Extreme Design

Final Report

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Introduction to Extreme Design project (01.06.2008 – 31.05.2010)

The Extreme Design project focused on exploratory user centered and co-design methods in service design domain. It was Tekes founded, joint research project of Helsinki Institute for Information Technology, Helsinki University of Technology (SoberIT) and the University of Art and Design Helsinki (department of industrial design).¹ The learning happened through case studies conducted in collaboration with companies Kone, OPK, Palmu Inc. and Idean. While the first three companies had their own cases in the project, the role of fourth company, Idean, was slightly different. Idean is one of the leading consultancies in Finland focusing on user centered design, and thus their practical experiences from working within user research in industry domain was seen as essential to push new research methods beyond regular approaches towards extreme.

The first case study with Kone focused on seniors and people flow in senior houses, while the second with OPK concentrated on user centered service model at bank, and the third with Palmu Inc. looked at service opportunities in social media. During these case studies we developed several co-design methods inspired by design games and drama to take into account particular aspects of services: 1) the long lifespan of the service relationship, 2) holistic view on service ecology addressing the need for novel business partnerships to cover the whole customer journey; 3) communicating user insights in inspirational and empathic way; and 4) organizing collaboration beyond traditional design team through co-design gatherings as temporarily learning stages. One of the research questions has been: How design games and drama can be used for designing the total user experience of services that utilize both multiple channels and personal customer service?

While doing the cases and conducting cross-case analysis we learned that the strength of design games and drama in service design is in the possibility to include different stakeholders into service design – do co-design. We did not develop methodologies that would be somehow very revolutionary, as our project name would indicate, but we were able to utilize design games and drama in a way that was engaging for all parties. Moreover, design games and drama are very suitable tools for creating common language for all stakeholders – the language of the service customer. They are very good for looking things from customers’ perspective and taking his/her role in service design.

¹ Since January 2010 both schools has belong to the same Aalto University.
1 Motivation

Of Services

Services have been around a very long time and they are more or less omnipresent. The concept of service, however, is very ambiguous. In a reluctant attempt Grönroos (2007) defines: “A service is a process consisting of a series of more or less intangible activities that normally, but not necessarily always, take place in interactions between the customer and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to customer problems.” Another definition, by Gummesson (1987), states that: “A service is something which can be bought and sold but which you cannot drop on your feet.” Of course, neither of these definitions is very practical nor they are meant to be. Both of these however emphasize the intangible nature of services and demonstrate very well the elusiveness of the concept.

Services can be found from many kinds of commercial or non-commercial activities. Services can be seen for example in financial, transport, retail, entertainment, healthcare, education and construction industries. Services are present as well in such fields as social work, waste management, telecommunications and personal grooming. One type of services can be found also from modern computing from for example databases that serve other programs. The variability in services’ nature lead Johns (1999) to recommending that authors should always lay down parameters for each specific situation, and to give actual examples wherever possible. In our project we were able to look service design from very different angles in different service design cases. Therefore, in this report we have aimed to illustrate some issues that rose in the cases besides describing the service design techniques that we created in the project in order to give more understanding on possible challenges in user-centered service design.

Services vs. Goods

Traditionally, services have been separated from goods. One of the most famous distinctions is the IHIP classification which is based on an extensive literature review by Zeithaml, Parasuraman and Berry (1985). IHIP stands for Intangibility, Heterogeneity, Inseparability and Perishability. In short, intangibility refers to services being something that is performed and cannot be sensed in the same manner as goods. Heterogeneity (or nonstandardization) means that each time a service is performed it is different from other occurrences. Inseparability states that the production of the service and its consumption are simultaneous and cannot be separated. Perishability is understood as the inability to store a service in a way goods can be stored.

Even though IHIP can be seen as a workable description of services in general, it is problematic. All four characteristics can be challenged and a plenitude of exceptions can be found for each. Also, IHIP does not answer to the question of what services are but it instead defines services as
a special case of goods. These kinds of artificial dichotomies, especially tangible-intangible, can be misleading as products or services are only very seldom fully of one kind (Shostack, 1977). The same applies for entities being solely products or solely services (Shostack, 1982). For further criticism, see e.g. Vargo & Lusch, 2004, The Four Service Marketing Myths.

**Goods distribute Services?**

In the last years another kind of position has raised its head. Instead of considering the differences between goods and services, goods are viewed as a way to distribute services (Vargo & Akaka, 1999). This usage, which can be direct or indirect with, for example arts, can be seen as a service. Products can also work as platforms for services as it is with smartphones. The product provides a setting in which a user can choose the service from multiple service providers. Especially noteworthy aspect of this approach is that goods and services can create value only through mutual operation (between the provider and the customer). This can be also understood in a way that a service or product cannot create nor have any value by themselves.

**Of Value**

The theory of marketing revolves strongly around the concept of value. The meaning of value, a concept no less vague than service, is heavily dependent on the creator and the recipient. One very simple meaning of value for a company is the price the customers are willing to pay for the things the company produces. Value for a customer can mean for the customer that some task is fulfilled in a satisfactory way. Thus, value can be in the same time measurable and immeasurable, depending on the perspective.

The older and currently still more or less dominant view states that, especially when speaking about products, a manufacturer adds value to a product by its processes. In other words, value is embedded to the product. After the manufacturer has added value to a product by its processes it supplies the product to the customer in exchange of some price. This process is known as value-in-exchange.

**Service-Dominant Logic**

A newer stance, called value-in-use, is closely connected to the previously discussed notion of goods distributing services. Both of these can be found from an emerging logic called Service-Dominant Logic (S-D Logic). S-D Logic is an approach that makes a deliberate distinction from Goods-Dominant Logic, which is the logic on value-in-exchange. One of the cornerstones of S-D Logic is that value is fundamentally derived and determined in use, instead of an exchange (Vargo, Maglio, Akaka). S-D Logic is built on ten foundational premises that explain the nature of services and the generation of value (for more information, see Vargo & Lusch, Vargo & Akaka). S-D Logic also stresses that value is generated by the service provider and the customer. This notion is especially important when considering services. With products, a customer or a user can provide her a service (through the product) and therefore generate value by herself.
With a service neither party can generate any value by themselves but only by co-operation. Thus, the most important task that a service company has is to ascertain an environment for the customer in which it is possible for the co-operation to take place. Most of these ideas have been introduced also by the Nordic School (Grönroos). Without going into detail and speaking broadly, both of these schools consider value-in-use the most important value creation process, co-creation of value the top importance and discarding the older view of value-in-exchange.

S-D Logic has also served as a theoretical foundation for a new field of science, Service Science. Service Science was at first a term coined by IBM but has thereafter evolved to an academic branch. Service Science is however a field that is deeply involved in management of services and thus is not of very high importance in the eyes of the Extreme Design project as the goal of the project was to create service design methods.

Of humans

Previous discussions have been on an academic level and have considered services from a top-down perspective, i.e. management/marketing perspective. This kind of approach has a definitive pitfall of not taking into account the most complex part of any service, the human. In all services, the most important stakeholder is a human who can play the part of a consumer, customer or a user, depending on the perspective. It is also possible that the service provider, or at least the contact point for the customer, is another human. This is true for services that are provided by humans to humans. It is only fair to ask that how can one understand value-creation or customer motivations without understanding humans? And how new products or services can be developed if this knowledge doesn’t exist?

A human being in the focus is of course not a new idea. Multiple fields of design and sciences in general are interested in how humans work. There are fields that consider how humans function physically and mentally, how humans utilize their surroundings and how to design for humans. In the following some fields of design are visited.

Human-computer interaction

Human-computer interaction (HCI) was born on the need of making computer programs more usable and receptive to user needs. This goal is pursued by making interaction between the user and a computer more natural and effective. In short, HCI is interested in making the computer software and hardware behave in a way that is compatible with the users’ cognitive models. In practice, this is usually achieved by designing graphical user interfaces and web interfaces.

User-centered design

User-centered design (UCD) is a design philosophy that is interested in finding out who are the users of some system, what are their needs and tasks and in what context they are. UCD differs
from, for example HCI, in a way that its field of application is broader. The experience of using a product or service is always related to the people who use them and the context were the interaction takes place. Thus it’s important to identify who is the user we are designing for and take that into consideration in design. Different aspects and approaches have been considered meaningful for studying users during last decades. For example in the 1970s the main weight was put on ergonomics and cognitions whereas 1980s and beginning of -90s usability was seen as most important factor in the design practice (Julier 2000). In the end of 1990 and beginning of the 2000 UCD which emphasizes the meaning of emotions and pleasure in user experience has become common approach. Today designers’ should understand besides the aesthetics, production and usability also user experiences (Mattelmäki 2006), which binds user, product and use context together and puts the emotional aspects for the same level than cognitions and functional properties previously were in design (Battarbee 2004). Recently the interest has changed towards understanding the processes and practices highlighting that designing the design process itself can be as important as designing the artifact (Brandt 2006).

Empathic design

Empathic design approach is set of design process principles that take into account emotions. Understanding emotions – being empathic- is an ability share feelings and hence, it requires some effort (Fiske and Taylor 1991). It involves identification with the other person, and awareness of one’s own feelings after the identification (deCatanzaro, 1999). People empathize with another person’s perspective at least when both are in the same mood, have similar personalities, share co-operative goals, or take the role of the other (Fiske and Taylor, 1991).

Common emphatic design principles are often defined as follows (Leonard and Rayport, 1997; Black, 1998):

- Observe consumers in their own environment
- Capture qualitative, visual data about the consumers
- Follow technological development, and use the newest solutions yourself
- Reflect and analyze consumer data
- Generate new product ideas
- Create scenarios to explore how the new product ideas could be used in future
- Develop prototypes of the new product ideas
- Evaluate the prototypes with consumers.

Observation is mostly recommended method to uncover consumers’ needs in empathic design approach but Sanders and Dandavate (1999) argue that there are actually three ways of accessing needs: by focusing on what people say, do and make. Observing and interviewing are the most
traditional ones and they focus on what people do and say. Less traditional tools focus on what people make. With specially tailored toolkits, people make artifacts such as collages or diaries that show and tell stories. The tools are projective in nature, allowing users to project their own needs and desires onto their imagined experiences. When all three perspectives (what people do, say, make) are explored simultaneously, one can readily understand and establish empathy with the users according to Sanders and Dandavate (1999).

Besides various user research methods and prototyping, scenarios are working tools in empathic design approach. In user-centered design a scenario is understood as narrative description of what the user does and experiences when using a computing system (Carroll, 1995). Kuutti (1995) identifies two levels of scenarios: rich context scenarios and systematic application scenarios. Hackos and Redish (1998) have also noticed this dichotomy when discussing storyboards which are a kind of visualized scenarios. According to them high-level storyboards correspond to use scenarios and workflow diagrams that show the overall flow of actions by an individual or a group of people. Detail-level storyboards include rough sketches of screen layouts and designs that correspond to the use sequences.

**A call for methods**

Human-computer interaction (HCI), User-centered design (UCD) and Empathic design have their focus on the user. Broadly speaking, they are interested in how user with certain characteristics can use a certain product in a certain context in order to fulfill her needs. By definitions, they talk about users and *systems*. However, traditionally they have been limited to products or software. This however is not entirely true as, for example, many software products are or can be understood as services.

Even though these fields have helped in understanding humans and giving a solid base for designing for humans, they don’t address the problem of designing services. Services can be provided by humans for humans. Services can be part of mixed systems, systems that consist of digital parts and customer service. Service marketing has identified this need (Vargo & Akaka, etc.) but do not provide means to get a holistic understanding of the customer.

Returning to the question posed earlier in the introduction, how can services, intended for human use, be designed without properly understanding humans? Clearly there is a need for service design methods that can address the user, the context, the tasks, needs and emotions but also understand how service providers work. In order to have a working co-operation, or co-creation of value, it is equally important to understand both parties. Concurrent service marketing theories enthrone the importance of value-in-use, value that is created through use. Marketing talks about customers whereas human-centered design fields usually talk about users. Even though the
vocabulary of other fields, like UCD, is different, the goal is the same: What is important for the user is important for the provider.
2 Co-design: Our Methodological Approach

Terms *co-design* and *co-creation* don’t have well established definitions or practical use context and thus causing confusions when speaking about design processes or use experiences related to those terms. In this report we do not attempt to provide perfect definitions for those either, it is a task that goes beyond our scope. Instead, we address our particular way of using these terms in the Extreme Design project. As we have seen it, co-design in general refers to design processes whereas co-creation may also describe the moments of experiencing services. Since Extreme Design has focused on service design processes and especially methodological considerations on how to involve group of people (different experts, service providers, designers and users) to contribute service design, we have adapted the concept of co-design. In this chapter we will introduce our standpoint for co-design beginning with more general aspects and moving towards specific examples from the Extreme Design case studies.

*From participatory design to service design*

Möller et al. (2008) highlight the need for new approaches to the companies that want to succeed in the world where economy increasingly builds on services. One limitation of the traditional management thinking, they point out, is the lack of considering the value of services from the clients’ or users’ perspective. According to them the most successful service providers are not those who focus on their own capabilities or their clients’ current needs but those who incorporate clients’/users’ experiences and capabilities into the service co-creation process. This demand for collaboration is an apparent link between services and participatory design (PD). PD has emphasized the need for collaboration among designers and users whereas in services it’s extended to cover wider spectrum of professionals, decision makers etc. like typical in many complex design projects nowadays. Thus, we agree with Holmlid (2009) that service design could learn from the PD methods if extended to cover BtoB partners as well. The importance of building a common design language, a concern pointed out by Ehn and Sjögren already in 1991, is essential in all multidisciplinary work. To overcome distinct professional languages Ehn and Sjögren developed several design games, which provided designers and users a common vocabulary. Design games have also been one of the approaches utilized and developed further in the case studies discussed in this report.

*Envisioning future*

In the core of any design practice as well as in research through design like Extreme Design project the focus is on understanding *what could be* – to develop future visions of the human world (Cross 2006a) rather than explaining *what is*. This perspective directs the way co-design has been performed in our case studies; we have organized temporarily occasions, co-design gatherings, as stages to achieve future visions and alternative solutions within multidisciplinary group of people. The overall aim has been to gather appropriate people together temporarily to tackle with certain design challenge at hand.
Co-design as understood in this report refers to a particular gathering where at least two persons are at the moment bounded in regard to place and time. It is not spontaneous action as opposed to practical situations of working together with colleagues in the design studio. Rather, it can be described in terms of social occasion that is typically programmed in advanced, possess an agenda, and has pre-established unfolding of phases (Goffman 1963/1966). There is typically someone in charge of guiding the main activity and sustaining order. In our cases there is a facilitator(s) who plans the activities, arranges the environment and provides tools and materials to work as scaffolds for people who are invited to participate in the co-designing.

**Who to invite as design partners?**

Because the roots of co-design are in the tradition of participatory design, it is typically understood as an activity which empowers potential users to bring their wishes into the design of new solutions. Co-design can however also be conceived in more general terms as a collaborative knowledge sharing and creating process, in which different practitioners’ skills, experiences and creativity are brought together in order to support generative thinking and thereby to reach novel solutions (Mattelmäki 2007). This is especially fundamental when dealing with complex service design which requires skills and knowledge from wide spectrum of professional fields.

During three case studies done in collaboration with companies we have conducted several co-design gatherings with distinct aims, participants and contexts. One essential quality that they all shared has been *being eyes open for change*. Therefore providing tools for participants to change their perspective has been key aspect to consider when designing new methods for collaboration. We have followed three guidelines for organizing co-design based on our previous experiences: 1) amplify participants’ creativity, 2) set the stage for constructive negotiations, and 3) ground future possibilities in current situations. These three advices in mind we have designed the unfolding of the activities and often wrap those into game rules and built the game material that either opens new perspectives or help to facilitate discussion.

**Co-design gatherings as temporary learning stages in Extreme Design**

In the Extreme Design project the research has happened through three case studies with company partners. The title “Extreme Design” refers to the experimental attitude towards the method development; organizing collaboration beyond traditional design team by applying creative methods which highlight out-of-box-thinking. Moreover the co-design gatherings have been aiming at understanding the wide solution space instead of seeking the shortcut to the final design, thus they have widened the problem area rather than focused it. It’s important to remember that lot of meetings that included designing, testing and analyzing took part throughout every case study. The ones discussed in this report are those that involved also other people outside the core teams. This decision is a result from our wish to point out the possibilities to
engage various important actors temporarily to the design process. Short term gatherings during the service design project can provide valuable insights outside the partners’ own standpoint. This is also what we want to demonstrate in this report.

2.1 Case 1: People flow in senior houses

There were different levels of collaboration in our first case. Firstly between university researchers’ and representatives from Kone; Secondly between Kone and two companies (YIT and SATO); and thirdly among people working at R&D in Kone. The tight collaborative relationship that was established between researchers working at Extreme Design and key representatives from Kone enabled continuous dialogue during the study. The researchers’ focus was to explore novel ways of communicating field data on seniors and senior housing in an empathic and inspirational way keeping three main objectives in mind:

1) To utilize user data as source for new business networks
2) Raising awareness of seniors as special user group
3) To promote company’s shift in design towards more holistic understanding of “people flow”

The first agenda included working with three companies who are somehow connected with house manufacturing, whereas the second and third objectives mainly concerned company’s particular R&D department located in Finland. Based on the overall aims of communicating user data the researchers developed a “Character Game” that was played in a particular half a day co-design session and “Senior Expo” which was exhibited in the company’s R&D department for a month. In this case study the user group under study, seniors living in the senior houses, was not invited face-to-face encounters with the design team, but more traditional approach was used; interviews and observations. The collected material from the user study was then transformed into a Character Game and Senior Expo to communicate it in inspirational and empathic way. Role-taking was seen as a tool to learn insights from the users’ world. The game and the expo were used to communicate representations of user study/field findings in a way that can be open ended for new interpretations thus allowing and inspiring personal insights.

2.2 Case 2: Developing new service models for bank

In this case there were three parties involved from the beginning; representatives from OPK that was our partner company, designers from Palmu Inc. (the design agency working to OPK) and the researchers from Extreme Design. Besides drawing from the expertise of these parties two co-design gatherings including also users (bank customers) were organized. It was facilitated through storytelling within groups of designers, bank personnel and users. We perceived the method as creative version of traditional Focus Group sessions, thus it was named a “Storytelling Group” This time user representations were not needed since the actual bank customers were presence in the co-design gathering. While envisioning a story of customer journey participants had an opportunity to reflect on their own experiences and needs through the imagined character
and his/her lifespan. In face-to-face meeting the empathy towards different people and happenings in their life is easier to achieve than through impersonal PowerPoint presentations or piles of written documents. Later on at the time of launching the new service model, we organized co-design gathering with bank personnel including customer service stuff, concept developers and in-house consultants who support organizational change processes. The aim was to demonstrate novel ways of facilitating discussion concerning the implementation of new service model and as such provide tools for the in-house consultants. The discussion was facilitated by the design game called “Customer Profile Game” that highlighted distinct customer needs during a customer journey.

2.3 Case 3: Widening the understanding of service opportunities within social media

This case underlines the possibilities of rather brief co-design process as source of inspiration and information. The main partners were designers from Palmu Inc. (mainly different than in OPK case) and researchers from Extreme Design. However the case came from Palmu’s client Itella and their representatives took part in the organized co-design gatherings as well. Other level of collaboration took place between two Extreme Design researchers and users in the form of Facebook probing. Third stage for collaboration was organized through the storytelling group method developed first in OPK case. The aim was to bring users around the same table with designers and service providers to allow mutual learning through collaborative storytelling. Researchers were also keen on to develop promising Storytelling Group method further by conducting it in different context.

2.4 Summary: Reasons for collaboration and creative methods in companies

Darsø (2004) explains the purpose of utilizing artistic approaches outside its traditional domains, for instance in management to reach social innovations: “Most groups prefer to work in the safe and certain field of knowledge, but unfortunately this alone does not create innovation [...] Another important feature concerns how the arts can invite people into the unknown, into improvising, into questioning the habitual and ordinary and into the process of creation. [...] ... conflict can be generative for innovation, but only when it takes the form of a creative tension, not a clash. Creative tension can be generated by new perspectives, odd questions and intriguing provocations, and this happens to coincide with the key competencies of the arts (pp 52-53).” This also describes the fundamental aim of the methods developed in Extreme Design. Reasons to apply artistic approaches in business include: to challenge people’s values and attitudes; to unlock creative potential, provide new ways of seeing; team development; to improve communication, collaboration, feedback, and quality of conversations and meetings in
individual, team and organizational level; discovering new ways of seeing and saying (expression), exploring a plethora of possibilities (Darsø 2004, p 123).

In Extreme Design, the co-design gatherings can be considered as ‘artistic approaches’ having many of the same objectives point out by Darsø. They have mainly tackled with defining the problem area, or pointing out interesting themes related to a specific project, user group etc. Being able to provide new perspective to the participants, in one way or another, has been common for all. Similar with concept design that can be used for several purposes outside the traditional design goal of production (Keinonen & Takala 2005), the methods developed during the Extreme Design have had other reasons than design outcome. Key objectives can be summarized as:

- Learning from a specific user group, situation, or problem.
- Enhancing participants’ creativity by rehearsing out-of-box-thinking.
- Empowering people in change processes to express their viewpoint.
- Improving team work by providing tools to understand others, having discussions around difficult issues in a more relaxed way etc.
- Finding new collaboration opportunities and networks.
3 Design games, drama and storytelling in Extreme Design

As described in the previous chapter, we have followed co-design approach guided by various co-design gatherings. These encounters among distinct parties have been facilitated through activities that have drawn from the design games, drama and storytelling. Because of the methodological base, all these co-design gatherings can be viewed as sort of theatrical performance. Theater has been used in organizations among other things to create focus and dialogue (Darsø 2004, p 87). The strength of the theater, according to Darso, is that it encouraged dialogue with active participation. As Forum Theater applied in organizational problem solving (ibid, p 89), methods developed in Extreme Design can enhance overall understanding of the complexity and interdependence of organizational life.

Another quality related to the organizational theater implies also to design games; the blend of fiction and reality to evoke new (provocative) insights into the problem / theme under study. The overall experience if positive would also invite further conversations. The scenes and game material provide common references which may help to improve the depth of communication. The aim is often to recognize the problems without necessary involving direct change. (ibid.)

3.1 Designing design games should be a collaborative effort

One of the challenges we have faced in the collaborative projects among companies and university is how to transform the knowledge gained during the design process to the partnering companies in a level that enable progress and continuity (Mattelmäki, Vaajakallio and Ylirisku 2007). We have applied a process with several co-design gatherings to engage partners in the design and learning process. However, lot of important decisions and learning takes place already while designing a co-design gathering and activities in it; hence there is need for stronger involvement already when designing a particular design game.

When designing a design game, the team goes through the field data and discusses its relevance to the design phase and task at hand. As Törpel (2006) mentions there are many possibilities how to translate relevant categories (e.g. problems, roles, work tasks etc.) identified in the design process so far into a form of a game and game elements. Johansson (2005) reminds that sometimes the game format forces you to do certain kind of game pieces, for instance the size and amount of the video-cards in a design game can be limited to create a better playing experience.
Moreover, we have noticed that lot of learning takes place when creating the game material: selecting quotes, images and videos, discussing the rules, building and gathering props etc. This sense, game design sensitizes participants to the topic. In many collaborative UCD processes the outcomes from the project, include learning new approaches, seeing things from different angle, and increased empathy towards users. Many of these ‘implicit’ outcomes emerge already when immersed with the field data while designing the design game. Only fractions are gained while playing the game.

Similarly, in Extreme Design a lot of emphasis was put on to extend the collaboration from playing design games to designing those together with the company partners. The tight collaboration among researchers and company representatives in Kone case, for example, helped to guide the process to the meaningful direction to all participants, and changed the consultant-client relationship towards more equal partnership. The collaboration demanded flexibility and resources from every participant, but was also source for positive experiences; the researchers gained insights about the way of working in the company, help to design and prepare the games, and real-life challenges to work with, whereas the company learned besides the knowledge about seniors and senior housing new approaches such as design games to adapt in their everyday practices. In the other two cases continuous dialogue was maintained through the serious of co-design gatherings, meetings etc. that primed the Storytelling Groups and Customer Profile Game.

3.2 **Emphasizing practices with history instead of tasks in certain moment**

In traditional user-centered design the focus is on tasks that user conducts with certain tool. The tool is considered as an artifact that the company produces in order to launch it into markets as an output. This kind of thinking does not meet the requirements of service design that focuses on value co-creation. As Korkman (2006) points out, in order to understand the value of a service, one has to link the service to the contextual nature of human life. Korkman suggests that when developing a new service, the company should acknowledge the historical development and understanding embedded in the practice it relates to. The objective of service development becomes thus not the creation of meaningful service (e.g. how it relates to customer’s status or identity), but the cultural production of new forms of practices. The interest is thus not in the understanding of human beings, but the practice they are engaged in. Services are input and not output in users’ everyday life.

Reckwitz (2002, 249-250) defines practices in the following way:

“A ‘practice’ (Praktik) is a routinized type of behavior, which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion
and motivational knowledge. A practice – a way of cooking, of consuming, of working, of investigating, of taking care of oneself or of others, etc - forms so to speak of the ‘block’ whose existence necessarily depends on the existence and interconnectedness of these elements, and which cannot be reduced to any one of these elements.”

In our service design cases the focus has been on practices the elderly people engage within their everyday life in service house, practices people have around banking services and new practices people could develop in social media. If we would have focused only on tasks the elderly would have been conducting with the elevators, or tasks people conduct when going to a bank, or tasks they do with social media, the understanding of possibilities for new practices and needed service ecology would have been missing. Therefore we have applied more holistic approach inspired by design games, drama methods and storytelling.
4 Establishing collaborative project

In the next chapters we will underline three aspects of service design as fundamental to consider according to our experiences:

- Establishing the collaborative project.
- User insights as source of inspiration: from user study to face-to-face encounters.
- Flexibility in the implementation phase: understanding people and locality in services.

Brandt reminds (2006) that the design team itself often includes people with varied skills, areas of interest and professional languages. Collaboration within this multidisciplinary team may be sometimes problematic but when we expand the collaboration to cover even wider spectrum of partners and interest, certain things become essential to consider. Our earlier experiences from working with companies have stressed the importance of reaching common vision of the project’s goals and explicating the various interests embodied in the industry - university collaboration. (Vaajakallio et al 2008) To overcome the possible challenges caused by the several goals and interests involved in a single case study, we developed a “Project Planning Game”. The aim was to become aware of the potential contradictions early enough and reach commonly created and agreed project plan for the project.

Project Planning Game: towards common goal

Project Planning Game was directed primarily for planning UCD projects with two or more different partners (preferably some kind of client designer relationship). In our cases the partners were researchers from Extreme Design project and a collaboration company that provided the empirical case. There have been discussions on the challenges faced in the university- industry collaboration (Vaajakallio et al. 2008) and the lack of decisions makers’ involvement in the design processes (Clark 2007). Project Planning Game was developed to meet these challenges by building the design brief / project plan in a collaborative manner. It takes in to consideration resource allocation, and it can also produce design process alternatives if more than one team is playing the game at the same co-design gathering.

The outcome of the game, the project plan, is by no mean fixed. On the contrary it is meant to be modified during the learning while the project evolves. However, it sets the stage for collaboration by defining main objectives, providing possible tools for different phases of the project, and pointing out distinct interests that stakeholders or individuals may have. Thus, playing the game paves the path for further activities. One of the strengths of the game is to have a shared vocabulary among participants with various professions. It has been developed and tested in two of our case studies; one game session was organized with the Finnish bank
Osuuspankki) and another with an elevator manufacturer (Kone). In addition, it has been used twice with industrial design MA students.

Players were the project stakeholders (potential users are not involved). In our two cases the participants varied from three to four, in student cases from two to five according to size of the project team. There is no designated facilitator but everyone participates in equal manner. However, the background information concerning possible methods may vary. The setting was a meeting room with tables for two play-teams. This game is easy to use in several UCD projects with minor changes to the playing cards (they present alternative methods for the project), which should be context specific.
5 User insights as source of inspiration

One of the strengths of co-design, if organized properly, is its quality to create an understanding of the users and use context simultaneously with novel design concepts. In design games conducting user studies, interpretation and concept design are overlapping and in many cases can’t be looked at in isolation from each others. Therefore design games may diminish the need for separate user study. It’s important to note here that many design games, alike the Character Game, requires user data to enable designing the game in the first place. Anyway, well prepared co-design gathering produces lot of information, inspiration and design openings within couple of hours.

It becomes fundamental to understand the nature of the produced knowledge when analyzing the data for design and / or research purposes. In user research the researchers typically reconstruct the reality of the users through several visualization techniques such as persona descriptions and videos. The representation is influenced by the purpose, selection of the material, chosen visualization format, and personal skills and interests of the researcher, thus the outcome is not an image of “reality” but reconstruction of (parts of) it. We can adopt Schechner’s (ibid. p 50) notion, concerning ethnographic films that are shot in the field but edited at home, to the user research: “History so-called is not “what happened” but what has been constructed out of events, memories, records: all shaped by the world view of whoever – individually or collectively – is encoding (and performing) history. To “make history” is not to do something but to do something with what has been done.” This also underlines the relative and contextual nature of user data; generalizations in design research are tricky to do. Arguing the meaningfulness of creative collaboration must be done through individual cases and keeping in mind that there are no right answers in UCD.

The main limitation of this kind of creative methods like design games and storytelling are how to analyze the data. This stresses designer’s and researchers’ expertise to interpret the data in their specific purposes. The other concern related to the nature of the knowledge of the creative methods is reliability. Since imagination is embedded in stories and performances, there are always the question of reliability concerning the new insights and knowledge gained through those approaches; can it be handled as trustworthy information to be used in design? For instance, the Storytelling Group is completely based on the participants’ input and can’t be controlled by the researchers. In the Character Game we used game world creation and character templates, which introduced parts of the field data, to maintain the link between imagined and reality. This is also one of the contradictory properties of these methods stressing the necessity for the right balance in order to achieve successful outcomes.
5.1 Seeking user insights in Extreme Design

In this chapter we give examples how user insights were approached in the case studies. In the senior case with Kone we had two distinct strategies: 1) a tabletop role-playing game, The Character Game that presented user data and provided a framework to link interpretation and idea generation together. 2) Senior expo that utilized artistic provocation to arise emotional responses and inspiration towards seniors. People flow and touch-points were introduced through four senior characters and themes found in the previous Character Game. In the following two case studies, with OPK and Palmu Inc., inviting a group of appropriate people (potential users) for co-design gathering were considered as key factor to gain insights from users’ practices and wishes. Collaborative storytelling in the Storytelling Group was the mean to bind different experiences into one consistent story.

Character Game: digging into user data through the tabletop role-playing game

Two sessions with the company participants were organized using a design game approach. The first session looked at opportunities for collaboration within three companies (an elevator manufacturer, a construction company, and a housing manufacture) whereas the second game focused on triggering discussion around the seniors’ world within R&D employees. The basic principle of the Character Game was to let the participants to step outside their professional roles and put on senior’s shoes to envision the world from that perspective.

The researchers were inspired by the table-top role playing games to combine quotations and images from the seniors and senior houses with players’ own experiences through role-taking and storytelling. Evoking memories and attitudes through the game material and game playing was considered important in order to support empathy. The following explains briefly the steps of the game, while the approach is explained in detail in our article (Kaario et al 2009).

Navigating between the user data and own interpretations

First, everyone told a personal story related to seniors. Second, printed images and quotes from the user study were placed on a paper to build a game world that illustrated the senior house. This aimed at visualizing the context and open the discussion related to senior housing. Third, the facilitator gave a brief description of the imagined senior house in which the (play) characters to be created in the following step would live in. Fourth, the participants were provided six different character templates from which everyone chose one as a base for his role character for the game. They worked as role scripts (Ehn & Sjögren 1991, p 257-258) including specifications to support the role-playing, mainly quotes from the interviews, which gave hints about personalities and disabilities. Things excluded from the templates were gender, careers, family ties and other personal information that were left to the participants to decide. To make the character creation more playful one random factor card were distributed to every player. It contained some secret background of the character that could be used in the game: "You have
won the lottery" or "You have a bypass surgery scheduled in two months." Cards with images of elderly people were given to choose from as an image to represent the character. Picture was placed in front of the player on the table to work as a reminder. Fifth, the group chose one of the provided weekly schedules with a variety in service level to drive the happenings.

To reach information and inspiration, the game included general play-elements such as role-taking, random factor cards, turn-taking and game world, but the activities were grounded to the themes found from the field data, such as monthly info meeting, chair exercise etc. The character templates ensured that the link to the original user data was maintained even though participants’ input and interpretations were essential for unfolding of the game. When the participants generated stories that were partly based on their own past experiences, and partly prompt by the game material, i.e. user data, the co-created stories included several design openings; new scenarios and services were “produced” as the story evolved. As for building empathy, the narrative nature and structured role-playing transform the players away from day to day personas. Even though the stories were placed in the game reality, the motifs and content were drawn from the user data and reflected players’ own experiences, assumptions, and attitudes as well. Many participants mentioned afterwards that the Character Game opened up the world of users, their values, needs, and problems to them in a new way. The way the players described the overall feeling of the game session varied from being “relaxed”, “inspiring”, “eyes-opening” and “positive”.

See more details from the two articles attached in the end of the report:

- Someone Else's Shoes – Using Role-Playing Games in User-Centered Service Design

**Senior Expo: communicating the questions and themes aroused from the user data**

In the flow of experimenting with new ways of representing user data we wanted to try out a more artistic way, and designed an exhibition. It was built on the same data as Character Game and was created around four key themes identified during two game sessions; me and others, aesthetic usability, moving, and feeling safety. These themes were introduced through four main characters that represented the people living in senior houses. The exhibition format aimed at letting the visitors to explore, feel and reflect. The purpose was to share some of the insights and questions that arose during the case study, not to present concept ideas. Thus, while exploring the exhibition everyone could create his own personal view on the topic.

One of the purposes of the exhibition was to promote company’s shift from mainly developing elevators and escalators to focusing on “people flow” in a wider sense. The four characters in the
core of exhibition had distinct abilities and needs regarding to moving around, e.g. one needed a walking stick, whereas one didn’t have strengths in her arms. To concretize different attitudes and challenges they faced when moving, the exposition included several touch points from image of elevator to real garbage can connected to descriptive quotations such as “It would be nice if there was some softness in the lobby, there is an iron bench now. Plastic plant would also be nice. ”The elevator causes blood pressure. When going shopping, you never know whether you get home. Or, when you have a laundry day. Since everybody else here is also aged, you can't ask them for help. Once when the elevator was broken, I had to call my son to come from Järvenpää [30 km away], because I couldn't go home with all the bags I had.”

Derived from the artistic approach and the wish to show some of the seniors’ fears and dreams, the exhibition stated provocative and stereotypical notions, such as a wall with “old photos” of the characters and quotations from the interviews indicating seniors’ distinct values, life styles and histories to promote their individuality. This was to underline that when people get older their needs and wishes become even more diverse than before.

Michael Brammer’s work (Darsø 2004, pp 101-106) is an example of using art as provocation in marketing campaign of car safety. He used spectrum of stirring, disturbing, provoking and insulting. Even though the art exhibition organized by Brammer at Volvo was not felt as successful in-house, it was presented in media to give publicity to the Volvo and the artist. Through the exhibition Volvo stood out as “courageous” and the project as “unique” thus illustrating the innovate attitude of Volvo. One aim of the project was to “shake up the organization and inspire the employees’ towards more creativity” (p 106).

**Storytelling Group: Different types of realism**

When developing the Storytelling Group method we aimed to tackle also the challenge that people use services during long lifespan, and on the other hand, the service providers have a need to understand how to develop services that evolve along the time. When applying the Storytelling Group technique the aim in the OPK case, banking services, was to increase designers’ and service providers’ understanding of changing user needs over a long customer relationship. Changing customer relationships offer an important perspective on banking services that should address people’s needs according to their varying life situations. Banking services in particular can carry a long life span: the customer journey or relationship may last tens of years. In the insurance business, for example, an insurance contract is often made with the bank when one moves to one’s first dwelling. Situations may change over the years and various types of insurance policies may be required, e.g. when one begins to cohabitate or to buy one’s own home. Accidents may happen at home, requiring an insurance claim, and so on. In sum, service moments and customer relationships with the bank depend on life stages as well as specific life
events. The Storytelling Group technique aimed to tackle both eventualities with the fictive story creation on the timeline and real-life storytelling based on past experiences.

We also tested the Storytelling Group technique in another TEKES project (Social Video) case focusing on a social video service in Internet. The aim was to discover how to further develop the concept so that it would attract a large number of users over time. So again, we faced the challenge of time. Therefore, we deliberately inserted several turning points on the timeline for the story creation. The story was begun so that the service had only four users; the participants then needed to proceed in storytelling so that the service could gain 100 users, then 10 000 users and finally 100 000 users. They needed to imagine what the service provider had to do in order to attract a certain number of users as well as what the four main characters in the story were doing while the service was evolving.

Since imagination is embedded in the narrative structure of the Storytelling Game, there is the question of reliability of the knowledge gained through the fictive scenario building; can it be handled as trustworthy information to inform design? Many approaches, such as Stroms ‘ (2007) recall participants’ experiences and knowledge on certain topics, and utilize those individual insights as sources for design concepts. In the Storytelling Game there are two types of realism: 1) some personal experiences are “hidden” into the overall fictive storyline thus becoming collaborative sketching material in Johansson’s (2005) terms, 2) some personal experience are shared by telling real-life stories that can be considered non-fictive and are easier to accept as trustworthy information. We propose the notion of “restored behavior” (Schechner 1985) as helpful concept to unfold the process of recalling memories in the fictive type of realism (scenario building).

See more details from the article attached in the end of the report:

- Storytelling Group – Co-Design Method for Service Design
6 Bringing services to practice

New service models cannot be implemented without having good knowledge of the status quo. Even a very good new service may remove some practices that are superior to the proposed. By knowing the strengths and challenges of the organization it is much easier to see the readiness for change and possible needs for further education for the servers in a new service model. Also, by studying and understanding the current situation it is possible to identify change agents, people who will promote the new ways of working.

6.1 Towards service implementation

The OP-Pohjola Group consists of over 200 independent member banks and the Group’s statutory central institution, OP Bank Group Central Co-operative (OPK). The central institution uses a group of consultants to offer and facilitate strategies and new service implementations for the independent banks. This task is very demanding because the banks vary greatly in geographical locations and sizes. Currently the consultants use different methods from scenario building to a body storming. OPK had developed a new strategy focusing on user centric way of doing their services. In their strategy focus was also on new customer profiles, which every officer in the bank should understand and work with. Our task was to develop a design game for the consultants to be used in implementing a new service model and new customer profiles to banks.

The aim was to support discussions on new service model developed during Extreme Design. The actual service model and new customer profiles were developed by service design agency Palmu Inc. The session organized in a bank situated in Kotka worked as a pilot for possible future games. The aim of the pilot session was to play the game with developers and face-to-face service providers from one bank, and moreover allow the in-house consultants observe and try the game in practice. The aim was not to provide a final game but rather to create play-elements and demonstrate some play-qualities, and to let the consultants develop the rules and unfolding according to their practical needs and interests. The objective was to provide a flexible tool. The finalized play will be facilitated by the in-house consultants who help individual banks and bank personnel in change processes. However, in this first pilot game, the consultants were observing and actively supporting the Extreme Design researchers to facilitate the dialogue among participants. Good knowledge about the content / subject of the game was necessary in order to help the players to change their current thinking and see opportunities for change. The researchers didn’t have enough competence on the subject matter and thus consultants’ support was fundamental. As priming to the first implementation game organized in Kotka, we had two sessions with the development personnel from the bank.
The key idea of the design was Goffman’s roles of everyday life. Can we as designers absorb theatre metaphor in a banking situation? What are the roles of the personnel or the customers? What kind of props and staging is needed to successful banking experience?

### 6.2 The game

Before the workshop took place, the members of the game (banking officers) were asked in advance to think “what if the bank is a theatre?” In the beginning of the workshop there was a discussion about the roles, props and staging of the bank in order to the researchers to better understand the service context.

The game was played simultaneously in two different groups. The game itself was divided to two phases; introduction or warming up and the profile-game. The game set consisted of rules (different for the consultants and for the players), three sets of playing cards (Hullunkuriset Perheet = “Funny Families”, service situations and profile descriptions) and two dice. Also 20 pairs of different kind of gloves were reserved for the second group of players. Service situation cards and profile cards had been edited from the information material of the OP-bank’s new customer journey. A form of questions was made for the consultants to sum up their observations.

The game was played in each group by two players at a time, the first player being a customer and the second a banking officer. The customer picked up a card from the Funny Families deck and got the name and the profession of the customer. Then the player threw dice to get the age for the customer. The player of the officer turned the service card, for example, a negotiation for a bank loan. Then the player on the role of the customer started the discussion with the player on the role of the officer. The pace of the action was fast and in the next round the player of the clerk turned to the role of the customer and new clerk was the person next to the left.

The second phase was started when all the members of the game had finished their turn. This phase is called the profile-game, because we added the profiles of bank’s customers developed for the use of bank clerks to the previous warming-up. These profiles were four different types of critical customers. Each profile tried to sum up a “stereotypical” character in their kind. The game changed a little; the player playing the customer got extra information by lifting a character card and not showing it to others. The customer-player used the features of character card and the opponent had to adjust his or her playing in the service situation – to guess what kind of character s/he was playing against.
6.3 Lessons learned

Planning of the game is vital in design-games. It often takes a lot of work and iterations. The game we proposed for the use of consults had to be tested and perhaps remade. We already knew that we did not have enough practical knowledge about banking and the game had to be tested. We had two tables for game lead by researcher as facilitators, four banking officers and a consultant in each table. The role of the consultant was to observe, to find interesting questions and to think how they could use the game in their work. In the actual game the role of the consultant was vital. Without their experience the game would not have worked. The workshop took 3 hours (the game itself took 90 minutes) with introduction, coffee break and extended discussion of 30 minutes.

Some obvious reactions during the game could have been taken in the account also on the fly: to reject the use of gloves as a tool to characterize the customer. The idea was to try using hand puppets (gloves) to give more playful game experience. The gloves made the player more unsecure when the attention of the player was divided between the played card and the player’s hand.

In general, the first responses were positive. The game was functioning very well in supporting discussion. The players saw the opportunity for the game in learning teamwork and introducing new officers in bank’s activities. The taking of customers’ or officers’ role with cards was easy. Problems arose when the service situation was too general. If the situation was accurate the playing was very easy, situations changed fast and the players enjoyed. Different kind of real customers and situations came to discussions and the players could share their experiences of even painful customers with sympathy. The game can work as a tool for exchange best practices and tactics as a part of bank’s own educational processes.

The idea for body-storming was attractive; if the gaming was situated in real environment, bank, and not in a table in a meeting room. The results could be more inspiring and concrete. A new aspect for the profiles was revealed. A category of “difficult customer” was missing. The word difficult is here referring to customers coming from different cultural backgrounds or people having serious problems with communications. The need for training these kinds of service situations was revealed during the discussion.

The use of metaphor “bank as a theatre” was not completed in the first group. The group just started to discuss service situations of the bank and playing it. The use of theatre metaphor was not needed at all for a successful game. The second group tried to think it over and an idea to develop the customer journey came out. In technical level it is also possible to accomplish.
The use the profile-game for creating the roles of everyday life of bank officers was positive. It supported discussion, learning and teamwork. Still if the game is to be used as a tool for change it has to be developed in more concrete direction. The game is designed for bank officers. They can start the gaming if the managers approve the idea. That is the key element of running changes in organization of independent local actors.
7 Important concepts: locality and performance

All services work in their surroundings. New services also have an impact on their surroundings. Locality plays an important role in the development of new services. When new services are developed by using methods that utilize games and drama, there is a need for a common vocabulary. This chapter sheds light on a more theoretical level on these issues. First, the concept of locality is dissected from different perspectives and it’s followed by explaining the theory of gaming through performance theory.

7.1 Locality

Locality and context are important dimensions to consider in service design. Resources are wasted if the people for whom the service is designed do not appreciate it or know how to use it. Services should match the context into which they are introduced. According to Mager (2009, 34) “service design aims to ensure that service interfaces are useful, usable and desirable from the client’s point of view and effective, efficient and distinct from the suppliers point of view”. Service design is a holistic field of research and practice, and the understanding of behavioral and cultural patterns is crucial to it. Important insights of human behavior and culture can be drawn for instance from the fields of psychology or anthropology. (Mager, 2009, 38.)

In this chapter, the concept of culture is used to define locality and context in service design. Culture is a holistic concept. In the most basic form it can be defined as “those abilities, notions and behaviors persons have acquired as members of society” (Eriksen, 1995, 3).

It is good to keep in mind that the concepts of society or country are not the same as the concept of culture. According to Eriksen (1995, 4), culture refers to “acquired, cognitive and symbolic aspects of existence”, whereas society refers to “the social organizations of human life, patterns of interaction and power relationships”. Roth (1995) points out that social and economic conditions often vary substantially even within a single country. Regions within a country can differ markedly from one another for instance with regards to income, employment or media access.

The term culture refers at the same time to basic similarities and systematic differences between humans. Every human is cultural but we have acquired different skills and notions. A national or local culture is hardly ever shared by all its members. (Eriksen, 1995, 3-4.) These basic similarities and systematic differences between people will be the main focus of this present literature review, since in many cases services should be easy to access and use for a variety of
people (e.g., the inhabitants of one country) but at the same time momentous or fun for all the individual users. In the first part are presented the frameworks with which macro and micro level differences between people can be understood. In the second part, alternative approaches to locality and context are discussed, in which regions are the main focus.

**Macro and micro level cultural frameworks**

There can be both macro and micro level cultural frameworks that can be used in understanding locality and context in service design. At first, we will present two macro level theoretical frameworks that are commonly used in cross-cultural service research: Hofstede’s cultural dimensions and a SERVQUAL measuring instrument. In the end, on this first part, we will present a practice approach, which can offer new cultural insights for micro level service research.

The research results and frameworks we present in this paragraph indicate that culture is a complex concept. If a service designer wants to consider locality and context, a vast array of frameworks could be useful to take into account. Many typical service design methods emphasize gathering insights from a small amount of people, and researchers generally interpret this data in a free form way (see Miettinen & Koivisto, 2009). Deeper understanding can probably be achieved if the macro level cultural issues, like behavioral patterns are taken into account in analyzing data gathered with typical service design methods. Even deeper understanding can be achieved when for instance local practices are taken into account in the analysis.

Human interaction is a crucial part of the service experience. A comprehensive analysis, which takes into account various levels of human behavior, is important especially when the service includes human interaction. In an ideal situation, services are designed in a way that helps employees in the customer interface interact in a culturally adequate manner.

**Hofstede’s cultural dimension and consumer behavior**

Geert Hofstede is one of the most known culture researchers who has done cross-cultural research for decades. He and his colleagues claim that consumer behavior is and will be divergent across (macro) cultures even in times of comprehensive globalization. In the second part of this paragraph, we will briefly present Hofstede’s framework: the famous five cultural dimensions that have been used in interpreting universal differences across different cultures.

Mooij and Hofstede (2002) explain consumer behavior with values and cultures. Values are strongly rooted in history and because of that very resistant to change. They (ibid.) predict consumer behavior to be divergent around the world even though they claim that technology is converging and income differences disappearing. Actually they predict that with these changes
the manifestation of value differences may become even stronger. Mooij and Hofstede suggest cultural and local sensitivity to be the key to success for multinational companies.

The original data for Hofstede’s cultural research comes from IBM employees in over 70 countries. Hofstede has distinguished five different cultural dimensions. The following brief descriptions are taken from the 2005 edition of Cultures and Organizations.

*Power distance* is “the extent to which the less powerful members of institutions and organizations within country expect and accept that power is distributed unequally. Institutions are the basic elements of the society, such as family, the school and the community; organizations are the places where people work. “Malaysia and Slovakia score highest and Canada and the Netherlands lowest on power distance (Hofstede & Hofstede, 2005, 46, 43.)

*Individualism* “pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family”. The United States and Australia score highest on individualism. *Collectivism* “pertains to societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people’s lifetimes continue to protect them in exchange for unquestioning loyalty”. Ecuador and Guatemala score highest on collectivism (Hofstede & Hofstede, 2005, 76,78.)

*Masculinity* “a society is called masculine when emotional gender roles are clearly distinct: men are supposed to be assertive, tough, and focused on material success, whereas women are supposed to be modest, tender and concerned with the quality of life”. Slovakia and Japan score highest on masculinity.

*Femininity* “a society is called feminine when emotional gender roles clearly overlap: both men and women are supposed to be modest, tender and concerned with the quality of life” Norway and Sweden score highest on femininity. (Hofstede & Hofstede, 2005, 120-121.)

*Uncertainty avoidance* is “the extent to which the members of a culture feel threatened by ambiguous and unknown situations. This feeling is, among other things, expressed through nervous stress and in a need for predictability: a need for written and unwritten rules. Greece and Portugal score highest and Jamaica and Singapore lowest on uncertainty avoidance (Hofstede & Hofstede, 2005, 167-169.)

*Long-term orientation* “stands for the fostering of virtues towards future rewards, in particular perseverance and thrift”. East Asian Countries like China score highest on long-term orientation.
**Short-term orientation** “stands for the fostering of virtues related to past and present, in particular respect for tradition, preservation of “face” and fulfilling social obligations.” Nigeria, Czech Republic and Pakistan score highest on short-term orientation. (Hofstede & Hofstede, 2005, 210-211)

**SERVQUAL**

Perceived quality of services can be measured with an instrument called SERVQUAL (Parasuraman et al, 1988; Ref. Moonkyu & Ulgado, 1997). Moonkyu & Ulgado (1997) describe SERVQUAL to “consist of 22 items measuring customers’ expectations and another 22 items measuring their perceptions of service performance. When consumers make their judgment on service quality they would generally consider the service provider’s:

- a) Physical facilities and equipment (tangibles)
- b) Ability to perform promised service dependably and accurately (reliability)
- c) Willingness to help customers and provide prompt service (responsiveness)
- d) Knowledge, courtesy and ability to inspire trust and confidence (assurance)
- e) Caring and individualized attention to its customers (empathy)”.

**Research results with Hofstede’s cultural dimensions and SERVQUAL**

In the following paragraphs we will briefly present some interesting examples of research that has been executed with the frameworks presented above. The results indicate that service quality expectations differ between cultures and this can also be found in Web service context. Some differences can also be found in the way people perceive service concepts, like McDonald’s fast-food restaurants. Relational service quality research indicates that human interaction is a crucial part of the service experience.

**Cultural orientation and service quality expectations**

Donthy and Yoo (1998) investigated the relation between cultural orientation and service quality expectations in banking services. Respondents were from Canada (72), Great Britain (85) and India (42). The used scale to measure service quality expectation was SERVQUAL. Donthy and Yoo found out that overall high power distance and long-term orientated customers had lower service quality expectations. On the contrary high uncertainty avoidance and individualist customers had higher service quality expectations. Besides this the consumers vary in their expectations on different dimensions of service quality. For instance high power distance customers had lower expectations of responsiveness from the service provider and high uncertainty avoidance customers placed more importance on tangibles. Masculinity-femininity dimension was not investigated in this study.

**Different ways to perceive fast-food concepts**

Lee and Ulgado (1997) investigated consumer evaluations of McDonald’s fast-food services in the US and Korea with the SERVQUAL instrument. The researchers found out that Koreans appreciated other service dimensions than Americans. In a country like Korea where
McDonald’s is something relatively new, its services are mainly considered as something American. Fast food delivery is not that important but reliability and empathy are appreciated. Koreans also regarded eating more as a social experience. Americans were mainly interested in low food prices and time consumed. It seems that compared to Americans, Koreans think differently of fast food concepts. When time passes the novelty value of the American fast food chain fades away and traditional Korean fast food may become highly valued compared to the expensive American one. Lee & Ulgado emphasize the need to be more aware of distinct customer expectations and perceptions.

Culture and Web services
Tsikriktsis (2002) investigated the influence of culture on web site quality expectations. The study was conducted in the context of Web banking services. Service quality expectations were measured with WEBQUAL instrument, which includes twelve different themes (e.g. interactivity, trust, responsiveness). WEBQUAL captures all the dimensions of SERVQUAL except reliability (Voss, 2000b; Ref. Tsikriktsis, 2002). Cultural orientation was measured with a version of Hofstede’s cultural dimensions.

The results indicate that there are themes, such as trust and the veracity of information that are important to all users. But also cultural differences in expectations can be found: the dimensions of masculinity and long-term orientation are associated with higher web site quality expectations. People from high masculinity cultures appreciate easy interaction with the web site and personalized information or service. People from cultures with high long-term orientation appreciate web site uniqueness, creativeness and entertainment. Also communicating message between the Web site and other media should be consistent. According to Lovelock and Yip (1996; Ref. Tsikriktsis, 2002) cultural elements have the greatest influence when services involve a high degree of human interaction. Web services do not include human interaction and Tsikriktsis suggests that e-services could be easier to globalize than traditional services.

Relational service quality
It is good to remember the significance of interaction between customer contact employees and customers. King and Garey (1997) use the term relational quality to describe elements of this interaction. Relational quality “refers to customer perceptions and evaluations of individual service employees' communications and behavior, such as respect, courtesy, warmth, empathy and helpfulness. Relational quality does not concern technical performance - the mechanics of delivering the service, nor does it involve the design of the service - the features or amenities offered. Rather, it involves inducing feelings and emotional states through customer-employee interactions”.

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Tsang and Up (2007) investigated relational quality service attributes in a tourism context. They wanted to find out the difference between Asian and Western customers perceptions. They used SERVQUAL as a starting point in designing a proper measuring instrument for this study. The attributes measured included e.g. courtesy and willingness to help. The study results indicate that Asians are more demanding than Western people and that they appreciated different things. “While Asians gave significantly lower ratings, they also preferred the basic and practical aspects of service that addressed need satisfaction and dependability in giving higher ratings for variables such as staff understanding your problems and needs, dependable service and responding effectively. On the other hand Western tourists showed a preference for proactive aspects of service such as made to feel welcome and willingness to help”. The difference between Asians and Westerns was explained with power distance dimension. Asian countries are high power distance cultures and customers may treat employees as having lower social status and expect high levels of service.

**Micro culture: a practice approach**

Practice based approach differs considerably from the frameworks presented above. It is a framework, which helps to perceive services in specific contexts. Shove and Pantzar (2005) present the reinvention of Nordic Walking in new contexts. According to them, “practices and associated cultures of consumption are always homegrown”. Users should be seen as active and creative practitioners and the adoption of behavior as just one dimension of the service process. The rules and conventions of “doing something” are produced by the members of the community. Larger cultural influences and situation affect this production process.

Shove and Pantzar (2005) suggest conceptualizing Nordic Walking as a socially situated performance (Goffman, 1976 Ref. Shove & Pantzar, 2005). This way conceptualized Nordic walking can’t be “exported”. First of all, “Nordic Walking is in large part made by the actions and inactions of potential practitioners”. Secondly, “in any one country, walking with sticks exists not in isolation, but with reference to an array of already established, culturally specific concepts of fitness, infirmity, wellbeing, silliness and ‘mild’ nature”. Third, the actors involved are not the same in different countries.

**Services and regions**

Next we will discuss alternative ways to perceive locality and context in service design. The focus of this part is the connection of services with cities and regions. Services and regions create value or meaning to each other. For instance, well-designed services attract people to a region. Services can also draw from the cultural heritage of an area.

**The importance of services in choosing a place to live**

Richard Florida is famous for his writings on the creative class. He describes the term as “the workers who have the good fortune to be compensated monetarily for their creative input”. In his
book Cities and the Creative Class (2005) he explains that creative class people look for high quality experiences in their home cities. The chosen high quality events validate their identities, in other words who they are, as creative people (4, 35-36).

Florida explains that when creative workers look for a job, they place more emphasis on lifestyle factors of a region than on its job market. For instance they appreciate vibrant music and performance scene, wide range of nightlife experiences and nice cafés. Florida advises regions and cities to invest in services, which attract creative class workers. (83-84,167).

**Services define the “identity” of a city**

According to Neal (2006) in the developed world individuals can easily satisfy material needs and that’s why more attention is drawn to individuals’ ability to cultivate their desired identities. Access to desired consumption places affects positively individuals’ quality of life. And on the contrary if you feel like an outsider in the only consumption places you can access, quality of life can suffer.

According to Crewe and Lowe (1995; Ref. Neal, 2006) the identity (which is linked with consumption) of a city can be defined by examining the number of different consumption spaces. Neal (2006) investigated identities of cities by categorizing restaurant types. He identified four different categories: Urbane oases, McCulture oases, Urbane deserts and McCulture deserts. In an urbane oasis you may find a big variety of restaurants and a big amount of fashionable or refined restaurants. In a McCulture oasis you may find a lot of restaurants but these are mainly franchising restaurants like McDonald’s. In the deserts the proportion of the different kinds of restaurants is almost the same as in oases, but there is just fewer of them.

The inhabitants of these cities differ as well. Urban oases tend to be populous, dense urban centers with highly educated, ethnically heterogeneous population. In McCulture oases the population is homogenous and the inhabitants are less educated and earn less than in the Urban oases. Investigating consumption spaces helps to map the world socially. It provides hints of the style of the city. Neal also compares his research with the ideas of Florida (2003; ref. Neal, 2006) and argues as well that certain people search for certain services in order to maintain their identities.

**Place branding and services**

According to John Thackara many cities are in competition with one another and some cities are even considered as brands (2005, 74). Meethan (1996) researched the creation of the city of York as a tourist destination. He explains the trend of cities seeking to create themselves as places of consumption with the growth of service sector and increasingly mobile investment capital. Urban landscape and symbolic meanings linked to it are important in creating a special locality.
Meethan uses narratives in describing the change of the image of the city of York. The creation of distinct spatial narratives and revaluation of the urban environment has changed York’s function from a place of production to a place of consumption. The narratives of the city of York deliberately emphasize its history and heritage and these are linked with opportunities for leisure and consumption.

**Conclusion**

Locality and context are important for service design. They can be defined in many ways. In this chapter we have approached them from cultural and regional perspectives. First we presented existing research on cultural dimensions, service expectations and the practice approach on services. All these perspectives are important since services are designed for people. Secondly we presented regional approaches to locality and context. The special features of a region can also be taken into account in designing services. All possible cultural and regional forces can never be taken into account in service design, but acknowledging the existence of different perspectives is the first step.

**7.2 Terminology**

**Drawing from many directions: games, design and drama**

In the multidisciplinary projects different professional languages may cause challenges to understand each other’s; sometimes even the same term may have distinct meanings for different professions. In Extreme Design we faced a need for a new vocabulary to combine professional languages from the fields of game development, design and drama. This was not first time when similar problem was confronted in the design project that build on drama techniques. For instance in the project called Drama (2003 – 2007), drama and design professionals tried to create a common language, even creating a dictionary for themselves to clarify the use of the concepts derived from drama and user-centered design. The discussions revealed, for example, that when the designers spoke about design drivers, the drama people spoke about character’s motivation; both words referred to the same thing - person’s inner motivation. The problem was that the use of the words was totally connected to the professional background of each speaker making the communication difficult. When we add vocabulary of games to this discussion, as was done in Extreme Design, there will be one more tradition influencing to the communication. Even though this may be considered rather academic challenge, it has practical consequences as well: it is sometimes hard to explain the activities in co-design gatherings for the invited participants when there is lack of common concepts; the activity (and its nature) is hard to capture and verbalize without appropriate vocabulary. This may cause unnecessary confusion and tension towards co-design gatherings with qualities of games, drama and design. Therefore we want to open the discussion here.
Our first attempt to build common terminology was in the article concerning the Character Game (Kaario et al 2009) in which we mainly applied vocabulary from role-playing games alike Iacucci et al (2000). However, we noticed that it only made sense in the game context and did not open up easily to other professions. Unlike we wanted, the game vocabulary also concealed the practical context of the method, the user centered design practice. Moreover, it was hard to verbalize the role of the “characters” that on one hand reminded “personas” or “user descriptions” which are typically used in design, but on the other hand in the game they were play characters and thus more open for participants’ interpretations. It became fuzzy what was “real” (i.e. based on the user study) and what was imagined (people’s own interpretation), and how the interplay between these two realism influence to the nature of the knowledge gained by playing the game. Based on our previous unsuccessful attempts, we propose a wider stance, performance theory, which incorporates all these domains (game / play, drama, design) as a “tool” to explain particular type of co-design methods developed in Extreme Design.

**Learning from performances: the unfolding of performance process**

The methods developed in the Extreme Design aim to enhance participants thinking and interaction (practices) by providing tools such as game rules, pieces, and roles for facilitating e.g. dialogue, equal participation, imagination and new perspectives. These tools are not considered as “objects of study” but instead the emphasis is put on e.g. how they mediate certain messages, or how they influence to the interaction or the whole situation. Similarly, performance theory is not interested in stable objects or artifacts but them as “... players in an on-going relationships, that is, “as” performances [...] the quality of “liveliness” is at the heart of performance studies” (Schechner 2002 / 2009, p 2).

Performance is an inclusive term, thus easy to apply in several domains. According to Schechner (2002 / 2009, p 2) it covers “... broad spectrum of human actions raging from ritual, play, sports, popular entertainments, the performing arts [...], and everyday life performances to the enactment of social, professional, gender, race, and class roles, [...] the media, and the internet ”. It is not a new idea to adopt performance theory with its models and vocabulary to study, organize and describe co-design. E.g. Clark (2007, p 42) has seen the following benefits in the concept of performance in explaining co-design: “The concept of performance is useful for its 1) processual connotation, 2) transformational qualities, and 3) for how it incorporates the preparation and use of the physical space, artifacts, performers and audience, and 4) the impact the activity has on all those involved.” Clark considers different meetings during collaborative design process as performances, as sort of social drama, and he utilizes the performance process introduced by Schechner as lens to “analyze what happens before, during and after theatrical performances [the meetings]” (p 42). Iacucci looks at interaction in mixed media as performance (2004).
As discussed by Schechner, performance theory brings two previous theories together; Goffman’s concepts (e.g. social drama and frame analysis) which shed light on the theatrics of everyday social interaction and Turner’s ritual process that focus on transformational qualities of performance. By building on this theoretical background it is possible to produce holistic image of co-design process, the actors and activities in it as shown by Clark (2007). One approach is to look at co-design process or temporal co-design gathering through time-space sequences of performance process (Schechner’s 2006, p 225), since according to Schechner it applies to all kind of performances from rituals and sports to performing arts and performances of the everyday life – like wedding. In this model performances are divided in Proto-performance (including training, workshop period and training of performance), Actual performance (having warming up session, public performance, contexts sustaining the public performance and cooldown session) and Aftermath (including critical responses of performance, archiving it and memories). What should be recognized is that these phases can be found from one co-design gathering or it can be expanded to cover the whole co-design process; e.g. one Character Game in Kone Case, the whole Kone case study or the whole Extreme Design project with three case studies and several other activities can be looked through this process. The Actual performance has gained most attention in co-design, whereas proto-performance has gained less thought and the Aftermath hasn’t been considered almost at all. Performance theory gives us tools to focus on all these different phases and look the relations between them in order to better understand what can be made out of co-design processes. Similar with other types of performances also co-design gatherings have a short-term impacts and long-term impacts; they leave traces in the bodies of both performers and audiences. Performances may also change traditions, this happens sometimes in smaller scale in a co-design process (organizations change their practices to become more collaborative and reflexive).

**Actors in performance: in between performer and audience**

Besides the process Schechner also names the different players / actors of the performance which can help to discuss the level of interaction (immersion) of a performer and an audience. By considering co-design gathering as performance we need to understand interaction as a continuum not as an on/off situation: at the one end audience/user group/researchers are just observers and at the other end they are fully participating. Hence, during one co-design gathering who is “performer” and who is “audience” is not fixed but changes based on the evolving activities, thus the degree of participation also varies within couple of hours gathering. By adapting Schechner’s (p 225) categorization of the players we can give more accurate terms for the changing “roles” and level of involvement participants have in co-design. They are: Sources (authors, choreographers, composers, dramaturges, etc.), Producers (directors, designers, business staff, etc.), Performers and Part takers (spectators, fans, juries, public, etc.). Again, these can vary during one performance and one person may have many of these roles simultaneously.
In her article Edyta Lorek-Jezinska (2002) has applied Schechner’s studies of performing arts to present the continuum line of participation degrees:

- **Authentic participation**: the audience’s active involvement in the creative process forms an authentic and integral element of the performance structure, that is: a genuine ability to make choices about the creative process and its outcome.
- **Legitimate participation**: participation exerts impact upon rhythm, tone and the effects of the performance but is limited optation within creative process.
- **Invited or figurative participation**: the audience is acknowledged and forms part of the mise-en-scene (like guests around a wedding table).
- **Token participation or selected involvement**: the spectators are asked to perform some (unimportant) activities which are part of the performance (like join the singing).
- **Active viewing**: the audience has freedom only within the sphere of viewing, distance, point of view and other spatial arrangements.
- **Symbolized or processional participation**: the audience’s role is limited to passive walking.
- **Controlled verbal reaction or audience animation**: involves prescribed responses from the audience with an anticipated content. This involvement is primarily illusory and manipulative but it can open the audience in group integration and openness.
- **Non-participation**

It is also possible, as Lorek-Jezinska does, to apply Victor Turner’s concepts of *deep and shallow play*. Participating in deep play can be an experience of immersion, in which the participants lose the sense of separation between themselves and the surroundings. It is an experience of “flow”. Shallow play, on its side gives more room to reflection and critical approach. Critical distance increases the audience’s awareness of certain phenomena (Lorek-Jezinska, 2002 and Mehto & al 2006). In co-design both deep and shallow play are important; the first engage people into the activity and promotes empathy and inspiration whereas the second is needed to bring emerged feelings and ideas into reflective discussion.

The performance theory has links to Forum Theatre developed by Augusto Boal (1979). He was theater director who was interested in utilizing theater as a way to empower people to express their opinions about social and political issues. In Forum Theater, he puzzled the line between audience and performer by proposing a concept of ‘spect-actor’. When people become spect-actors, they are empowered because instead just seeing the course of action they can guide it and change it if necessary. The spect-actor is active, not passive. Forum Theater has been applied several times in design domain, the following example is from Drama project. In Drama project, a Forum theatre play “Satuma” was used as a research tool. The play was an Aristotelian tragedy, which was played for the audience and after the end of the play audience had a change to change the flow of its action by entering the scene as a substitute of the actor playing the role. The method of substituting the actor reveals the concept of the spect-actor. Boal’s ideal of the
'spect-actor' is not a simple synthesis of the spectator and the actor: the concept of the actor as the one who acts remains, but the spectator is transformed. Through this transformation, Boal hopes that when people see a problem, they will also act to solve it. Forum Theater achieves this by allowing people to see that the outcome of a performance is unfixed, something that can be changed, which is analogous to social activism.

Role-playing in Extreme Design methods with a high degree of emphasis on simulation and realism has similarities with spect-actors. In these games, we propose that not only can the players all become spect-actors, they probably do so completely unconscious of the fact. The game master is probably unaware that the game he runs for them is actually akin to a session of Forum Theater, and similarly, the Forum Theatre facilitators are probably unaware that they are running a live-action role-playing game. It is not so much a thin grey line between the two; more of them being two sides of the same coin. (Choy 2004)

One way to understand the roles and play between reality and imagined, which is typical to all performances (co-design as well) is to look at Goffman’s Frame Analysis (1974). He introduces the concept of ‘frames’ of meaning in which individuals operate: “Actions framed entirely in terms of a primary framework are said to be real or actual [...] [but] these actions performed, say, onstage provides us with something that is not literal or real or actually occurring. The frame tells to observer or audience how the action is supposed to be interpreted”. The primary frame of meaning refers to the ‘real world’, the reality in which we exist. Accordingly, everything in the primary frame is taken for real. All other frames of meaning exist within and in relation to the primary frame, through ‘keyings’ (ibid). The ‘key’ is defined as “the set of conventions by which a given activity, one already meaningful in terms of some primary framework, is transformed into something patterned on this activity but seen by the participants to be something quite else”. (Goffman) The concept of the frame and the key together inform us how people derive meaning from actions. (Choy 2004)

In Frame Analysis, Goffman offers ranking of various types of performances based on their purity:

- A conventional theatrical performance would be considered pure. These are intended for the entertainment of the audience, and if there is no audience, one might as well cancel the show.
- Next would be contests or matches, where the contestants involved perform not just to entertain the audience, but for some greater prize or title. This is less pure because some matches can be held without audience, though the presence of a paying audience often justifies the existence of a contest.
• Slightly less pure are personal ceremonies, like weddings and funerals. Audience here is usually invited guests, not paying watchers. While the above are ostensibly entertainment, as the performance becomes less pure, it also becomes more serious.

• Work performances, actual work like the construction of a building or a rehearsal by theatre students ignoring the fact that they are being watched openly, are most impure. This is due to the open disregard for the dramatic elements of their labor by the ‘performers’.

Summary: co-design as performance

Schechner describes performance process in time-space sequences and names the different players / actors of the performance. We can use that to give more accurate terms on the unfolding of the co-design process and the level of interaction (immersion) of performer and audience in it. This may improve our ability to organize, analyze and explain particular co-design gatherings which combine qualities from games, design and drama. This work is still on progress, in this chapter we started the discussion to point the opportunities we believe that performance theory can offer in the field of co-design. We tried to open up the mobius strip of “real life – pretending – acting on stage – simulating – and again real life”, the challenge is their intertwined nature; they can’t be clearly separated from each others. When we are speaking co-design, the real and the simulation are weaved together – weaved as in real life in nowadays in Baudrillard’s (1981) sense.

The performance theory has since its beginning tried to solve the puzzle of the mobius strip of real and simulation. We believe that it is useful to use the tools and methods from that tradition also in the area of co-design. The performance theory gives a description language for actions more accurate than any other tradition. It also links co-design in theoretical level to the theories of Erving Goffman, Victor Turner and the deep questions of western philosophy – those of poststructuralism and deconstruction. The question of ethical action comes to focus of co-design as it came in the theatre of Athens in the beginning of our European civilization. In the theatre, there was a ritual and the simulation ethical questions in Athens civil life. We designers are performing; we are deeply involved to the mobius strip of simulation and real. We should not hesitate to see the ethical dimension of our work.

This performance frame puts more focus on the background, situation and intentions of actions and thus helps researchers to speak more accurately about what is happening and how or when it is happening. The incorporate discussion with designers and theatre people could be more relevant and communicative than that of Drama-project had.
8 Conclusions

In this final report of our project we have pointed out that co-design techniques are something
that user-centered service design could benefit from. Having different stakeholders exploring
new possibilities in creative way enhanced with design games and drama was something that we
ended up for doing in all three company cases.

What is interesting that we were also forced to think what kind of role traditional user research,
such as participatory observation, can have in service design process where co-design techniques
are utilized. We agree with Korkman (2006) that service design should concentrate on practices
but perhaps in some cases ethnography is not the most cost-efficient way of study them. For
example, our Storytelling Group reveals historical stories of user practices in three-hour session
but with ethnography it might take months or even years to observe them. However, there were
moments where we were uncertain about the reliability of the user insights we got and
communicated through our developed techniques. The good old principle of triangulation of
methods might be wise to follow in service design processes if there is time and money to do
that.

One of our research questions was considering tools for continuous service development.
According to our experiences co-design gatherings could have an important role in continuous
service design processes since they provide information about customers’ practices and not only
solutions for current problems. For example, including customers into re-design projects in
banking field with co-design methods was experienced useful. Doing that in every re-design
project as a standard way of working could cumulate knowledge about customers that go beyond
any specific re-design project. One of the challenges is in which format and how to document the
information gathered from users so that the service organization could develop and share
knowledge across different re-design projects and organization boarders. This is something to
study in following projects.

Moreover, co-design methods are not only for gathering information from users. As our Kone
case indicated they can be used also for seeking new partners. In continuous service design new
partners, e.g. local service providers that can take a role in people’s practices, are in key role and
therefore, co-design gatherings could be used for finding a common starting point for
collaboration and sharing understanding of customers. In OP case co-design sessions were also
used for implementing a new service concept inside the service organizations. Such methods
could be part of continuous service design as well when even small changes are needed to be
made. To conclude, it is not only the tools that co-design approach can bring into the
organizations but the attitude to think differently and seek opportunities, the “what if” worlds.
All our co-design gatherings also promoted the importance of approaching a certain user group, design problem etc. from several perspectives which in longer run may support innovative thinking in organization. In continuous service design process, however, it becomes essential to consider: When there is need for multidisciplinary co-design gatherings, for what purposes it is organized, who should be invited and how to document and transform the results into everyday practices?
References


Framework for Action-Oriented Design. Mads Clausen Institute. Sønderborg, University of Southern Denmark. PhD.
Mattelmäki, T., Vaajakallio, K. and Ylirisku, S., (2007). ‘Active@work- Design dealing with social change’, In Include 2007 proceedings online, Helen Hamlyn Research Center, RCA
Miettinen S. & Koivisto M. (Eds.), Designing services with innovative methods. Keuruu: University of Art and Design Helsinki.


**Publications during Extreme Design:**


**Available reports done in Extreme Design:**


Appendix A

Someone Else's Shoes – Using Role-Playing Games in User-Centered Service Design
Someone Else's Shoes - Using Role-Playing Games in User-Centered Service Design

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Laugh and enthused voices fill the big lecture room when four groups around the room play a Character Game; a game that combines elements from role-playing and personas. We have decided to share the user study results in a service design project within multidisciplinary group of people from three companies [designers, managers etc.] by playing a design game, a game in which the participants should step into someone else’s shoes. We, the researchers who have developed the game, have been anxious about peoples’ reactions but now we start to relax; the game seems to work after all. The atmosphere feels relaxed, the participants have taken the character’s roles and vivid discussions and stories evolves as the game goes on. But will they gain the inspiration and empathy as we have wished for?

Through the Looking Glass – Introduction

In order to create positive service experiences, it is necessary to identify users’ needs and wishes through user-centered design (UCD) processes and tools. However, in UCD, it has been noted that written user research reports do not meet the designers’ need for inspiration in addition to information. Face-to-face meetings between users and designers, as well as creative user study methods, such as empathic probes, have been suggested as ways to overcome this challenge. (e.g. Mattelmäki 2006) Unfortunately, in many design projects it is not possible to involve the whole multidisciplinary design team to conduct user studies, but still everyone should adapt user insights in their work. This leads to two challenges: firstly, how to bring user perspectives into design / designers, and secondly, how to facilitate creative collaboration among different practitioners.

We are not the first ones to tackle with these challenges of finding approaches which support design empathy, ideation and decision making in UCD. For example Experience prototyping (Buchenau and Fulton Suri 2000) has been utilized to deepen designers’ understanding about other people’s experiences by trying things out by themselves. Similarly
many theatre methods, such as Forum Theatre, have been adapted to design processes (e.g. Mehto et al. 2006; Brandt and Grunnet 2000) to combine props and drama as a means to explore new design opportunities. Brandt (2006) proposes exploratory design games to build a common ground for collaborative design activities. According to her, the exploratory design games can be used to, for instance, conceptualize design, change perspectives, negotiate, and build scenarios. Besides using the notion of design games to create co-design sessions, many authors have underlined contextual approaches, either taking the collaborative events into the context under study (Binder, T. 2007) or conducting design experiments on the fly while users perform their everyday practices (Iacucci and Kuutti 2002; Vaajakallio and Mattelmäki 2007). While many methods rely on face-to-face meetings between designers and potential users, there are some methods that try to bring users alive in other ways. For example, personas (Cooper, 1999) are visual and textual descriptions of potential user characteristics, lifestyles, needs and limitations, and are often used to share user understanding within a design team.

In this paper, we present a new method for tackling these challenges, focusing on facilitating emphatic understanding of users in multidisciplinary projects. We are inspired by the use of game-like methods in design (Brandt 2006; Johansson 2005; Brandt and Messeter 2004), and Cooper's (1999) personas for sharing user data. In addition to design games and personas, we take advantage of a previously not often utilized source of innovation: tabletop role-playing games. We find the storytelling structure and role-taking in role-playing games promising for service design: the storytelling structure of the game evokes new scenarios and service opportunities as the story evolves, and role-taking provides an empathic approach to the user data.

The challenge of collaboration was evident in the particular service design case for which the method was developed. In addition to involving professionals from distinctive fields, the case concerned representatives from diverse stakeholder organizations. We consider that a role-playing approach provides a way to ease the articulation of different views. Moreover, stepping into users' shoes and seeing the whole service ecology from their perspective, helps to discover collaboration opportunities between different stakeholders in a service design project.

During the development of the Character Game, we had user data from an interview and observation study, which was conducted by a project partner company, KONE. In this paper, we provide one example of how the user data can be shared through the Character Game. The findings discussed in this paper are based on two Game sessions. A Game session has three main stages with an optional fourth stage for idea generation: 1) Introduction to the topic; 2) Warm-up exercise and game world creation; 3) The Character Game; and 4) Idea generation.

Our experiences show that the Character Game gives good motivation to dig in to the original ethnographic material of user studies in an emphatic and inspiring way. For service designers, the special benefits of the Character Game lie in bringing stakeholders around the same table, understanding users by highlighting empathy and inspiration, and finding relevant issues to inform design. The realization of the method presented in this paper can be creatively adapted to purposes of different projects. The development of the method was part of the on-going project called Extreme Design – developing extreme service design methods (2008-2010), which studies how design games and drama methods can support multidisciplinary service design.
The Blue Pill or the Red Pill – Inspired by Role-Playing Games

One of the earliest definitions of role-play was “A game of character development simulating the process of personal development commonly called life” (Perrin et al. 1980). Since then it has gone through redefinitions without ending up being just one thing. There are many forms of role-playing games ranging from massive multiplayer online games to tabletop games. But they have some things in common: The character, which the player uses to interact with the game world, a game master who controls the game world, a game world in which the characters live in and interact with. They usually also have a strong narrative compared to other games. (Hitchens et al. 2009)

Role-playing has several forms; two examples of this variety are live role-playing and tabletop role-playing. Live role-playing resembles somewhat drama methods used in UCD (Brandt and Grunnet 2000) and service design (Holmlid and Evenson 2006) as it emphasizes bodily interactions. Tabletop role-playing games, instead, do not demand as much bodily engagement, since the players sit around a table, and the story is acted out mostly verbally. This was one of the reasons why we applied a tabletop format; we assumed that it provides easier framework for the participants to relax, and act in a new role. This could diminish the need for long warming-up tasks before the actual game.

Role-playing games in general have some features that we find promising when sharing user data among various participants, especially their narrative structure and role-taking. The narrative structure of the game evokes new scenarios and services as the story evolves. By taking roles everyone plays someone else than themselves - thus being able to express views and ideas that extend beyond one’s professional role. The roles the players have in the Character Game illustrate possible users or ‘characters’ somewhat similar to personas. However, our focus was to evoke empathy towards users, not to present “hard facts”, even though the characters were created based on the user study material, mainly interviews. In any case, role-taking makes the participant actively process the user data for the requirements of the game. This can be argued to provide a deeper understanding to the service needs of the users than a simple presentation of a user study.

We use the following concepts, derived from role-playing vocabulary, to describe the features in the Character Game: The concept of a game session includes the whole event, in which user perspectives are processed, and collaboration among the participants facilitated. In a game session, after a briefing to the topic, the participants create a game world: they use the image and text material provided to create a mind map that describes the environment where the game takes place. After that the Character Game is played. The last phase aims to build discussion around the presentation of either generated ideas or discovered themes.

From Chaos into Order – Preparations for the Game Session

Sorting the user study material for creating the Character Game.
Interviews and observations as source of user data

The case, in which the Character Game was developed, focused on senior houses and moving in and around the building. Thus, the user data utilised in the game focused on the same theme. The data was gathered by usability experts from our partner company, KONE, during February of 2009 and consisted of 28 interviews of people living in 7 different senior houses. The interviews were done as contextual inquiries, which were taped. Video cameras were not used to keep it more informal. In addition, in every house someone who knew the house well, e.g. a janitor, was questioned about the house itself. The recorded interviews were transcribed into a 40 page long document. The data was not produced specifically for the purposes of the game development, but for other occasions as well. One project researcher was present for 4 interviews. The houses were owned by SATO and were situated in Helsinki, Finland. The service level of the houses varied a lot; some of them were close to ordinary apartments while some were in the same space as a nursing home and thus had staff in it around the clock. Also, the physical health of the residents varied a lot, as their need for services; from people unable to move unassisted to active and healthy seniors.

Sorting Things

Before designing the actual game, the project researchers familiarised themselves with the material and break it down to smaller, more manageable pieces. In the first meeting, the usability experts, who had mainly conducted the interviews, and the project researchers discussed about the material and meaningful themes that it evoked. Going through the data gave insights of the content, as well as a rough understanding what could be made out of it. In the second meeting, three project researchers together with one designer from KONE started to dissect the material for creation of the game. In order to manage the huge amount of the material, everyone focused on different aspects of it; for example, social practices, encounters, surroundings, problematic situations and new ideas. These were written up on post-it notes and affinity diagrams were created from them. The affinity diagrams were further developed as the ‘bases for the character templates’ and other materials written for the game, such as, the opening scenes and the weekly schedules (described later).

As a parallel process to going through the material was the creation of the game rules and mechanics. In practice this meant that the project researchers together with representatives from KONE had several meetings; some focused on processing the data while others concentrated on the actual game and how it could turn out; what kind of roles players could have, what game pieces would support the game, how it would proceed, what was the beginning and the end of the game, etc. As an outcome from this process we, the project researchers with some help from the representatives from KONE, created a Character Game which main idea was to allow participants step into senior’s shoes to experience the world from user’s perspective. To support role-taking we provided quotes from the interviews, pictures from the environment, and weekly schedule about happenings in the senior houses. Moreover, we created character templates, which illustrated different seniors living in the senior houses but were open for the participants to come-up the personal details. These game materials, game rules and the two game sessions are described in more detail below.
Rules of Engagement - Game Rules and Material Description

The following is a list of materials that was created for the game and what they were used for.

*Game rules* describing the game and its mechanics. Also, it contained a short description about the senior house the characters live in the year 2012. It was transported away from modern day to give room for re-imagining happenings and technologies. This document was mainly a hand-out for the facilitators. It also contained a first scene which the facilitator reads out aloud to help the participants to get the ball rolling.

*6 different character templates* were created, which included traits and background, such as habits, personalities, disabilities and quotes from the interviews. There was a place for a picture and underneath a brief text that described a character and his / her motivations in life. Things excluded from the templates were gender, careers, family ties and other personal information that were left to the participants to decide in the beginning of the game. To give some randomness to the character creation eight random factor cards were created based on the background material. These were dealt to the participants when the game started. They contained some secret background to their character: "You have won the lottery" or "You have a bypass surgery scheduled in two months."

*Cards with images of elderly people* were given to choose from as an image to represent the character. These cards had a place to write the name of the character on them. They were placed in front of the player on the table to remind about who your character is. After the game the images were placed on the character templates to complete the character.

*Images and quotes* to build a game world of senior housing. This phase aimed at paving the path for actual game by visualising context, senior houses, and opening the discussion about the themes and issues related to senior housing. The created mind map may work as a game board or as a reminder during the game. Materials not used in the mind map exercise were left on the tables for the group to use as inspiration during the game.

*The weekly schedule* that presents possible situations that may take place in the senior houses. Aim of this document was to drive the happenings in the game. It also tells about the service level of the senior house the characters live in. Two different schedules were created with a large variety in service level.
The First Game Session

The first character game was arranged in March 2009 and had participants from three companies (an elevator manufacturer, a construction company, and a housing manufacture). The venue was a large conference room. 17 participants were divided into four groups with a facilitator from Extreme Design project. The session was recorded with four video cameras for later analysis. The game aimed at: 1) bringing representatives from three companies together to find out possibilities for future service networks; 2) sharing gathered user data in an inspirational and empathic way; 3) identifying meaningful themes from the participating companies’ as well as seniors’ point of view; and 4) finding design openings related to the service design case. Tangible outcomes from the game session included several character templates filled by the participants and a list of concepts that could involve all the participating companies. Furthermore, we hoped it would be a memorable event that would gather different professions towards a common goal. Altogether it took three and half an hour including a brief sensitising task to tell a short personal story involving seniors and end discussions.

The Game

The sequence of the game is presented below. The players are divided into groups of 4-6 in a way that every group has people from different organisations and one facilitator.

1. The game starts with facilitator explaining the brief and the game.
2. The character templates are distributed. The participants are free to choose the one that interest them most. When this is done the random factors are given out to the players.
3. The players are given some time to make up their character; name, age, past, nature etc. and pick an image that illustrates her / him. It is not necessary to have every little detail filled in. There is time to do that during the game.
4. The players present their characters to the other players at the table.
5. The facilitator sets up the first scene.
6. The game continues so that everyone is the director of the scene at least once.
7. The game continues until the time comes to an end or the facilitator ends it.

The Director of the Scene

The director (not the same person as the facilitator) is in charge of framing the scene and deciding when to move on to the next one. Every one has their turn as a director. The director should follow the Weekly Schedule if he does not come up with a follow up scene. If the player does not come up with something for the scene then the turn is passed on to the next one. If it looks like no one comes up with anything then the facilitator should give a helping hand for the director. The director also decides what the possible non-player characters introduced to the scene, such as nurse or seniors’ relatives. If required the facilitator can step in to be a non-player character.

Framing of the Scene

The framing should not be too difficult or elaborate. An important thing is to have an ending to the scene. As an example of a framing could be like: "Ella and Aleksi are going to the
When they arrive at the elevator they notice it is broken. They try to figure out who to notify. The scene ends when they figure out who (for example a janitor) it is”. The next framing could be something in line of “Ella and Aleksi tries to find a phone to contact the janitor. They do get hold of him and he promises to come and see what is happening”.

Playing the Scene

After the framing is set the scene is played. The players describe their character’s actions to fulfill the framing. The director decides when the scene is over and the turn is given for the next person to be the director and frame the next scene. The facilitator should ask clarifying and supporting questions.

Documentation

For research purposes, i.e. developing the game further, the session was documented with one static video camera in the corner for every group. For design purposes, i.e. supporting recall and further development of the ideas discussed during the Game, after the session project researchers created a visual booklet with still images from the session, identified themes and generated ideas. The booklet was delivered to the participants. The content in the booklet came mainly from the facilitators' notes and the filled character templates.

Forward March - Game Session Facilitation from the Trenches

The second Character Game session was arranged with mainly the same game material, only a few changes were made based on our first observations. These changes are described and discussed below. The aim was besides sharing the user data within the KONE to learn more about the game setting and playing the game. Besides the facilitators, seven participants from Kone and two Extreme Design members participated in the game. The two facilitators of the game were the same as in the earlier workshop so they were more familiar with the material this time. Again the session was video recorded for further exploration.

Improvements made to the second game session

During making of the mind map everyone was told to stand up next to the material which was set up on a different table. This was done in order to activate every member of the group. In the first workshop there was a too much of delegating things in order to make the most out of the creation. The groups were so much different that no absolute truth can be said but from what we saw it had a positive effect on the activation of the group members.
To speed things up the main headings were already put up there with a blue tack, and the amount of images was reduced from about one hundred to half of that.

In the first game session we had the character name cards as blank A5 cards where the participant could glue a picture cut from newspaper to present his character. There were some problems with this approach; mainly that the suitable images from newspapers tend to be small. For the second game we improved on this by printing images on cards that the participant could choose from. This way every group had the same amount of images to choose from. Also printing them two sided might have supported the role-playing; we noticed that people tend to turn their cards over every now and then to remind themselves how their character looks like or their name.

After the first game we were wondering how much the opening scene effected to the game. Thus, for the second game session we added a new opening scene to see how it would change the game. Now one group started with a dramatic scene involving a fire and the other one a social scene involving a get-together. Based on our observations we came to the conclusion that it did have some effect on how the players viewed the world through the character. Mainly it seemed to affect the topics that appeared to be meaningful for the characters; when the opening scene was about smoke in the corridor, safety became a central issue discussed throughout the game.

Even though framing of a scene was very rewarding it was hard for the players. As a solution for this we made Situation Cards for the second game. They were cards that were drawn before every framing to help come up with ideas for the scene. They were left very vague in order to leave room for interpretation. For example, "There is a stranger among you" or "A rapid change in your life". These were just aides; the framing did not have to come from these. 13 cards were made for variation which equals 2-4 rounds of framing turns on the table. This seemed to help the framing since now many framings were based on the situation cards.
After the Dust Settles - Feedback and discussion

Feedback from the sessions was gathered as email questionnaires with more than a dozen open questions. The questionnaire covered participants’ familiarity with co-design and their opinions on usefulness of the game session for their work. For example we asked them to describe the game session with three words. Nine from roughly twenty participants returned their answers. In addition to participant feedback, there were several discussions between the project researchers and facilitators in which the game sessions were analysed and written up in memos. In this chapter we first discuss the participants point-of-view based on the answers given in the questionnaire, and then we will concentrate on the researchers’ observations.

From the participants point-of-view

All returned questionnaires indicated that game sessions involving co-operation between different organizations and professionals were considered meaningful. Overall, the participants were familiar with working in workshops but only a few had experience with role-playing games. However, their answers to the questionnaire did not stand out from the non-gamers. Thus it seems that the Character Game may be equally demanding and rewarding for gamers and non-gamers.

The overall attitudes towards the game session were positive. The way the players described the overall feeling of the game sessions varied from being “relaxed”, “open”, “inspiring”, “eyes-opening” and “positive”. We didn’t ask them to be more precise about what effected on the feeling; other players, earlier knowledge, facilitator’s ability to lead the game, own professional role etc.

Even though senior housing was very familiar topic to most of the people involved in the sessions, the participants reported that they have not had many casual discussions about the subjects that emerged during the game and only a few had taken advantage of these in their work. One of the challenges of UCD mentioned in the beginning is how to bring user data to a design team. Some of the participants felt that they had learnt several new aspects of senior living while some didn’t. This wide range of answers can be explained by a wider base knowledge of the subject: there were participants who had studied senior living before. Anyway, based on the questionnaires, the game was experienced more inspiring than just a presentation they were used to.

The framing of the scenes were considered the most difficult part in the game, even though we tried to ease in the second session by providing the random factor cards. Providing more input and guidance from the facilitator or making the framings as a group could make the task easier. In any case, we consider the framing as an integral part of the game since it forces the participant to process the events from the characters point-of-view. Therefore, we don’t want to give the participants ready-made scenes, but instead, we encourage them to come up with the scenes they find relevant and interesting to play. In any case, the balance between the players input and the facilitator’s guidance needs more consideration in the future games.

From the creators and facilitators point-of-view

Even though the participants came from different companies and professions, everyone was able to participate in an equal manner in a game session. Since the Character Game involves story telling, everyone can take distance from their day to day personas. Also, the game
session forced the participants to change their point-of-view by looking through the lenses of a senior. A Character Game opened up the participant to the world of users, their values, needs, and problems. However, since almost every participant had an idea what senior living is like, more detailed analysis is needed to be able to say to what degree prejudice and assumptions were played out in the Character Game. Anyway, the characters didn't become over acted caricatures but felt credible everyday people. When role playing, the participants can get out of the role which they play in the organization, thus supporting possibilities to propose ideas other than those expected for a person in a particular position.

Although the character game is easily duplicated, creating the material for the first time takes resources. For the senior living case an estimate would be 60+ working hours, divided between several workers and several days. This excludes the time used for the interviews and transcribing those. This will, of course, go down with experience and ready templates. We assume that if the creator of the character game would be an active participant in the user study, it would speed up the game design, since then he would be familiar with the material from the beginning. Since one character template was built up from one interviewed person, the number of interviews could be cut down to minimum, meaning the amount of needed characters in the game. This would diminish the time needed to interpret the user data.

From the facilitator’s point of view the character game was two folded. On the one hand it gave a structure and tools to lead the session. On the other hand it demanded sensibility to realise when to stop the game, how to encourage the participants to take new roles, and ability to maintain the flow when it was reached. However, the game rules and material supported facilitation; in all of our games, both more experienced facilitators as well as the ones without any experience, managed to do it well.

Summary: Service Design through Role-Playing

We have developed a table-top role-playing game for the purposes of service design, to support, firstly, the sharing of user data for developing an understanding of users to inform design, and secondly, to discover collaboration opportunities within diverse stakeholders. The strengths in the role-playing approach, compared to exploratory design games or personas, are the storytelling structure and role-taking. The tabletop format further provides a tangible approach to user data. The character game forced the players to take a new perspective on the subject by highlighting users’ point-of-view. The observation that different opening scenes led different discussions, proposes that the first framing should be considered carefully. This is not a surprise nor is it a weakness if we are aware of it when planning the game and when analysing the outcomes from it.

The storytelling structure of the game and active processing of the user data enforced the players to think the service needs of the users from several angles and also outside of their own profession, thus revealing new service networks. When the participants generated stories that were partly based on their own past experiences, and partly prompt by the game material, the co-created stories included several design openings; new scenarios and services were “produced” as the story evolves. Many themes such as feeling safe, me and others, and aesthetic usability were identified as starting points for the new concept ideas and service opportunities. Since the project didn’t end up with any design outcome (yet), we can’t say if the character game effected on the actual design or not.
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References

Appendix B

Someone Else’s Shoes - Using Role-Playing Games for Empathy and Collaboration in Service Design
Someone Else’s Shoes - Using Role-Playing Games for Empathy and Collaboration in Service Design

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Abstract

Laughter and enthused voices fill a large lecture room when four groups, of mixed managers, designers and engineers, play a Character Game: a game that combines elements from tabletop role-playing games and personas. The game has been developed to share user data and find new collaboration opportunities in service design projects involving a network of diverse stakeholders. This article introduces the background of the game, the case in which it was developed, and reflects upon its potential in supporting service design.

Introduction

Companies that earlier focused on manufacturing and selling products to customers are now developing services. The objective in service logic is “assisting customers in their own value-creation process” (Mattelmäki, 2006). In this transformation, companies are looking for ways in which to collaborate in networks. In addition to strategic relationships as a component, service design is about understanding context, customer values, and service experiences. Companies need to identify users’ needs and wishes through user-centered design (UCD) processes and tools. Being user-centered is not only necessary for user insight specialists; many stakeholders need to become familiar with the users, their practices and values, and innovate services inspired and informed by these insights.

Creative user study methods, such as empathic probes, have been suggested as ways to support user orientation and design empathy (e.g. Mattelmäki, 2006). Yet, in many cases it is unfeasible to involve all the stakeholders in user studies. The literature focusing on service design does not suggest how to organize collaborative design processes that would bring together the whole service network. In service design an understanding of the complex service ecology is needed in order to create consistent customer journeys and hence positive use experiences. Service ecology is a systemic view of the service and the context. It is a map in which “the actors affected by a service and the relationships between them reveal new opportunities and inspire ideas,” in order to establish the overall service concept (Moggridge, 2007). We use the concept of a service network to refer to the stakeholder companies involved in the service ecology.
We believe that a method for communicating user knowledge from researchers to a service network should take into account four aspects: building empathy towards users; bringing inspiration in addition to information; balancing between individual interpretations and collaborative actions; and indicating opportunities for new partnerships. In this article we discuss how design games, personas and role-playing can be combined to support these aspects in service design.\(^2\)

**Mixing design games, personas and role-playing to illustrate service ecology**

In developing a service design method that illustrates a complex service ecology to diverse stakeholders, we are inspired by design games, personas and role-playing.

**Design games**

Holmlid (2009) suggests that service designers should consider methods and experiences gained during the last few decades within the Participatory Design (PD) approach. We could not agree more: the multidisciplinary nature of service design especially points to the same direction. PD has emphasized the need for collaboration among designers and users, whereas service design has been extended to cover the wider spectrum of professionals, decision-makers etc. typical for many complex design projects nowadays. To overcome distinct professional language barriers Ehn and Sjögren (1991) developed several design games, which provided designers and users a common vocabulary. Others (e.g. Brandt 2006) have followed this example and claimed that design games are particularly good for creating a common language among several stakeholders. Design games as described by Brandt (2006) are generative, sensitive, visual and playful tools aimed at sensitizing the imagination and facilitating exploration in co-design settings. According to Brandt, design games work especially well for changing perspectives and building scenarios. Changing perspectives is particularly important when building an understanding of the users and evoking empathy towards them. A source of inspiration for us was Johansson’s (2005) design game for collaborative storytelling based on ethnographic material. Whereas Johansson used videos, we used printed still images and quotations from interviews.

**Personas**

The roles the players have in the Character Game illustrate possible users or ‘characters’ somewhat similar to personas (Cooper 1999). Cooper’s basic assumption regarding

\(^2\) The Character Game was developed in the ongoing project “Extreme Design – developing extreme service design methods” (2008-2010), which studies how design games and drama methods can support multidisciplinary service design. This article is a reworked version of a paper presented in the first Nordic Service Design Conference in Oslo.
 personas as a method for user-centered design is thus: “Develop a precise description of our user and what he wishes to accomplish” (Cooper 1999). We used personas as inspiration when considering ways to provide necessary specifications needed to reach realistic characters in the role-play. Design methods for collaboratively constructing personas have been developed, such as the "personal card set" by Visser et al. (2007). We go beyond this by inviting participants first to complete character templates and subsequently to play these out in a role-playing game.

**Role-playing**

Besides design games, several studies have applied role-playing as a way of incorporating the users’ viewpoint. For example, *experience prototyping* (Buchenau & Fulton Suri 2000) has been introduced to deepen designers’ understanding of other people’s experiences by trying things out themselves. Similarly, theatre methods have been adapted to design processes (e.g. Mehto et al. 2006; Brandt & Grunnet 2000) to explore new design opportunities by acting out scenarios that highlight users’ experiences. From Hitchens and Drachen’s (2008) deconstruction of role-playing, we derive the following elements: *The character*, which the player uses to interact with the game world, *a game world* in which the characters live, and a strong narrative compared to other games. We include characters, a game world and narratives in our understanding of role-playing, and show how these elements support the sharing of user data in a multidisciplinary service design project. The difficulty in encouraging participants to act, as reported by e.g. Seland (2009) and Iacucci et al. (2000), guided us towards *tabletop* role-playing games. Tabletop role-playing games do not demand as much bodily engagement as live role-playing resembling drama methods used in UCD (e.g. Iacucci et al. 2000; Brandt & Grunnet 2000) and service design (Holmlid & Evenson 2006; Pollak 2008). The players sit around a table, and the story is acted out verbally. In service design the interest is placed on intangible aspects of use experience in which the tangible artefacts (while important to the experience) may change during one customer journey. Tabletop role-playing in service design allows moving between a wide overview of the service ecology and moments of truth on a customer journey. This is essential in cases such as the one at hand, in which a product is merely one part of a customer journey involving many stakeholders.

**The case**

The development of the game was a part of a case study organized in collaboration with KONE.³ The case focused on senior houses and people flow, i.e. moving in and around the building. The main reason for developing a new design method for this particular case was that instead of looking solely at the manufacturing of a particular product, it was essential for all the stakeholders – the elevator manufacturer, a construction company, and a housing company – to gain an overview of the service ecology. If we had focused

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³ KONE is a global elevator and escalator manufacturer, and the R&D department with whom we worked is based in Finland.
only on tasks the elderly would have been conducting with the elevators, the understanding of service ecology would have been missing.

The Character Game has been developed to be applicable to variable user data. In our case, the game was built from the user data gathered by the usability experts from KONE during February 2009. It consisted of 28 interviews with people living in seven senior houses in Helsinki, Finland. The interviews were conducted as contextual inquiries, which were taped and transcribed. The service level of the houses varied; some were similar to ordinary apartments while others were more akin to a nursing home and were thus staffed around the clock. The physical health of the residents also varied, as their need for services ranged from people unable to move unassisted to active and healthy seniors.

The game material

Like Iacucci et al. (2000), we applied vocabulary from role-playing games, which is explained in the following:

- **A game world:** At the beginning of the game, printed images and quotes from the user study were placed on a paper (size A2) to build a game world that illustrated the senior house. This was done before the actual playing phase to visualize the context and open the dialogue related to senior housing. In the first game it hung on the wall, while in the second it was on the table as a game board.

- **Game rules:** On the table we had game rules describing the principles of the game and how it proceeds. This also contained a description of the senior house the characters live in, in the year 2012. The context was transported to the near future in order to give room for re-imagining technologies. This document was mainly a handout for the facilitators.

- **First scene:** The game rules also contained the first scene that the facilitator reads out aloud to help the participants to get the ball rolling.

- **Characters:** Six different character templates were dealt out to the participants when the game started. From these templates everyone chose one as the basis for her/his role. They included several specifications to support the role-playing, mainly quotes from the interviews which gave hints about personalities and disabilities. There was a place for a picture and underneath a brief text that described a character and his/her motivations in life. All the information was taken from the user data. Things excluded from the templates were gender, careers, family ties and other personal information that was left to the participants to decide at the beginning of the game.

- **Random factor card:** To make the character creation more playful one random factor card was distributed to every player. It contained some secret background information about the character that could be used in the game: "You have won the lottery" or "You have bypass surgery scheduled in two months."

- **Cards with images:** Cards with images of elderly people were offered for selection as an image to represent the character. The picture was placed in front of the player on the table as a reminder. After the game the images were placed on the character templates to complete the character.
- **Weekly schedules**: There were also two distinct weekly schedules which varied in service level. These presented possible situations that may take place in the senior houses. The group chose one of them to drive the events as the game unfolded.

Figure 1. An overview of the Character Game process.
Figure 2. An example of the game world created at the beginning of the game.

The unfolding of the Character Game

The unfolding of the Character Game is based on scenarios or scenes situated in the game world. A scene is introduced to others by the director of the scene (not the same person as the facilitator) who describes what happens in the scene by framing it. For example: "Ella and Aleksi are going to the pharmacy to get their medication. When they arrive at the elevator they notice it has broken down. They try to figure out who to notify. The scene ends when they decide to call for a janitor." After the framing, the scene is acted out by those whose role characters are in it. Every player has their turn as a director and is thus in charge of at least one scene. If the director has difficulties with the framing, the facilitator helps. The director also decides if there are non-player characters in the scene, such as a nurse or seniors’ relatives. If required the facilitator can then step in to be a non-player character.
Game sessions

The Character Game was conducted twice with distinct focuses. The first focus looked at opportunities for collaboration whereas the second game focused on evoking discussion around the seniors’ world. The number of the players in a group varied from four to six plus the facilitator, who starts the game and supports its unfolding but does not participate in the role-playing actively.

The first Character Game

The first game was arranged in March 2009 and had players from three companies involved, all of them already operating and offering services in senior housing but looking for new potential. Seventeen participants were divided into four groups with one facilitator in each. The main objective was to discover openings for novel partnerships based on the user data. We expected the role-playing to help players to identify meaningful themes from the participating companies’ and from the seniors’ point of view in particular. Since the participants did not know each other beforehand, the play-format was used to create a relaxed and inspiring setting for collaboration. Tangible outcomes from the game session included several character templates filled in by the participants and a list of concepts that could involve all the participating companies. Altogether it took three-and-a-half hours, including a brief sensitizing task to tell a short personal story involving seniors, and the discussion wrap-up.

The feedback indicated that the game provided the relaxed atmosphere we desired. The game proved to be helpful in illustrating the service ecology and consequently indicated touchpoints where the service providers could collaborate. As a negative response, the participants felt that being the director of the scene was difficult and lacking enough support. We were unsatisfied with the game world creation, since all the participants did not place the images and quotes on the paper that represented the senior house.
The second Character Game

The overall aim of the second game was to share the user data within KONE and elaborate the game further. Besides the facilitators, there were seven participants from KONE and two from the Extreme Design research team divided into two play-groups. The two facilitators were the same as in the earlier game so they were already familiar with the material. The game rules and material remained largely the same, aside from a few changes made based on our observations. Firstly, to activate every member of the group from the beginning, the game world creation happened by standing next to the table instead of sitting around it. In addition, to speed it up, we did not start with an empty paper as in the first time, but the main headings were already on the paper. The number of images was also reduced by half from about one hundred. These changes led to a more equal participation. However, it is impossible to say how much this was due to the different changes in the setting or to other factors, such as group dynamics.

Secondly, we changed the first scene to see whether this would change the unfolding and outcomes of the game. This time one group started with a dramatic scene involving a fire and the other a social scene involving a get-together. This pointed out the influence of the first scene on the topics that appeared to be meaningful for the characters: for instance, when the first scene was about smoke in the corridor, safety became a central issue discussed throughout the game. As the first game session was lacking in enough support for framing of a scene, we created Situation Cards for the second game. They contained clues to build the scene such as "There is a stranger among you" or "A rapid change in your life". The situations were also derived from the user data. The cards were provided before every framing to help the director to come up with ideas for the scene. As expected, the directors often utilized the Situation Cards in addition to the weekly schedule.

As in the first game, the overall attitudes towards the game were positive. The way the players described the overall feeling of the game session varied from being “relaxed”, “inspiring”, “eye-opening” and “positive”. The framing of the scenes were still considered the most difficult part of the game, even if we had tried to ease it with the Situation Cards.
5 Evaluation

To evaluate the Character Game and develop it further, both game sessions were video recorded. Each session ended with discussions on the user insights and thoughts about the game itself. The topics of discussion touched upon participants’ opinions on how well the game managed to evoke inspiration and information, what was felt as difficult or easy, how they regarded the atmosphere, and if they gained insights valuable in their work. Feedback was gathered also through email questionnaires with more than a dozen open questions. The questionnaire focused on the same topics as the end discussion. Nine out of roughly twenty participants returned their answers. We also conducted several informal discussions with the participants and many meetings among the researchers.

For design purposes, i.e. supporting recall and further development of the ideas discussed during the game, we created a visual booklet with the identified themes and initial ideas for services and collaboration. As a follow-up from the two games we organized a half-day concept development session at KONE. Later we also built an exhibition to introduce some of the characters created by the players and the main themes identified during the games.

As described at the beginning of this paper, there are four aspects a useful tool for service design should consider. Through the process of designing, playing, reflecting on and analyzing the Character Game, we have identified certain features that address these aspects:

1. **To support design empathy**, the game should help the participant to look at the world from a different angle, from the perspective of the users, seniors in this case. Narration and structured role-playing transform the user data into three-dimensional people. Even though the stories were placed in the game reality, the motifs and content were drawn from the user data and reflected the players’ own experiences, assumptions, and attitudes as well. We believe that supporting this quality of recalling memories highlights the empathic feature of the Character Game. Many participants mentioned that the Character Game opened up the world of the users, their values, needs, and problems to them in a new way.
2. **To transfer knowledge and arouse inspiration**, the game should include both play-elements and relevant content. In the Character Game we introduced play-elements such as role-taking, random factor cards, turn-taking and the game world but grounded the activity in the themes found in the field data in order to enable playing with purpose. Letting the players create their own character was important to make them think about the values, life situation, needs and desires that should all direct the actions during the game. It seemed that by utilizing their own insights while building the role, the characters became detailed enough to feel “real”. In order to maintain the link to the original user data the balance between the given information and the participants’ input is essential – the character template ensured this.

3. **To allow both individual reflection and collaboration**, in the Character Game everyone had their own role and a turn as a director of a scene, but the performances were joint efforts including everyone’s contribution. None of the game sessions ended with one coherent goal but instead pointed to many possible directions; the game worked well for new openings but lacked the evaluation of them.

4. **Considering the opportunities for new partnerships** is of special interest in multidisciplinary service design cases. Through the scenarios the whole service ecology became visible without putting too much emphasis on the details, thus allowing a holistic view on the services. In the character game the game world created, the senior house with its weekly timetable and the character templates provided starting points for the role-playing; the social encounters taking place in the senior houses were used as triggers for ideas. The game pointed out the opportunities to combine the knowledge and interests of the three companies present in the first game.

Finally, we want to consider some limitations of the Character Game. The work context creates demands for the game to be fun and relevant at the same time, leading to the challenge of design games in general: they are context specific and thus often regarded expensive to conduct. The first phase of creating the Character Game was time-consuming, as it included the conducting of field studies, making sense of them and transforming the material into game material. However after the game was designed, we were able to introduce the user data to around 30 persons during two half-day game sessions.

The facilitator’s input has been mentioned an essential factor for the success of a role-playing workshop (Seland 2009). In the character game, the facilitator’s influence on the unfolding of the game was minimised. This led to uncertainty for the players who had to come up with the scenes. The reason we did not provide the scenes or involve a game master in the game, as Iacucci et al. describe (2000), was two-fold: to empower the players to choose themes that they find interesting, and to force them to process the data. Nonetheless, based on the feedback, the tactics to support the directors in future games must be reconsidered, perhaps by following the model by Iacucci et al. (2000) and demonstrate at the beginning of the game how it is played. For the facilitators the Character Game gave rules on leading the session, but also demanded the sensibility to realize when to stop the game and how to maintain the flow when it was reached.
However, in all our games, both the more experienced facilitators as well as the ones with no experience managed to do it well.

6 Conclusion
In this paper we have described the Character Game developed during a research project. It is a tabletop role-playing game intended for service design to support the sharing of user data, and to discover collaboration opportunities within service networks of diverse stakeholders. The strengths of the role-playing approach are the storytelling structure and the role-taking. The stories generated in the game were partly based on the players’ own past experiences and partly prompted by the game material. The co-created stories included several potential design openings; new scenarios and services were “produced” as the story evolved. Our observation that differing first scenes given to the teams led to different discussions indicates that the first framing should be considered very carefully. The project has not yet resulted in any realized design outcomes. However, our game showed interesting opportunities to further develop existing co-operation for the companies participating in the game. Thus, based on the experiences gained in this project we propose that it can be applied to support service business development based on user understanding.

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References
Appendix C

Storytelling Group – A Co-Design Method for Service Design (submitted)
Storytelling Group – A Co-Design Method for Service Design

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In this paper we will introduce a co-design method called Storytelling Group that has been developed and tested in three different service design cases. Storytelling Group combines collaborative scenario building and focus group discussions. It inspires service design by providing different layers of user information: a fictive story of a customer journey is created to illustrate a “what if” world, users tell real-life stories about their past service experiences, users come up with new service ideas, and they are also asked about their opinions and attitudes in a focus group type of discussion. The method is very flexible and takes into account the nature of services in several ways as described in the paper.

Keywords: service design; co-design; storytelling, user research

1. Introduction

In this paper we will present a co-design method called Storytelling Group. The reason we created the method is that we noticed that user-centred design methods used for designing interactive technologies do not match particularly well with the service design approach. User-centred methods such as participatory design techniques are mainly developed to design certain tools to do certain tasks and do not take into account well enough the nature of service design. Service design focuses on the value creation process in customers’ lives and not only on conducting specific tasks with specific tools. As Blomqvist & Holmlid (2009) propose, storytelling could be one way forward in developing co-design techniques for service design. The Storytelling Group method takes into account the nature of service design in various ways:

- it focuses on the customer journey
- it has a time perspective
- it takes into account multiple channels that the users can use when interacting with the service
- it allows the users to talk about the needed service ecosystem in their life. In other words, it does not focus only on the service under design but during the storytelling the participants naturally talk about what other services they need in their life situation
- it takes into account the social interaction that happens both when using the service and as part of the value creation process where the service is involved.
Storytelling Group combines scenario building and focus group discussions. It encourages the participants to create fictive stories of customer journeys (scenario-building) and to tell real-life stories about their past experiences that ground their motivations for future experiences. It brings all parties - users, designers, researchers and services providers - around the same table. It is therefore a co-design technique as well. Moreover, it allows service designers and service providers to ask about users’ opinions and attitudes towards the service under design (in a focus group discussion).

Consequently, Storytelling Group informs and inspires service design in several ways. It has different layers that provide different kinds of information about user needs and service concept ideas:

- During the Storytelling Group session a fictive story (scenario) of a certain customer journey is created. The story describes the dream situation – the “what if” world. The scenario illustrates what the users would like to experience with the service under design. It is a customer journey over a certain time period defined by the session participants. It includes character profiles that have a role in the customer journey, service moments that the characters will have, multiple service channels (e.g. e-mail, Facebook, etc.) that the characters use when interacting with the service, and interactions the characters have with each other. All these are also created by the participants. This story creation is guided by a moderator, and it is visualized on a large piece of paper displaying a timeline (see figure 1). The moderator can facilitate the storytelling by placing some turning points on the timeline before the session starts (e.g. a social media service that has 100 users at start-up should have over 100,000 users by the middle of the story).

- At the same time the fictive story of the customer journey is created the participants are encouraged to tell real-life stories about their own experiences that somehow relate to the fictive story. The real-life stories help to understand why the users want the fictive story to proceed as they suggest and what motivates them to use the service.

- During the fictive story creation the participants usually also come up with new service, touchpoint or service evidence ideas.

- The role of the creative secretary (service designer or service provider) is to ask relevant questions related to the service (users’ attitudes, opinions, concept/feature ideas) during the story creation. After the story has been completed the creative secretary can also ask the users wrap-up questions related to the service. Grasping these interesting topics and finding out more about them is the responsibility of the “creative secretary” (service designer or service provider) who should be sensitive
towards possible design openings. Without the creative secretary this layer of knowledge stays at a rather superficial level.

In this paper we first will explain some principles behind the method, we will then describe how the method was developed in three different service design cases, and finally, we will give some practical instructions on how to conduct it.

1.1. Storytelling and service design
Services are complex, dynamic, holistic and networked. In addition they are created in collaboration and appear in interaction. Thus they are flexible in nature and have a great deal of openness that must be tackled. This complexity poses a challenge to designers and decision-makers to envision and prototype services. One of IDEO’s leaders, Bill Moggridge, has seen storytelling as a potential solution. His statement illustrates well the importance of storytelling in service design:

"When you put all these things together, with elements from architecture, physical design, electronic technology from software, how do you actually prototype an idea for a service, and it seems that really, it’s about storytelling, it’s about narrative.” (Bill Moggridge, keynote at the Danish CIID conference Service Design Symposium, May 2008)

Overall, there are at least three reasons for considering narratives in service design:

1. First, stories are gathered from users to inform and inspire design. The methods often used include observations, design probes and interviews. Interpretations of user data are also often communicated to design through narratives such as personas and scenarios of current actions. Storytelling Group informs and inspires design, but “what if” scenarios are designed together with the users at the same time user stories are collected.
2. The second reason pertains to storytelling in prototyping services, as referred to by Moggridge. Storytelling is used as means to formulate a design driver that facilitates the style and overall design of a service. A story serves as a red thread to connect various details together from architecture and environment design to communication, marketing and customer experience.
3. The third reason relates to using storytelling to create and manage contexts in which experiences happen. Storytelling is thus a tool to create a specific image, to differentiate from other similar services, as well as to create and maintain an
attraction, an experience that triggers the imagination. Storytelling is often seen as related to thematic concepts such as the Hard Rock Café restaurant chain, but, for example, Mossberg and Nissen Johanssen (2007) emphasize that at the organizational level storytelling is more. At the organizational strategic level a story can explain why the company exists and how it creates profit; at the marketing level the story explains how the company and its product are differentiated; and the third level of using stories deals with how people in the company communicate who they are and how they should realize their visions. At this level, the story can even create a specific feeling of “us”.

1.1.1. Stories from users to inform and inspire service design
When conducting the literature review on narrative user research methods for service design we were surprised that there are few papers on such methods. Scenarios and storyboards are widely used in service design, but they are often created by the designers (Diana et al, 2009). However, users’ storytelling has been utilized in designing, e.g., mobile phones and industry software but little in service design. In fact, two of the authors (Mäkelä and Mattelmäki, 2002) had earlier developed a storytelling technique that was piloted in designing mobile phones and their accessories. A group of users were invited to a storytelling session. They were asked to tell stories about their mobile phone experiences in general. As inspiration they were given postcards that triggered storytelling. The stories that were gathered from users with this technique were random memories of the users using mobile phones in specific situations. There was no time perspective; the stories were simply about single use situations. However, mobile phone designers were able to proceed with concepting new mobile phone features and accessories on the basis of the stories, which were presented in the form of storyboards.

If this method were applied to service design, its weakness is that it concentrates only on certain use situations in the past and not on service moments in the future where the service could be part of a value creation process. The future is left for the designers to imagine and is not co-designed with users. It could perhaps be considered for use in
gathering user stories on a very specific existing service where the target for improvement is focused on critical service moments (moments-of-truth).

Strom (2007) has reported on how he has used user stories with emotions and conflicts in industrial software projects. He conducted user studies in the field and wrote stories based on them. In field studies he used the so-called Sense-Making methodology, which focuses on situations where users experience the largest problems instead of going through all steps of their work processes. When writing the stories on the basis of his field study, Strom also noticed that there are different types of realism that he could use in storywriting. In Storytelling Group there are also different types of realism, as explained in the next section. Strom’s method could perhaps be used to improve certain service touchpoints by focusing on the problems the customer faces with them. However, according to our experience user stories can reveal opportunities that can be missed if only focusing on problems. Therefore going through the whole customer journey from both positive and negative perspectives has its benefits.

1.1.2. Different types of realism
Since imagination is embedded in the narrative structure of the Storytelling Group method, there is the question of reliability of the knowledge gained through the fictive scenario building: can it be handled as trustworthy information to inform design? Many approaches, such as Strom’s (2007), wish to draw out participants’ experiences with and knowledge on certain topics, and utilize those individual insights as sources for design concepts. In Storytelling Group there are two types of realism: 1) some personal experiences are “hidden” into the overall fictive storyline thus becoming collaborative sketching material in Johansson’s (2005) terms; and 2) some personal experiences are
shared by telling real-life stories that can be considered non-fictive and are easier to accept as trustworthy information. We propose the notion of “restored behaviour” (Schechner 1985) as a helpful concept to unfold the process of recalling memories in the fictive type of realism (scenario building).

According to Schechner (1985, p. 37) “restored behavior is me behaving as if I am someone else or as if I am beside myself, or not myself […] , being someone else may also be me in another state of feeling / being.” In other words, when people perform (in Storytelling Group they build scenarios) they combine “myself” and “someone else” by memorizing, recovering and inventing restored behaviour. Schechner claims that restored behaviour can be used as “material” that can be worked on, changed or put away. Derived from this quality the restored behaviour can be treated “… as a film director treats a strip of film. These strips of behaviour can be rearranged or reconstructed; they are independent from the causal systems (social, psychological, technological) that brought them into existence” (Schechner 1985, p. 35). In a co-design gathering such as Storytelling Group, people recover, remember and invent these strips of behaviour and then re-behave, i.e. tell the new story accordingly.

1.2. Co-Design principle
As previously mentioned Storytelling Group brings together different stakeholders around the same table. A design approach that highlights collaboration is called co-design and has its roots in the tradition of participatory design (PD). It typically refers to an activity in which potential users are empowered to bring their ideas into the design of new solutions. The notion of co-design is also conceived as a collaborative knowledge sharing and creating process, in which the skills and experiences of various participants
are brought together to reach novel solutions (Mattelmäki 2007). The original political ideology of PD in 1970s Scandinavia to promote workplace democracy has weakened somewhat, while emphasis on creative collaboration in multidisciplinary group work has come to the fore. Due to this shift in overall aim the term PD has been partially replaced by the term co-design, also used in this paper.

In this paper, co-design refers to a particular gathering where at least two persons are at one moment bound regarding place and time. It is not spontaneous action nor a practical working together with colleagues in the design studio. Rather, it can be described as a social occasion that is typically programmed in advanced, possesses an agenda, and has pre-established unfolding of phases (Goffman 1963).

In co-designing, the roles of professional designers or design researchers may vary from active participants to almost invisible facilitators. However, regardless of the variations, two fundamental needs remain: to enhance participants’ creative thinking and to support dialogue between participants. Thus one of the cornerstones of co-design is facilitating creative, generative collaboration (e.g., Brandt 2006). As Johansson (2005) points out, the challenge faced in co-design is that the “trained designer may use a pen and a piece of paper to illustrate his ideas while other stakeholders need other kinds of design material to be able to sketch” (p. 17). In the Storytelling Group method teams of four to six people tell a story about an imagined person and his/her relationship with a certain service.

The aim of this method is to thus bring together different actors by providing a common ground for a group of people with various backgrounds and interests. The storytelling structure is seen as having potential to create a relaxed atmosphere and
encourage the participants to envision dream situations without the boundaries of current technology and practices.

2. Our Process of Developing the Storytelling Group Technique
Storytelling Group method has been developed and tested it in three different service design cases: 1) banking services, 2) congratulatory services within social media, and 3) a social video service. During these cases four Storytelling Group sessions were organized altogether with 10 groups, having altogether 45 service users participating. The sessions were conducted in late 2009 and early 2010 in the capital area of Helsinki. In the following sections we will briefly describe the service design cases where we applied the method and explain the process of how the method has evolved to what it is now.

2.1. First Case: Banking Services
The aim in the first case, banking services, was to increase designers’ and service providers’ understanding of changing user needs over a long customer relationship. The intention was not to invent new banking services but to improve existing ones. Changing customer relationships offer an important perspective on banking services that should address people’s needs according to their varying life situations. Banking services in particular can carry a long life span: the customer journey or relationship may last tens of years. In the insurance business, for example, an insurance contract is often made with the bank when one moves to one’s first dwelling. Situations may change over the years and various types of insurance policies may be required, e.g. when one begins to cohabitate or to buy one’s own home. Accidents may happen at home, requiring an insurance claim, and so on. In sum, service moments and customer relationships with the
bank depend on life stages as well as specific life events. The Storytelling Group technique aims to tackle both eventualities.

In the two Storytelling Group sessions in this particular case, the aim was to create a setting in which the service providers, design consultants, and potential end users could meet and envision the bank services as a lifelong customer journey.

In the first session all the stakeholders were represented, but the designers and service providers did not have pre-defined roles in the Storytelling Group. The service providers mainly acted as customers or service personnel during the story creation. The designers for the most part simply observed and made notes. The moderator’s task was to guide the storytelling. During the session we noticed that the service users started to naturally tell real-life stories about their past experiences with banking services. The service providers and designers found them very interesting, and, moreover, new service ideas emerged. Therefore, we decided to facilitate those experiences as well in the second session.

In the first session two of the design researchers began to participate unintentionally. One had been the moderator and another was taking notes. The one taking notes, however, noticed the difficulties the moderator had with handling story creation, concept ideas and facilitating real-life storytelling. The note taker then began to take a more active role that we later called a “creative secretary”. She facilitated the real-life storytelling and also asked focus group type questions about opinions, attitudes and service concepts. Since we thought that we should adopt a more active role as designers and define a clearer role for service providers, before the second session we proposed that one would take the role of “creative secretary”. This proposal worked well. In the second
session, however, we did not have a wrap-up discussion facilitated by the creative secretary, which was felt a lack by the designers. This was added to the method in the second service design case.

2.2. Second Case: Services Within Social Media
In the second case the aim was to explore the kinds of motivations and attitudes people have regarding new services within social media that would enhance congratulatory occasions or sharing celebrations. The service provider and designers were also interested in current use situations and new service concept ideas. We organized the third Storytelling Group session with three different groups. All three groups included on average five social media users and a service designer, as well as one design researcher acting as moderator. Moreover, one of the groups also had the service provider participating. She was there to detect possible service concept ideas and ask more focus group type questions about them. In all groups service designers had a clear role as creative secretary, and they were instructed beforehand about their role. We also reserved time for wrap-up discussions with the groups for the creative secretaries.

One group included the designer who had by chance participated in our first case and was therefore experienced with the method, and this group provided the most interesting and relevant user information. The designer managed to guide the ‘focus group’ discussion, detect ideas for interesting concepts and ask deeper questions about them, as well as facilitating real-life storytelling. He also facilitated the wrap-up discussion. Less experienced designers were more passive in other groups, and the user information from those groups was not as rich. Focus group type discussions on attitudes and opinions did not occur for the most part. Real-life storytelling and concept ideas
came naturally also in the groups with more passive designers. However, it turned out that the service provider was also very interested in attitudes and opinions since they were entering a new service domain.

2.3. Third Case: Social Video Service
In the third case we explored a social video service concept. Its development was in its early stages: the first prototype was about to be built. The aim was to discover how to further develop the concept so that it would attract a large number of users over time. We organized a Storytelling Group session with three groups having five service users in each and a moderator. It was intended that each group would have also had a service provider acting as creative secretary, but in the end only one group included a service provider besides the moderator due to illness. The lack of creative secretary was prominent in those other two groups since the moderator did not have the time nor capacity to deepen discussions on interesting topics that arose during the story creation and the discussions were very short.

What was new in this case was that we deliberately inserted several turning points on the timeline for the story creation. The story was begun so that the service had only four users; the participants then needed to proceed in storytelling so that the service could gain 100 users, then 10 000 users and finally 100 000 users. They needed to imagine what the service provider had to do in order to attract a certain number of users as well as what the four main characters in the story were doing while the service was evolving. This process worked very well and triggered discussions among others on the importance of word-of-mouth marketing and if the service could be free or a paid service.
3. Instructions for Conducting Storytelling Groups

3.1. Running a successful story-line workshop, a co-operation between two facilitators

According to Lundberg and Arvola (2007) an extra “creative facilitator” is needed in collaborative design workshops besides a “normal facilitator”. The reason for this practice is the fact that the facilitator himself cannot run all the necessary documentation during the workshop and he is very often pushing his own ideas while running a workshop.

Based on our experience of running Storytelling Group we have come to the same observation as Lundberg and Arvola (2007). We named this “creative facilitator “ more frankly as a creative secretary to emphasize the difference from the moderator, who takes care of story flow. The responsibilities of the creative secretary are important, as pointed out in our case descriptions. (S)he is observing the hidden possibilities in the story world – which is created by the group, and (s)he can interrupt the story flow or the organization of the story events of the group. The profession of designer provides a good background for the secretary, because designers can generally see the opportunities of the story world both at a technological and a social level. However, the service provider can also act as creative secretary alongside the designer. For the service provider participation is as important as hearing the real-life stories and concept ideas from the service users, according to our experience. Moreover, the service users can ask more detailed questions about the service from the service provider during the session.

3.2. Other issues to consider

To run a successful story-line workshop a peaceful room with e.g. fruit and beverages on the table is needed. Drinks and fruit offer the opportunity for the group members to think and pause. The group members can thereby stand long periods of waiting to make their
own contribution to the story world without feelings of frustration. The act of listening is a very important aspect of the workshop. The long silence of a group member can suddenly provide a very important twist to the story events and change the story world once the silent member takes the initiative. A sense of humour is also important during the workshops. There is a point where the group begins working hard, which can be tangibly sensed. (The experienced moderator of our workshops had even stated, “Now it is starting!” to his group, which made the group laugh.) At this point the process can continue at a new, more intensive level.

According to our experience a group of approximately five service users, a moderator, a designer and a service provider needs ninety minutes to complete one to two stories (depending on how active the creative secretaries are in facilitating focus group type discussions). In addition the group needs fifteen minutes at the beginning to get to know each other and the moderator to tell them what they will do, and thirty minutes at the end for wrap-up discussion. One Storytelling Group session thus lasts approximately 2.5 hours.

As described earlier we have had maximum three different groups in the same session. We have therefore been able to invite maximum fifteen users to the same session at the same time, which requires three moderators and three creative secretaries. At the same time, this has saved time in practical arrangements.

We have also noticed that the most inspiring and active group is the one where the service users have a very similar background. In some cases it might be feasible to have users from different age and life stages if the service is such that there is interaction between users with different backgrounds (e.g. an extended family interacting with the
service). However, the moderator and the creative secretary then need to take everyone’s perspective into account in the storytelling and discussions.

3.3. Steps to moderate a Storytelling Group
To successfully moderate a Storytelling Group the moderator needs to have clear instructions for everyone. Before the session the moderator needs to also brief the creative secretaries about their role. In the group it is advised the moderator takes the following steps:

1) Ask everyone to introduce themselves.
2) Tell the group what they will do and what the participants’ roles are in the storytelling.
3) Give the theme of the customer journey (e.g. home insurance) to the participants.
4) Ask the participants to think about and describe who the main characters are in the story that would use the service (age, gender, livelihood, hobbies, place of residence, family and friends).
5) Take a large piece of paper showing the timeline and possible turning points. Mark the years when the story starts and ends with post-it notes on the timeline. Discuss this with the participants. Be ready to extend or shorten the timeline if the story requires so.
6) Ask the participants to tell how the story starts, what motivates the personas to start to use the service. Write down the events in the story on post-it notes and place them on the timeline. Move them if the participants wish.
7) Encourage the participants to tell the story until the end by taking into account the turning points. Ask them to also use different channels (e-mail, Facebook, etc.) in the story if relevant. Write down the channels on post-it notes. Together with the creative secretary encourage the users to tell their own real-life stories. Give room for the creative secretary to ask questions as well.
8) When the story is ready on the timeline, go through it with the group so that the users are role-playing the characters. If the group is not particularly relaxed or talkative go through the story yourself.
9) Ask the creative secretary to facilitate the wrap-up on the insights and concept ideas s/he had during the storytelling.
10) Repeat 3 to 9 if you have time.

3.4. Analysis and reporting
Since the method provides user information in different layers we determined that the best way to proceed with the data after the sessions is to write transcriptions from the
video recordings. The moderators and creative secretaries can subsequently have a
workshop where the transcriptions are reviewed and insights from them are written on
post-it notes. The insights are placed on the wall and categorized in the form of an
affinity diagram (Beyer and Holtzblatt, 1998). The affinity diagram itself is already very
valuable input for the design process. The designers can take with them the most
interesting findings already from the workshop and do not need to wait for the report to
be finished.

We have, irregardless, written a report that includes current use situations from
real-life stories, “what if” use situations from the story, motivations, opinions and
attitudes, and service ideas. The report includes many user quotes from the transcriptions
in order to enhance empathy. The report is something that designers and service providers
can return to even when the actual case is over. Moreover, it can be sent to a wider
audience in their respective organizations.

4. Conclusions
Having testing the Storytelling Group method in three different service design cases that
were at differing stages of design, we feel that the method is very flexible and provides
very rich user information for service design. It requires more personnel to conduct than a
regular focus group, but this is compensated by the amount of truly rich and inspiring
user information acquired. Moreover, it better takes into account the challenges of service
design than traditional user research techniques. It also brings all stakeholders together so
that designers and service providers can gain immediate insights from the sessions and do
not need to wait for the report in order to proceed in the service design.
The challenge of the method lies in the different types of realism with which it deals. If the service provider and the designer accept that some of the user information the method provides is subjective desires and dreams that can be utilized as inspiration rather than cold facts behind rational decision-making, the method is then appropriate.

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6. References


Figure Captions

Figure 1. A Storytelling Group. The moderator (on the right) is documenting the created story on the large paper with a timeline. The creative secretary (service designer) is sitting next to him (on the right) and is participating in the discussions.