.

[13] Schön, D. A. (1983) The reflective practitioner. Basic Books. New York, NY.

[14] Säde, S. (2001) Cardboard mock-ups and conversations. Doctoral thesis. UIAH Helsinki. Finland.

[15] Toiviainen, H. (2003) Learning Across Levels. Challenges of collaboration in a small-firm network. Helsinki: Helsinki University Press.

[16] Vargo, S. L. and Lusch, R. F. (2008) From Goods to service(s): Divergences and convergences of logics. Industrial Marketing Management 37 pp 254 – 259.

[17] Winsor, J. (2006) SPARK. Be more innovative through co-creation. Dearborn Trade Publishing, US.