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Communicating Empathic User Insights

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Abstract
One of the greatest challenges designers encounter today is the users' acceptance of products and services within increasingly complex systems. Especially the service sector represents a field where value creation is utterly dependent on the users' experience. Hence the performance of the service provider is of great importance, and could possibly be even more impactful if considered already in the process of designing the service. Empathic understanding of users is one way to bring multiple perspectives together and make valuable solutions. This paper argues for connecting service strategies to the empathic design tradition to ensure long-lasting impact for all stakeholders. The designer can apply empathic insights for designing solutions *and* pass them on to the service-providing organisation. The paper discusses how to communicate research insights in a way that fosters empathic understanding among stakeholders without design competence. The discussion is based on findings from recent literature in the design field, and a case study on a service development project in The Norwegian Labour and Welfare Administration. The results are valid for designers working in public services as well as for service providers.

Keywords: Empathic design, service design, design games, value co-creation

1 Introduction

Today a transformative trend of appreciating and adapting design thinking and -competence in new and more complex fields, such as governmental and public services, is recognized by the design research community. Several authors mention in this context both the ability to empathise with the users, and that designers and clients have become more concerned about how the users experience these services (Suri, 2003; Sanders & Stappers, 2008; Vaajakallio, Lee, Kronqvist, & Mattelmäki, 2013; Battarbee, Suri, & Howard, 2014).

This paper discusses how to communicate research insights to stakeholders in a way that fosters empathic understanding. Following the introduction, section two focuses on the dual nature of empathy, and points out its role in the design research and the design process. Section three studies value creation in service design. Section four introduces creative methods for communicating insights. Communicating insights are put into practice by creating a design game for stakeholders in the public sector, which is described in section

five, while findings and the conclusion are presented in section six and seven. The project was undertaken in collaboration with The Norwegian Labour and Welfare Administration (NAV). The aim is to point out a potential for using design games as a tool to communicate empathic insights.

2 Empathy in design

Some authors state empathy as one of the key qualities of the designer (Koppen & Meinel, 2012, Battarbee, Suri, & Howard, 2014). This is based on the idea that designers will be better at designing if they can empathically relate to the people they are designing for. When empathy first entered the design field in the late 1990s, it was as an extension of the interest in user needs and human-centeredness. Leonard and Rayport (Leonard & Rayport, 1997) introduced 'empathic design' as a technique to identify user needs that would not be accessible through traditional market research. They argued that users are oftentimes so accustomed to the current conditions that they do not even recognize their own needs. To be able to detect this unarticulated potential for innovation, they proposed observation in the user's environment, conducted with an open and curious mind. This way the designers would not only focus on problem solving, but also sensitize towards emotions, experiences and the complexity of the context.

2.1 The dual process of empathizing

Empathy (from Greek *em – into* and *pathos – passion, feeling*) is the ability to emotionally understand another person and take on their perspective – to step into their feelings – without having the same experience. The empathic state has two components (Kouprie & Visser, 2009), one is related to the understanding and perspective taking, and the other is related to the emotional connection (Figure 1).

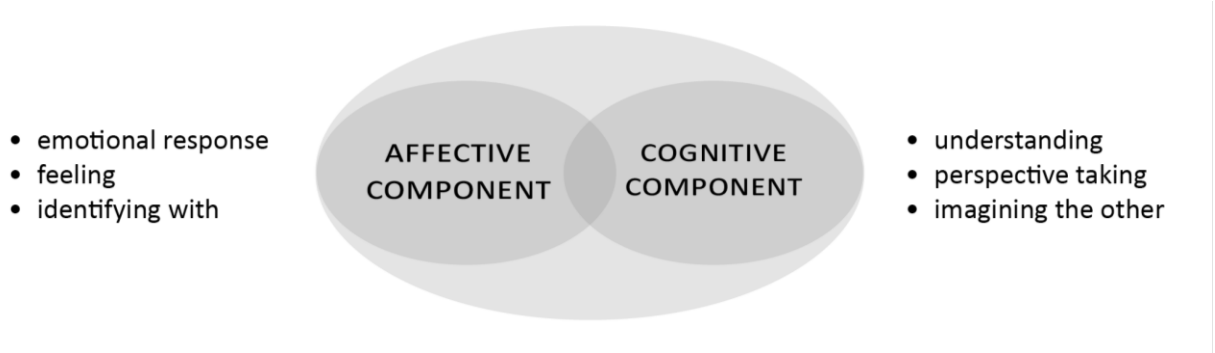

Figure 1: The components of empathy as described by Kouprie and Visser

The cognitive construct is being developed through generation of knowledge about the other person. By collecting facts about the other, the empathiser learns to understand and relate. The affective component, on the other hand, is a more immediate, unconsidered response and a kind of simulation of the other's emotional state (Koppen & Meinel, 2012). While the effort of rational reflection and resonating emotions might seem dichotomous, both aspects are essential in order to empathize with another person. In practice this means altering between "becoming" and "staying beside" (Kouprie & Visser, 2009); in other words to have an emotional response, and at the same time being able to intellectually reflect on that feeling. Kouprie & Visser assert that balance between subjective and objective is the core mechanism to empathy (Kouprie & Visser, 2009) and may also be the biggest challenge when applying empathy to design practice.

2.2 Empathic research

When Leonard and Rayport first proposed to "Spark innovation through Empathic Design" (Leonard & Rayport, 1997), they suggested observation in combination with open-ended questions as the main research technique. Later, several additional tools and methods have been adapted from other fields, or developed specifically to support empathy gaining in the fuzzy front end of the design process (Hanington, 2003; Sanders, 2005). In recent years, research methods have emerged especially from the design practise's visual and creative nature. Examples of this can be found in how designers are applying their creative competence to develop case-specific visual tools, often as a supplement to the more traditional ethnography-inspired techniques (Mattelmäki, Brandt, & Vaajakallio, 2011). These 'innovative methods' (Hanington, 2003) are typically developed to motivate participation and engagement. Maybe one of the best known examples are cultural probes (Gaver, Dunne, & Pacenti, 1999) which are material packages designed to facilitate self-documentation of peoples' private lives, contexts and experiences, further 'empathy probes' (Mattelmäki & Battarbee, 2002).

Empathic designers have embraced this playful and inspiration-enhancing innovation of research methods that may be a starting point for establishing a personal rapport between the design team and the users. Mattelmäki et al. (Mattelmäki et al., 2011) argue that designerly and artistic research and field studies also initiate a valuable thinking process within the designers. When looking at literature, the trend moves towards methods specially designed for each case. However, there is a lack of precise definitions and a common basis for categorizing and analysing. Kouprie and Visser (Kouprie & Visser, 2009) draw a general framework to support further developments of empathic methods in design in four phases:

1) Discovery: In this phase the designer's curiosity should be raised to create a motivation to understand and explore.
2) Immersion: Now the designer should take on the user's point of view and, without judging, internalize the user's experiences.
3) Connection: The designer connects with the user on an emotional level by reflecting on the user's experiences in relation to one's own. This phase is closely connected with the previous, but is separated to highlight the importance of both aspects.
4) Detachment: In order to use the new insights and increased understanding, the designer detaches from the emotional connection and steps back into the role of designer.

The core of this framework is the transformative action of the empathiser "stepping into and stepping out of the user's life" (Kouprie & Visser, 2009). In this way it also reflects the combined emotional and cognitive nature of empathy, where the stepping in is needed for the deep emotional resonating, and the stepping back for the cognitive reflection and understanding.

3 Value creation in service design

Around 2003 design briefs began to change gradually from product to systems- and service focus (Mattelmäki et al., 2014; (Sanders & Stappers, 2008). In the service sector design methods and processes often still have exploratory character (Kimbell, 2011) with a rather vague overarching framework for tools and approaches (Saco & Goncalves, 2008). One of the reasons for this lack of standardization may be the nature of services and co-created value systems.

3.1 Value-in-use

Grönroos and Voima (Grönroos & Voima, 2013) analytically define value creation in services, in order to identify the opportunities when designing for these systems. They claim that services ultimately are experienced by the customer, and argue that the value-in-use appears as a function of this experience. This means that the user is the one actually creating the value in a service – the service provider is only providing potential value. Hence, the user's experience of the service is critical to its true value. Taking this into account, empathy is essential not only for service development, but also for the service delivery; the service provider should be able to step into the users' shoes. Research shows that when tuning into an empathic mind-set enhances the ability to receive and process information, and increases personal motivation to solve challenges and find solutions (Battarbee et al., 2014).

Knowing that the number of workers in the service sector is increasing, it is likely that empathy as an emotional and communicative skill will become of even greater importance in the years to come (Koppen & Meinel, 2012). Therefore, in order to design valuable services, not only must the users themselves be considered in the service development process, but also other stakeholders. It is essential to create empathic understanding between different actors, and value them as resources, both in the design process and in the final outcome. This way it is possible to create a shared ownership in the design outcome, and valuable relations between the different stakeholders. Seeing this in connection to the empathic design tradition, the authors claim that there is an opportunity for long-lasting impact, if designers do not only utilise their empathic insights for designing solutions, but also pass it on to the service-providing organisation.

4 Communicating insights

There is a growing interest for considering the service design objective not only as a designed solution, but also as possibility to empower the organization with a human-centred mind-set and empathic understanding (Sangiorgi, 2011). Battarbee et al. from IDEO recently pointed to the importance of 'scaling' the empathy beyond the design team and a few involved stakeholders: "If design empathy is to sustain impact throughout the organization, it needs ongoing support from an overarching culture" (Battarbee et al., 2014: 6), and asked for a rethinking of methods and deliverables.

To be able to create empathic cultures, designers need tools to transfer empathic understanding and communicate insights. Even though user reports are easy to distribute in an organisation, such reports are not the most engaging representation of empathic insights (Mattelmäki et al., 2011). Nor are written reports likely to support the duality of empathy; rather are they mainly creating cognitive understanding through presentation of facts and knowledge about the user. In design literature, several methods have been considered for communicating empathic understanding and findings within a design team, but few articles about how to communicate empathic insights to people without design competence have been presented (Mattelmäki et al., 2011). Communication tools such as storyboards, personas and user journeys, are methods that work well for empathising among designers (Koppen & Meinel, 2012; Kouprie & Visser, 2009). However, professional designers have learned to develop a mental habit of switching modes between feeling and reflecting (Battarbee et al., 2014), and the same communication tools may therefore not be as effective when used with stakeholders that do not have this habit. In order engage both on the affective and the cognitive level, it might be beneficial to get inspiration from innovative tools used e.g. in co-creative design processes.

4.1 Open ends and co-design

Just like innovative methods for design research have emerged in recent years, creative methods for empathy gaining among stakeholders have been explored. These methods are often generative and linked to co-design and ideation processes (Hanington, 2003). Co-design is a design process where collaboration between designers and stakeholders is enabled and valued (Sanders & Stappers, 2008). The approach builds upon empathic design and recognizes people as experts of their own experiences (Mattelmäki & Sleeswijk Visser, 2011). The process is explorative and open-ended, and aims to let the stakeholders take part in the ideation and solution making. Typically co-design processes involve several facilitated co-creative sessions. These are temporary spaces for experimentation that enhances everyday people's creative expression through collective creativity (Mattelmäki & Sleeswijk Visser, 2011). The sessions may take many forms and include different types of open-ended methods and exercises. The objective of the sessions are not final designs, but common, shared understanding of the context and the participants' ideas and future hopes and wants (Vaajakallio & Mattelmäki, 2014). Thus, the experimental methods are designed to support ideation based on an empathic understanding, or to increase the empathic understanding through dialogues that reveal different perspectives and new findings.

4.2 Design games

One experimental method commonly used in co-creative sessions is design games. Design games is an acknowledged tool for building design competence and empower users, and engaging multiple stakeholders (Vaajakallio & Mattelmäki, 2014). The games are not traditional board games where the participants win or lose, but rather tools that foster a structured discussion among the participants, make them come up with new ideas and perspectives, and explore solutions. The games take many different forms, and are inspired by various playful activities (Vaajakallio & Mattelmäki, 2014). The games rarely have competitive aspects, but the game metaphor is a way to create a 'magic circle' - to invite the participants into a playful and explorative mood outside of their daily lives. Games are an arena where people are used to being governed by rules for interaction, which makes it possible to provide rules equalizing rules like turn taking (Brandt, 2006). This is often an effective way to eliminate the power structures among the participants, which is important in co-creative sessions to make sure everyone is participating and sharing what is important to them. The following sections present a first attempt in using design game inspired by card games, as a tool for transferring empathic user understanding to members of a service-providing organisation.

5 The NAV case

This project adds to the many examples of exploratory work of tools within the empathic design tradition (Kouprie & Visser, 2009), and is a first attempt in using design games as a communication tool for empathic insights to people without design competence. The project was titled 'A Company Perspective', and was conducted by the first author and a colleague student. It was a half semester project conducted autumn 2015 for NAV, in affiliation with The Institute of Product Design, at Norwegian University of Technology and Science (NTNU). NTNU and NAV have an ongoing collaboration on service design issues in which this project has been conducted. Its objective was to consider NAV's current recruitment services from hiring companies' point of view, and identify opportunities for NAV to improve or offer new services, based on the companies' needs and wants. Data were collected through observation, interviews and the design game with stakeholders. Since the samples were rather small, so results indicate a methodological way ahead, rather than prove the rightness of

assumptions. More detailed studies NAV like institutions are necessary to vindicate reliability of findings and validate methods.

5.1. Project background

In April 2015, the report 'Et NAV med muligheter' (Ekspertgruppen, 2015) [A NAV with possibilities] was published, where an expert committee presents opportunities and suggestions to NAV. The committee recommends NAV to make closer contact with employers to be able to offer better services in relation to recruitment. Today's recruitment services offered employers, are a digital CV database, possibilities to contact NAV at an 'employers hot line' ('arbeidsgiver-telefon'), as well as personal assistance from the local NAV office to find possible candidates to open positions. The report concludes that to be a more attractive collaboration partner for the employers in need of candidates, NAV needs to update and improve the quality of the CV database, and make available the information about registered job seekers (Ekspertgruppen, 2015). The expert committee further notes that NAV should work to develop the digital services based on the employers' needs. Currently, there are several initiatives within NAV that aim at improving the performance of NAV's digital services. Firstly, NAV do work to digitalize several of their forms, and also improve and modernize many of the underlying systems. Second, NAV have started a project to look at new solutions for the CV- and position database. At last, the project 'Brukerdialog' [User dialogue] consider the possibilities for new services for job seekers that can help speeding up the process of finding a job

5.2. A company perspective

Traditionally, NAV has viewed the job seeker as the primary user of its recruitment services. Thus before this project started, NAV had not empathised with the companies in the service development processes. The goal of the project was therefore to bring in the company perspective in the development phase by utilizing an empathic and human-centred design approach. Hence, a major part of the project was empathic design research. This research was mainly conducted through semi-structured interviews of company managers. This included close contact with a number of various companies to understand their needs and wants in the recruitment process. The recruitment process was considered including four main parts: vacancy consideration, advertising, candidate screening and final hiring decision.

Through the research empathic understanding of the managers' concerns and struggles in the different stages of the recruitment process, was gained. A detailed picture of the situations, including personal experiences and emotions was obtained by the first author, and when gathering the stories a pattern started to form, three key insights were identified:

1) The companies have limited amount of time to conduct the recruitment process due to other company obligations.
2) There is a want for more information about the candidates to reduce uncertainty in the decision.
3) Personality and interpersonal connection plays an important part in the decision-making.

In addition to the manager interviews, the knowledge was broadened by talking to people from other and connected fields. One of these was a psychologist specialized in recruitment processes and corporate culture. In reference to the work of Hunter and Schmidt (Schmidt & Hunter, 2004), she explained the importance of screening candidates primarily based on their competence related to the position. An interesting aspect in this context was also that competence and knowledge often are being confused with experience. To have experience from a field or position is not a true indication on how well the candidate preformed or will

perform in the position. In order to minimise the risk for incorrect hires, personality and personal connection should only be considered late in the process. This clearly opposed the common practice we had found among our informants, thus also represented an interesting opportunity for improvement. Therefore the following aspect was added it to the lists of main insights:

4) Knowledge and competence should be the primary driver behind the choice of candidate.

The next step was to communicate these four insights to the organisation, and at the same time pass on the emotional connection to the user's concerns and struggles, that the design researchers had internalized through the research.

5.3. The design game

The Candidate Game was designed to illustrate the specific insights gained from the research, in a way that fosters empathic understanding in the players. During the game, the players will discuss together in pairs or small groups, and select candidates for an imagined position. The game draws on ideas from role-play, but keeps the focus on the tasks, instead of on a role performance. The game is divided into four main parts: 1) Candidate screening; 2) Background check; 3) Board meeting; 4) Meta discussion. Each part is designed to illustrate or highlight different aspects of the empathic insights we wanted to communicate.

When the game starts, the participants are told that they are going to play the CEO of a small company that are looking to hire a PR manager, and that the objective of the game is to find the best suited candidate for the position. They get a short introduction to the company, some details about the firm's corporate culture, and a list of qualifications needed for the position.
In the first part for the game the player pairs get a set of seven candidate cards. The cards have different type of information about the candidate on each side (Figure 2).

Figure 2: Two sides of a playing card; to the left: the personality side, to the right: the knowledge side.

The personality side includes a portrait drawing of the candidate, and a quote about their personal interests. The knowledge side states the candidate's formal education and their latest work experience or related achievement. The players are only allowed to look at the information written on one side of the card. They have a limited amount of time to conduct a candidate screening based on the information they have available, and choose the two candidates they believe are best suited for the position. There should be an equal number of pairs looking at the personality side, and looking at the knowledge side of the cards.During

the second part of the game, the players are allowed to look at both sides of the two chosen candidate cards. They are told that this represents what they find out when they conduct a background check on the candidates. Within the pairs the players will discuss the information they now have available about the candidates, and collaboratively select the one they want to hire. This process is also time limited. In the third part of the game, the players go together in larger groups and discuss their choices and experiences. The groups should include one pair that looked at the personality side in the candidate screening, and one pair that first looked at the knowledge side. The pairs start with presenting their chosen candidates to each other, as if they were to present their choice for on a board meeting.

The meta-discussion is conducted in the same groups. The players are asked to talk about their decision making process, and reflect upon how the game rules and access to the different information influenced their candidate choices.

Testing the game was conducted in two separate sessions with two multidisciplinary groups of NAV employees. The gameplay was supported by a traditional presentation, explaining the background for the project, research methods and design drivers developed based on the user insights

6. Results and further research

As a lens for the discussion, the previous described framework of Kouprie and Visser (Kouprie & Visser, 2009) is used and commented in relation to how the game supported the four phases: 1) discovery; 2) immersion; 3) connection; and 4) detachment.

6.1.1. Discovery

The game metaphor itself brought playful connotations and sparked curiosity and motivation among the participants. It worked as an invitation to an explorative state outside their daily life. The tangibility of the playing cards supported the game metaphor, and the cards had a colourful and simple look that clearly referred to game aesthetics. This established a common, playful ground for the participants. When the cards were handed out the participants were visibly excited and eager to read the information.

6.1.2. Immersion

The participants immersed themselves in the life of the users by conducting the tasks based on the real user's own experiences. The game metaphor provided a framework where we could make sure the goal of the player and the original goal of the user in the comparable situation did match. The background story and the role as the company's CEO, also created an alibi for the participants to step out of their own roles and into someone else's. Playing a role allows the participants to step out of their ordinary cognitive constraints (Mattelmäki et al., 2014). At the same time, the shared playing cards worked as boundary objects (Brandt, 2006) and helped to share focus on the task. This took the attention away any role-play performance, and onto the discussion.

The players did not get any character descriptions or guidelines on how to act out the role. This meant that the participants mainly acted as themselves within the rules of the game. Thus, the emotions and frustrations due to time limit and too little information were the participants' own. It relates to Kouprie and Visser's statement that "designers should gain understanding of the user (cognitive), by feeling the user's emotional state (affective)" (Kouprie & Visser, 2009).

6.1.3. Detachment

At the same time as the emotions and frustrations are the participants' own, the frame of the game – the magic circle that is being constructed – creates a distance between the player and the actions they are taking within the game. The last phase of the game gave room to the detachment and reflective interspace where the players abstract from the point of view of the user. The participants had experienced the feelings, but also within the rules – therefore they could remember the concrete insights, and step back and analyse them.

7. Conclusion

The case study indicates that the strategy of introducing design games might provide a tool for communicating empathic insights. Games have the possibility to guide the balance between cognitive and affective modes, and require involvement from the participants. Further, games might be more effective, and have stronger transformative power than mere empathic observation of users' activities.

Design games may provide one way to facilitate an organization retaining and progressing its empathy. An empathic design game can intensify the experience of empathy since it has the advantage over plain information supply that it engages and motivates participation (Hamari et al, 2014).

As a next step, a more scientific approach is needed explore design games further and produce reliable data for new analyses and developments. More research would be also beneficial too adapt the design games to specific user groups (Allam et al, 2015). Further an international comparison of methods applied for including users in e-governance could widen the picture and provide new insights on successful applications.

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