

Communicating Empathic User Insights

A case study of design games as a representation for empathic field research findings

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ABSTRACT

As designers encounter increasingly complex systems, empathic understanding is essential in order to bring multiple perspectives together and make valuable solutions for all stakeholders. However, when entering the service sector, we have also moved into a field where the value creation is utterly dependent on the users' experience, and hence on the performance of the service provider. Connecting this to the empathic design tradition, it is clearly an opportunity for long-lasting impact, if we do not only utilise our empathic insights for designing solutions, but also pass those insights on to the service-providing organisation. This paper focuses on how to communicate field research insights in a way that fosters empathic understanding. The topic is being investigated through a case study from a service development project in the Norwegian Labour and Welfare Administration.

KEYWORDS: Empathic design; communicating insights; design games; transformation design; service design; value co-creation

1. INTRODUCTION

There is a transformative trend of design thinking and design competence being valued and adopted in new and more complex fields, and the ability to empathise is becoming even more important.

In this paper I report on my experience as part of a design student duo creating a design game for stakeholder empathizing in a service development project in the public sector. Before proceeding with the case study, I first look to literature and set ground by discussing the dual nature of empathy, and briefly point out its role in the design process. In the following sections I describe the tendencies we see regarding the use of empathy in service development, and the

importance of anchoring empathy in the organisation. After that, I will draw on my experiences from the project work undertaken in collaboration with NAV [The Norwegian Labour and Welfare Administration] to point out a potential of using design games as a tool for communicating empathic insights.

2. EMPATHY IN DESIGN

Empathy is commonly regarded as an important aspect in the design process, and is often stated as one of the key qualities of the designer [1]. This is founded 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 [2] 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 empathising

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 [3], one is related to the understanding and perspective taking, and the other is related to the emotional connection (Figure 1). 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 [1]. 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” [3]; in other words to have an emotional response, and at the same time being able to intellectually reflect on that feeling.

This balance between subjective and objective, is the core mechanism to empathy [3], and may also be the biggest challenge when applying to the design practice. Several researchers and practitioners have pointed out the importance of moderating the empathy in order to benefit from it. If the empathizing becomes too immersive, the ability to abstract from the user’s perspective and identify the unarticulated needs, may be lost.

2.2 Empathic research

When Leonard and Rayport first proposed to “Spark innovation through Empathic Design” [2], 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.

In recent years, research methods have emerged especially from the design practise’s visual and

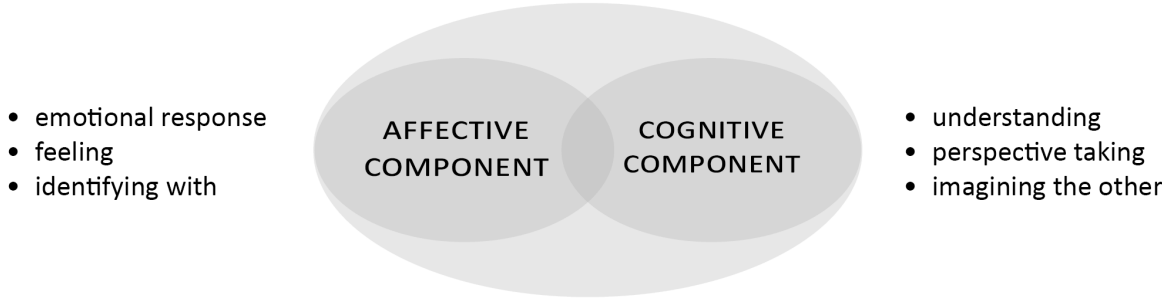


Figure 1: The components of empathy as described by Koupric and Visser

creative nature. Designers are applying their creative competence to develop case-specific tools, often as a supplement to the more traditional ethnography-inspired techniques [4]. These 'innovative methods' [5] are typically developed to motivate participation and engagement. Maybe one of the best known examples are cultural probes [6], which are material packages designed to facilitate self-documentation of peoples' private lives, contexts and experiences. This concept has also later been explored with even more emphasis on empathy under the term 'empathy probes' [7].

Empathic designers have embraced this playful and inspiration-enhancing innovation of research methods [8]. Because of the unique character of the tools in each case, these new methods may be a starting point for establishing a personal rapport between the design team and the users. Mattelmäki et al. [4] argue that designerly and artistic research and field studies also initiate a valuable thinking process within the designers.

When looking at literature, we see this trend of methods specially designed for each case. However, it also seems to be a general lack of precise definitions and a common basis for analysing the methods. Kouprie and Visser [3] are therefore especially interesting because they base their work on psychological literature and put forward a general framework for empathy gaining in design practices. The framework is meant to support further developments of empathic techniques in design. The framework describes 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" [3]. 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. DESIGNING FOR SERVICE

The ability to empathise is becoming even more important as designers now encounter increasingly ambiguous and complex challenges. There is a transformative trend of design thinking and design competence being valued and adopted in new fields [9, 10], and both designers and clients have become more concerned about how the users holistically experience the designed world and connected contexts [11].

Around 2003 the design briefs began to change from products and interaction to systems and services [8]. Designers are still young in the service sector, and the design processes are often exploratory [12] with no clear overarching framework for tools and approaches [13]. One of the reasons for this lack of uniformity may be the nature of services as ambiguous and co-created value systems.

3.1 Value-in-use

Grönroos and Voima [14] take an interesting perspective, when they analytically define the value creation in services, in order to identify the opportunities when designing for these systems. They establish that services ultimately must be experienced by the customer, and further 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. Empathy is therefore a key resource not only for service development, but also for the service delivery. Research shows that when tuning into an empathic mindset, we enhance our ability to receive and process information, and we get personally motivated to solve challenges and find solutions [9]. Knowing that the number of workers in the service sector is increasing, it is likely that empathy as an emotional and communicative skill will be of even greater importance in the upcoming years [1]. Therefore, in order to design fruitful and valuable services, not only must the users themselves be considered in the service development process, but also the frontline staff and other stakeholders. It is essential to create empathic understanding between the 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, it is clearly an opportunity for long-lasting impact, if we do not only utilise our 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 to be a designed solution, but also to empower the organization with a human-centred mindset and empathic understanding [15]. IDEO is among the consultancies that have long experience with empathy in design processes, and the company recently pointed out the importance of ‘scaling’ the empathy beyond the design team and a few involved stakeholders [9]. It stated, “If design empathy is to sustain impact throughout the

organization, it needs ongoing support from an overarching culture”.

To be able to create these empathic cultures, we as designers need tools to transfer their empathic understanding and communicate their insights. Even though user reports are easy to distribute in an organisation, also previous authors have stated that such reports are not the most engaging representation of empathic insights [4]. Nor can written reports likely to support the duality of empathy. Written reports are mainly creating cognitive understanding through presentation of facts and knowledge about the user.

In design literature, several techniques have been considered for communicating the empathic findings within a design team, but few articles about how to communicate empathic insights to people without design competence have been presented [4]. Communication tools such as storyboards, personas and user journeys; methods that work well for empathising among designers [1, 3], may not work in the same way for others. This is because while designers through practice learn to develop a mental habit of switching modes between feeling and reflecting in order to empathise [9]. Designers need to be more aware of this balance when scaling the empathy to people without this habit. Designers need methods that not only help internalizing the empathic findings, but also facilitate the balance between the cognitive and affective construct.

4.1 Open ends and co-design

Designers are normally visual and creative, and just like innovative methods for research have emerged in recent years, also creative methods for empathy gaining among stakeholders have been explored. However, these methods are often generative and mainly linked to co-design and ideation processes. Such processes are quite extensive and time consuming.

Co-design is a design process where collaboration between designers and stakeholders is enabled

and valued. The approach builds upon empathic design and recognizes people as experts of their own experiences [16]. The process is explorative and open-ended, and aims to let the stakeholders take part in the ideation and making of solution. 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 [16].

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[17]. Thus, the experimental tools 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 methods commonly used in co-creative sessions are design games. Design games is an acknowledged tool for building design competence and empower users, and engaging multiple stakeholders [17]. The games are not traditional board games where the participants win or loose, 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 [17]. 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 [18]. 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 [3], and is a first attempt in using design games as a communication tool for empathic insight to people without design competence.

'A Company Perspective' 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).

The objective of the project 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.

5.1 Project background

In April 2015, the report 'Et NAV med muligheter' [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 [19]. 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 we entered the project, NAV had not empathised with the companies in the service development processes. Our goal of this 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, and included close contact with a number of various companies to understand their needs and wants in the recruitment process. We considered the recruitment process including four main parts: vacancy consideration, advertising, candidate screening and final hiring decision.

Through the research we gained empathic understanding of the managers' concerns and struggles in the different stages of the recruitment process. We obtained a detailed picture of the situations, including personal experiences and emotions. When gathering the stories a pattern started to form, and we were able to identify three key insights:

- 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, we broadened our knowledge 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 [20], 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 performed 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. We therefore added it to the lists of main insights:

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

We wanted 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 we had internalized through the research.

5.3 The Game Design

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 participants 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). The personality side includes a portrait drawing of the candidate, and a quote about their personal interests. The

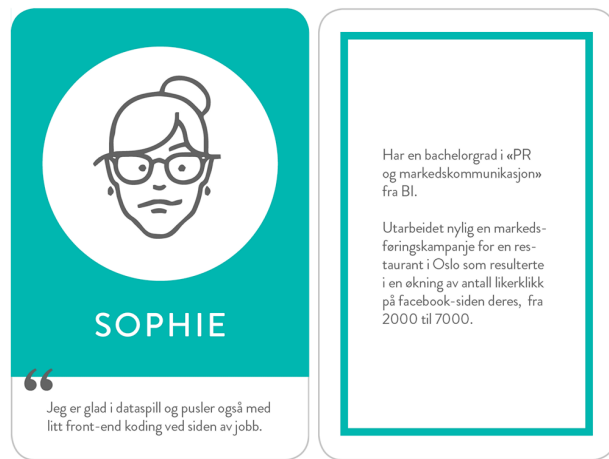


Figure 2: Two sides of a playing card; to the left: the personality side, to the right: the knowledge side. knowledge side states the candidate's formal education and their latest work experience or related achievement.

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.

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

6. DISCUSSION

As a lens for the discussion, I will use the previous described framework of Kouprie and Visser [3] and comment on how the game supported the four phases: 1) discovery; 2) immersion; 3) connection; and 4) detachment.

6.1 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 we handed out the cards the participants were visibly excited and eager to read the information.

6.2 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 [8]. At the same time, the shared playing cards worked as boundary objects [18] and helped to share focus on the task. This took the attention away any role-play performance, and onto the discussion.

6.3 Connection

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)" [3].

6.4 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. FURTHER WORK

This case study indicates a potential for using design games as a tool for communicating empathic insights. As a next step a more scientific approach, is needed to bring exploration of design games further and produce reliable data for conclusions.

My hypothesis is that since the games have the possibility to guide the balance between cognitive and affective modes, and also require even more involvement from the participants, than empathic observation of users' activities, games will be more effective, and have stronger transformative power.

To sustain the empathy within the organization, IDEO asks for a rethinking of methods and deliverables, and suggests 'empathic artifacts' [9], that may help the organization retain its empathy. I think an empathic design game, also may constitute such an artifact, and in addition provide an experience.

REFERENCES

1. Koppen, E. and C. Meinel, *Knowing people: the empathetic designer*. Design Philosophy Papers, 2012. **10**(1): p. 35-51.

2. Leonard, D. and J.F. Rayport, *Spark innovation through empathic design*. Harvard business review, 1997. **75**: p. 102-115.
3. Koupric, M. and F.S. Visser, *A framework for empathy in design: stepping into and out of the user's life*. Journal of Engineering Design, 2009. **20**(5): p. 437-448.
4. Mattelmäki, T., E. Brandt, and K. Vaajakallio, *On designing open-ended interpretations for collaborative design exploration*. CoDesign, 2011. **7**(2): p. 79-93.
5. Hanington, B., *Methods in the making: A perspective on the state of human research in design*. Design issues, 2003. **19**(4): p. 9-18.
6. Gaver, B., T. Dunne, and E. Pacenti, *Design: cultural probes*. interactions, 1999. **6**(1): p. 21-29.
7. Mattelmäki, T. and K. Battarbee. *Empathy probes*. in *Pdc*. 2002.
8. Mattelmäki, T., K. Vaajakallio, and I. Koskinen, *What Happened to Empathic Design?* Design issues, 2014. **30**(1): p. 67-77.
9. Battarbee, K., J.F. Suri, and S.G. Howard, *Empathy on the Edge: Scaling and sustaining a human-centered approach in the evolving practice of design*. 2014, IDEO.
10. Vaajakallio, K., et al., *Service co-design with the public sector: Challenges and opportunities in a healthcare context*. Proceeding from the Include Asia 2013, 2013.
11. Suri, J.F., *The experience of evolution: developments in design practice*. The Design Journal, 2003. **6**(2): p. 39-48.
12. Kimbell, L., *Designing for service as one way of designing services*. International Journal of Design, 2011. **5**(2): p. 41-52.
13. Saco, R.M. and A.P. Goncalves, *Service design: An appraisal*. Design management review, 2008. **19**(1): p. 10-19.
14. Grönroos, C. and P. Voima, *Critical service logic: making sense of value creation and co-creation*. Journal of the Academy of Marketing Science, 2013. **41**(2): p. 133-150.
15. Sangiorgi, D., *Transformative services and transformation design*. International Journal of Design, 2011. **5**(2): p. 29-40.
16. Mattelmäki, T. and F. Sleeswijk Visser. *Lost in Co-X: Interpretations of Co-design and Co-creation*. in 2011). *Diversity and Unity, Proceedings of LASDR2011, the 4th World Conference on Design Research*. 2011.
17. Vaajakallio, K. and T. Mattelmäki, *Design games in codesign: as a tool, a mindset and a structure*. CoDesign, 2014. **10**(1): p. 63-77.
18. Brandt, E. *Designing exploratory design games: a framework for participation in participatory design?* in *Proceedings of the ninth conference on Participatory design: Expanding boundaries in design-Volume 1*. 2006. ACM.
19. Ekspertgruppen, *Et NAV med muligheter: Bedre brukermøter, større handlingsrom og tettere på arbeidsmarkedet*. 2015, Regjeringen.
20. Schmidt, F.L. and J. Hunter, *General mental ability in the world of work: occupational attainment and job performance*. Journal of personality and social psychology, 2004. **86**(1): p. 162.