Design Thinking in Practice – Introducing Design for Renewing Bank Services

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Abstract: The growing importance of design in product and service development in recent decades has created a growing interest in design thinking (DT). This paper seeks to complement this discussion, by describing an example of the concept of DT as it is implemented in practice. We examine what happens when a DT project is introduced into an organisation (a bank in Poland). The paper contributes to the existing literature in three ways. Firstly, it provides a case study example on a particular translation of DT into an organisation with no prior experience in DT, describing some of the main challenges and difficulties that occurred. Secondly, it highlights some of the cultural changes in the organisation provided by this new way of thinking. Thirdly, it points towards a discussion on how design methods can be a vehicle and agent for organisational change.

Keywords: Design thinking, change management, service innovation, end-user approach

1. Introduction

It has been almost forty years since Nobel Laureate Herbert Simon declared the importance of design to managers, stating that, like the engineer and the architect, the manager is a form-giver who shapes social organisations and economic processes in order to create value (Boland, Collopy, Lyytinen, & Yoo, 2008, pp. 11–12). The growing importance of design has historically created a larger interest in the way designers act and work (Cross, 1982, 2011); how they solve wicked problems (Buchanan, 1992) and think differently leading to more innovations (Carlgren et al, 2014a). In recent years the concept of design thinking has become popular especially in management literature (Brown, 2008; Martin, 2009; Liedtka & Ogilvie, 2011) where it is presented as a remedy for the lack of creativity and innovation in modern organisations. However popular, DT is still a rather loose term with several different meanings (Johansson-Söldberg, Woodilla, & Cetinkaya, 2013). Kimbell (2011) remarks that design thinking, as it is presented

by its proponents in a majority of popular articles, such as Brown (2008) and Lockwood (2009), do not draw extensively on research in either design studies or management and organisation studies. As a result, DT remains under-theorized and understudied. According to Carlgren, Elmquist, & Rauth (2014a) studies of the potential value of the use of DT are also scarce in the areas of both design and innovation research. Stephens & Boland (2014) point out that scholars and practitioners have given little consideration to how this approach should be incorporated into organisational systems, and Carlgren et al. (2014b) points to that the practical evidence of what happens when DT is introduced in organisational settings is missing.

This paper seeks to complement these few previous studies by describing a practical translation of the concept of design thinking into an organisation. We do so by examining what happened when a DT project was introduced into an organisation with no prior experience in the concept. Our main research question was: What happens when DT is introduced in an organisation for the first time? In particular, our interest is in how DT can become a change agent in an organisation. We were inspired to ask this question after studying the existing literature of DT. The way DT is presented in mainstream management literature suggests that DT is a rather smooth and easy-to-implement process. However previous research on organisational change and innovation, points to many challenges and difficulties when implementing new, more creative ways of working. We find that this critical and reflexive approach to DT is somehow missing in studies of DT. The case study presented in this article is based on a design thinking project implemented in a bank in Poland. The project was implemented in collaboration with a Polish design consultancy specializing in DT. In the first part we present a detailed description of the project, with its different phases and actions that have been taken. That is followed by a discussion about different types of challenges and changes that occurred during and after the project finished. Finally, we conclude on our initial approach and suggest some areas for further study.

2. Conceptualising design thinking

In most mainstream (change) management literature it is commonly mentioned that the ongoing market challenges and changes constantly force companies to search for new ways to build competitive advantage, promoting the use of new tools and processes to create distinctive products and services. In this context various definitions of design tools and design process approaches have steadily been gaining popularity - not only in company activities, but also in business research (Martin 2009; Veryzer & de Mozota 2005; Liedtka & Ogilvie, 2011). Rylander (2009) note that design thinking has become a buzz-word among managers. One of the most popular advocates of design thinking, Tim Brown (2008) defines DT as follows: “Design thinking is a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity”. Lockwood (2009) similarly defines DT as “… generally referred to as applying a designer’s sensibility and methods to problem solving, no matter what the problem is. It is not a substitute for professional design or the art and craft of designing, but rather a methodology for innovation and enablement”.

These rather broad and loose conceptualisations of DT have found critics in the design research community (e.g. Tonkinwise, 2011; Johansson-Sköldberg et al., 2013; Jahnke, 2013). The main critique being that despite their widespread

popularity, they are presenting the concept in too simplistic and too optimistic ways, with vague and general terms providing generalisations such as "the designer's sensibility" without explaining what it consists of and how well non-designers might develop and make use of it (Stephens & Boland, 2014, pp. 1–2). Carlgren (2013, p. 30) notices that the managerial discourse on DT has been blamed for "presenting the concept as something that will create value in any setting, and is straightforward to implement". And Stephens & Boland (2014) point out that "it is overly simplistic to import a set of design-thinking practices (e.g., sketching, role-playing, prototyping) and expect their use to automatically resolve "wicked" problems in an organisation". Presenting various design tools as a toolbox from which one can pick and choose, regardless of skill, leaves out the knowledge needed to use these tools and competencies - which, according to Johansson-Sköldberg et al. (2013), requires years of training and is embodied in designers. Furthermore, as a result of this, some scholars state that the artistic and aesthetic dimensions of design knowledge are often repressed in the DT discourse (Jahnke, 2013; Kimbell, 2012; Tonkinwise, 2011). Kimbell (2011, p. 294) further remarks that design thinking, as it is presented in a majority of popular articles by its proponents (by scholars like Brown, Martin etc), do not draw extensively on research in either design studies or management and organisation studies.

Perhaps as a consequence of this DT appears rather vaguely defined, and many researchers do point to the lack of a common understanding of the concept (Johansson-Sköldberg et al. 2013; Kimbell, 2011). Some authors take a methods-approach in an attempt to define what DT is. According to Seidel & Fixon (2013, p. 20) three methods are commonly cited within a design thinking approach (cf. Brown, 2009; Lockwood, 2010; Martin, 2009): (1) need-finding: encompassing the definition of a problem or opportunity by the use of observation; (2) brainstorming: a formal framework for ideation; and (3) prototyping: building models to facilitate the development and selection of concepts. Carlgren (2013; Carlgren et al., 2014a; 2014b) frame DT as a set of five core principles: focus on the user; challenge the problem; include diverse viewpoints; make tangible; and experiment. Liedtka (2015, p. 927) notices that there are three significant changes and additions worth noting about DT that were not prominent in earlier writings of design theorists: (1) who designs (orientation toward co-creation), (2) the role of empathy and (3) strong emphasis on the concrete and the visual to highlight the key role of visualization and prototyping. With these principles in mind, we will now continue into our case study, studying the implementation of some of them in practice.

3. Research methodology

The project which led to the following case description was originally exploratory in nature, designed to gather qualitative open-ended data. Given our exploratory aim an inductive case study approach was considered appropriate (Eisenhardt, 1989; Yin, 2003). In practice the empirical material was collected through in-depth interviews with respondents directly involved in the DT project in the case company. We further decided to conduct qualitative interviews with two groups of experts, and the choice of them was purposeful. The first group consisted of DT consultants from design agencies working with organisations in facilitating DT processes. The second group consisted of representatives from the company, and among these the managers being responsible for the DT project group. In total 10 interviews were conducted in the period from June to December 2014: 5 with consultants, 5 with managers and team members, and all past the event, describing the project in past tense. The interviews lasted from 40 up to 90

minutes, and they were recorded and fully transcribed for later analysis. The details of the respondents are omitted and anonymised due to confidentiality reasons.

The analysis is hence built on narratives about the past events. According to Dawson and Buchanan (2005) narratives are widely used as vehicles for reporting organisational life and can be used as valid sources of knowledge. As explained by Putnam et al. (1996, p. 386–387) narratives are: "ubiquitous symbols that are prevalent in all organizations. Also referred to as stories, scripts, myths, legends and sagas, narratives are accounts of events, usually developed chronologically and sequentially to indicate causality. (...) They are the vehicles through which organizational values and beliefs are produced, reproduced, and transformed."

Czarniawska's (1998, p. 2) states that a narrative requires at least three elements: an original state of affairs, an action or an event, and the consequent state of affairs. She also notes that narrative plots rely on human intentionality and context, and are based on a chronology – this happened first, then that happened next. Narratives, by definition, thus link antecedent (or antecedents) with action (or a sequence of events, or a process), with consequence (or pattern of outcomes) (Dawson & Buchan, 2005). Because we were researching projects that were finished and implemented, our direct access to the happenings as they took place was not possible. What we could (and did) research were stories and narratives about these events, told by some of the leading participants directly involved. We are aware of the limitations that are related to this approach, as well as the fact that we have spoken to consultants and managers only, which is why we have remained critical in our approach, and when possible used data triangulation methods in order to maintain some credibility to the results. The identities of the respondents and the names of companies in the text are coded according to the agreement between the researchers and the organisation under study.

4. The case of a DT project implementation

In the following we focus on one case study of an implementation of a particular reading of a DT concept in one of the banks in Poland. We do so in order to look for how the practical implementation of the concept was translated into the organisation, and whether innovation and possible change outcomes was achieved. The case study presented in this article is based on a DT project implemented in a bank in Poland. The project was implemented in collaboration with a Polish design consultancy specialised in DT. The aim of the project was to look for innovation areas and new business opportunities in banking services. In the first part we present a detailed description of the project, describing the different phases and actions that were taken. This is followed by a discussion about different types of changes and challenges that occurred during and after the project finished.

4.1. About the project

The beginning of the project took place when one of the directors of the bank took part in a design thinking workshop. He became very interested in the examples presented during the workshop and also in the design thinking concept as a method for implementing innovations in organisations. He started to talk to the design consultancy that he would later collaborate with, and decided to co-develop a project. Because the company had no prior experience in DT, the project was led entirely by the consultancy. The project leader was the owner of

the consultancy – a person with a background in strategic management consultancy, who in recent years had started to develop projects using the DT approach. The project was divided in 4 phases and lasted from November 2010 till the end of October 2011. The phases were as follows:

- Phase 1 – Looking for a value proposition – ethnographic research (5 months)
- Phase 2 – Designing and initial testing of first solutions (4 months)
- Phase 3 – Prototyping and tests of the chosen solution (3 months)
- Phase 4 – Roll out (1 month + continue)

The bank originally approached the DT consultancy with the need to create innovation, which would create a unique value for customers from the mass premium market. They did not know what type of service they wanted to create, but they "knew" that they wanted a new service for an affluent type of customer. The project leader from the design agency reflected upon this:

> At the beginning it was not known what this project was supposed to be about (...) The initial brief was very open. They asked us to "look for innovation" ... to surprise them with something new, something that is not yet on the market and something that would grow the overall business. It was supposed to be in the segment of the mass premium consumers. It was a very difficult brief, because it was so very open, so we had to look in different parallel directions.

The team started to look for problem areas, and eventually decided to narrow it down to investment advisory services for customers. In the first inspiration phase the scope of work was divided between the design agency and the bank. The role of the design agency was, in general, the customer area. They were responsible for designing and conducting customer research and, later on, for defining a value proposition. The role of the bank was to look for interesting and potential technologies in the area of customer services. The first step taken by the design consultancy was to conduct a deep ethnographic research study of the profiles of premium consumers. They analysed different segments, and after recognising most of them, they moved on to conduct in-depth interviews with customers from the segments that seemed to be the most interesting to pursue from a business perspective. The interviews were carried out at the premises of the customers, and they were accompanied by observation techniques. The second stage was to explore the offers of the competitors, with the use of mystery shopping and role-playing techniques. The team members were visiting different bank branches and tested offers available in competing banks. As one of the managers reflected, they experienced the same thing in all the banks own affiliations, which actually led to the identification of the problem area:

> They were giving us a photocopied sheet of paper with a table of available deposits, completely incomprehensible to us. And that was it. So we thought ok, there is an interesting problem here!

As previously mentioned, the research was performed by the employees of the design consultancy. The employees in the bank were not engaged at this stage. After the phase of ethnographic research, the team decided to converge and work together. After gaining insights into the customers and sharing them within the team, the team started to work on initial concept ideas:

> And then we did plenty of workshops, sketching ideas in parallel on four such directions, on how to give people a better access to good investment advisory. (...) Soon after that we had defined our value proposition: "professional investment advice at hand."

The main insight here was the discovery that when a bank customer have to make important financial decisions such as deciding upon their investment strategy, or use of factoring, they expect to receive individual treatment and expert advice by the bank. In many especially smaller cities the access to highly qualified advisors is limited. The value proposition was hence defined as: “Professional advice within your reach”. The team decided to create a video-consultation system, which allows customers in different bank affiliations to access high quality advice services provided by experienced experts from the headquarter, in a convenient way. As the team leader reflected:

> We had one major problem - how to provide professional advice on a higher level than the competition, but not more expensive? Well, we came up with this idea that they have tele-conference links in the bank, so you can connect customers from different smaller branches with our experts that are based here in Warsaw.

At this stage, the team used the storyboard technique to better understand and communicate the idea:

> Well, so we sketched a storyboard that shows the customer experience with this type of service, where you have to make an appointment for a meeting like this; you walk into a branch, you walk into the videoconferencing room and you connect with a specialist that will help you with, for example, investing in the NY stock market, or with a second mortgage as an investment or anything else.

This stage was finalised with the presentation of the idea at a meeting with the board of directors. The concept was approved, and the next stage was prototyping and testing the idea. The production of the prototype was very important for the whole project. It was the first time the bank was creating a physical prototype of a service they were about to implement. One team member was reflecting on this part of the project in the following way:

> Before we came to the final solution we made a very cool prototype of the whole service experience. And we did it in one of the branches here in Warsaw, where we simply arranged a special room and invited 10 clients. We selected those early adopters, and we arranged real conversations about finances with them.

The service was very positively received by the majority of the customers, and all the team members were very actively engaged in the process. One team member was reflecting on how successful this stage of building the prototype was:

> And as it turned out they [customers] rated the service above 70 percent in terms of customer satisfaction. Through these tests we validated the whole concept behind this project. We wanted to see how the customer would react (…) and these studies came out so great that those clients not only said yes, that we want it, but the whole material (because we also recorded all the meetings on video) showed that customers felt even much more open and free than at a normal meeting face to face, and it was great!

After the whole concept was tested, the team showed the results to the board and the business side of the idea was also considered. A pilot test was implemented in 2 branches. After a few months of pilot testing the project was positively validated, and the service is now offered to the target customers in several branches in Poland.

4.2. DT as a change agent - analysis and discussion

The project developed by the team successfully rolled out throughout the organisation. To some surprise in the opinions of the interviewed respondents, the project turned out to have a much longer and lasting effect on the organisation as a whole, than was initially intended and assumed. As the team managed to implement a brand new service innovation using the DT approach, the whole concept of how the bank was looking for innovation seemed to have changed. In the following section we present some of these consequences, while emphasising on changes in the approach to developing new customer innovations, and in particular on how to approach the customers. Secondly we discuss some of the implications on the collaboration on a team level.

4.2.1. Changes in the process of developing innovative bank services

Overall, the most significant and lasting contextual and cultural "side effects" of the project were found at the organisational level. In the following we have divided them into two categories, using the quotes from the interviews to illustrate the change: (1) "It is worth talking with the client" and (2) "The way we do things here".

"It is worth talking with the client"

The first outcome of the DT project was expressed by one employee as "the change of the paradigm of thinking":

> Thanks to this project our whole paradigm of thinking has changed.

This new way of thinking (which was referred to in interviews as "a new mind-set" or "a new attitude") was in the area of the customer orientation. One employee stated that:

> We have now developed the attitude that it is worth listening to the client.

As he expressed it the customer had always been important, but it had never produced any serious results in the bank strategy or actions taken by employees. He said that it was "such a tribal knowledge, which was never really implemented":

> This kind of knowledge was such tribal knowledge before - yes, of course the customer is the boss, and you have to listen to the client. Until now I guess we never really did that.

After some time, an employee reflected back on that the whole company culture was affected by this project:

> This project was just the beginning of the creation of a culture based on the design for the client and with the client.

As we observed during the research, by understanding how deep empathy with customers and their engagement in the process (for example, by testing prototypes) can be beneficial for the final output, some of the employees eventually put this declarative knowledge into work.

"The way of doing things here"

Connected with the previous point was a second effect at the organisational level, which we have chosen to label as one respondent put it: "the way of doing things here". The changes in mind-sets/attitudes towards the customers led to a somewhat more "tangible" side effect – a change in the practical product

development process. After the successful implementation of the first DT project, the whole methodology for service and product innovation in the bank changed. As one manager said:

> On the canvas of this DT project we are now realizing other initiatives.

This was strongly connected with the change of the mind-sets/attitudes of the employees, described in the previous. The change after the DT project in the product development was mainly in the area of customer involvement. By understanding how fruitful quick verification with customers can be, the whole organisation changed the approach to how to develop innovation, by creating mock-ups, prototypes and testing them very early in the projects (which was never done before). One manager was reflecting on this:

> Now we think like "ok, let's not make a big blast out of something that we invent here, let the clients tell us what he/she thinks". So now we design the front-ends, prototypes, and interface applications for example, and we give them very early to the clients for test. And only if the whole concept validates only then do we put the whole project forward.

Another manager stated that previously "the customer was the last one to be involved" in order to validate the solutions. All the new project ideas were generated internally, without the customer engagement, which often led to market failures:

> Before [this DT project] we were designing the solutions ourselves, internally, here in the bank. And the client was the last link to know about what we did. (...) And that was the reason why many of our solutions failed in the market.

The DT project also affected other employees, not directly involved in the project. One team member highlighted that despite an initial resistance towards "the new way of doing things" the DT methodology successfully rolled out in the organisation and gained popularity among employees not involved in the project in the first place:

> Now we have the situation that different people come to us [the DT team] and report issues, and want us to help them with their project to be conducted in accordance with the design thinking methodology.

As a result of the DT project, seven employees were sent on a one-year course in design thinking and service design, which further managed to reinforce the organisational change in the area of product development.

4.2.2. Changes at the team level

The second level of change was observed on the team level. The main changes here were connected with the challenges which the DT team had to face during the implementation of the project. The respondents expressed that as a team they were facing many challenges and obstacles on a daily basis. Consequently, they managed to build a very strong team identity in order to sustain and finish the project successfully. One challenge was connected with the DT characteristics; in that the beginning of the project, as well as the outcome (even in the area of innovation) was initially unknown. According to one member this was unusual in comparison to how the bank usually operated, and employees that were outside the DT team were actively trying to sabotage this approach, forcing the team members to defend themselves:

> And especially it was such a difficult dialogue with people outside our team, because at the beginning of building the solution, we did not really know which path would be the most optimal. And the absence of such certainty, which could only be validated with the customers during tests, was very strongly challenged by people from business: "You know, or you do not know?" So we were telling them: “We have a right not to know, it is only the client who can tell us!”. They could not understand that. This was a big challenge to us all.

An interesting observation is how the team members developed a “them” versus “us” narrative to highlight the uniqueness of the DT team. One respondent even pointed out a particular “BAU – Business as Usual”– tendency for most people to maintain the status quo, and the natural tendency in the organisation to continue with the exploitation process and doing what had always been done:

> Always when you try to do something innovative and different, people from the “BAU, the business as usual”, they feel that you enter their field of competences. And it was very difficult. So for some people we tried to get them on-board, and make them a part of our project. But it’s also a challenge – you cannot have too many people in the team, and some of them just don’t fit into such a project.

Dealing with these tensions and challenges on a daily basis, the team developed a strong identity as being “outside the normal business”. They called themselves “hackers”, working outside procedures, always taking pride in the way they dealt with the challenges:

> Here you need to become a hacker, working outside of procedures!

Another team member said that:

> Our team was like the internal ambassadors of the project, but the environment around us was very hostile.

An interesting contextual challenge faced by the team had to do with the lack of a creative infrastructure. When the project developed the team lacked the right “creative” infrastructure. To create such a creative space, the director and project leader chose to transform his own office into a team space:

> I resigned from my own director office and we arranged it into a team working space. I moved my desk to this open-space in order to work with the team directly.

The move was also interesting in relation to the aspects of the legitimisation of the team in the bank, as the director symbolically became one of the team members, and thereby openly ignored the formal hierarchy in the organisation.

5. Summary and discussion

The aim of this paper is to provide a case study example of the introduction of a design thinking project into an organisation with no prior experience in DT, and reflect upon the consequences and outcomes. We initially intended to provide with an example of how the concept of DT was translated into new work practices, as well as into new attitudes/mind-sets in a particular case organisation, in order to contribute to the discussion of the definition of DT. However, as our case study also show, the introduction of DT as a change agent can also have wider, and somewhat unexpected, consequences in the organisation; some of them good, and some more unfortunate.

In this last part of our discussion we would like to return to the role of the design consultancy responsible for the implementation of the DT project, and how the chosen approach affected learning and translation into the organisation. But also on how it created tensions and conflict. Initially the project helped to achieve some lasting organisational changes and learning by disrupting some of the mind-sets, habits and organisational procedures on whether or not to involve the customer at an early stage; as stated by one team member "the way we do things here". But the changes can only be seen as partially successful. By introducing new working methods, the external design thinking specialists provided new methods of work and new mind-sets on how to approach problem-solving, especially in the area of customer involvement. During the project many tensions and problems occurred, which was later seen as part of the learning process, but which can also be seen as an indication of the trouble lying ahead.

Initially, at the organisational level of the case company, we point to the changes in the attitudes/mind-sets of particularly the team employees towards the clients ("It is worth talking with the client"). The activities, which were introduced by the design consultancy during the brainstorming and prototype test phases, provoked the biggest organisational change in the team were the co-creation and the empathy for the end-user built within the team during the interaction with customers. By being exposed to new working methods (mainly the early prototyping and validation of solutions with customers), the team members changed their statements about the way they perceived the role of the customers in the innovation of new services. As found in the literature, product development might lead to organisational change in an enterprise when the needs and the points of view of external actors, such as customers and suppliers, are brought into the organisation and thus provoke "outside-in" change, as opposed to the normal "inside-out" view of the organisation as a machine (Junginger, 2008). However, since the consultancy chose not to include any of the members of the organisation in the preliminary phases of the project, and mainly not in the part of ethnographically investigating and selecting new business propositions, the internal learning did not begin until the work with the solution spaces and prototype testing took place. This is in line with research performed by Junginger, who noted that design consultancies, when they shift their focus from "working for" an organisation towards "working with" or even "within" an organisation, provides a better opportunity for organisational change (Junginger & Sangiorgi, 2009).

In order to support and reinforce these changes, management sent selected employees to external courses in service design and DT, and created a DT task force in the organisation. This led to another change in the team connected with the process of innovation ("The way we do things here"). Changes in the mind-sets/attitudes led to a change in the formal procedures for how to approach and develop innovations in general, by emphasising a more open and collaborative multidisciplinary approach. At the team level, the main effects were related to a new and shared identity, which the team members developed during the project. This identity was mainly developed as a side effect of tackling different types of challenges that the team members had to face when seeking to collaborate with the remaining staff. One very colourful example of how the team developed this shared identity was the erosion of the formal hierarchy among the team members. But it also created a "them and us" approach to the collaboration with the remaining staff in the organisation, and eventually more or less isolated the team members as "hackers of the established" working outside ordinary procedures. This again could be related to the choices made by the consultancy, in only concentrating on a smaller group of project members, who later turned into the

DT task force. By not adopting a broader organisational approach involving more or perhaps potentially most of the organisational members, at least on a management or decision level, the project effectively created a DT "bubble" in the organisation, which eventually turned into a rogue group of 'misfits', who had to fight for their right to exist and perform their work in this manner.

6. Conclusion

We believe that our paper contributes to the existing literature in three ways. Firstly, it provides a real case study example on a particular translation of DT into an organisation with no prior experience in DT. As we have shown, popular articles written by proponents of DT often lack examples of the challenges and difficulties that occur when DT enters an organisation for the first time. As some researchers point out, there is still very little consideration to how a DT approach is to be incorporated into organisational work practices (Stephens & Boland, 2014). Furthermore, we show that the concept is presented too simplistically and over optimistically by its proponents (Brown, 2008; Lockwood, 2009). By presenting this case study, we hope to further initiate a discussion leading to a more critical and reflecting approach to DT, presenting it not only in simplistic, idealised ways, but also by pointing to the potential difficulties and challenges that companies can face when starting to work with the concept. Moreover, we point to the difficulties in conceptualising DT, and seek to provide an example of practical outcomes of its implementation.

Secondly, our paper puts the attention towards the more positive and constructive long-lasting effects of DT, which helps to understand the real value and definition of DT, by showing the changes in attitudes/mind-sets of the team members in their approach to innovation and customer involvement. This is in line with research by Carlgren et al. (2014a,b) who also points to some of the long-lasting effects on DT projects.

Thirdly, by linking the process of the introduction of DT into an organisation with the literature of organisational change, we hope to contribute to this, still very narrow discussion on how design methods can be a vehicle and agent for organisational change (Junginger, 2008; Junginger & Sangiorgi, 2009; Deserti & Rizzo, 2014). We believe that especially the last point is an interesting area to pursue in further future studies.

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