



ServDes2018 - Service Design Proof of Concept Politecnico di Milano 18th-19th-20th, June 2018

Humanizing organizations -The pathway to growth

Andrea Augsten¹, Bernadette Geuy², Rachel Hollowgrass³, Titta Jylkäs^{4,} Marjukka Mäkelä Klippi⁵

Abstract

Human-centered design approaches in organizations have emerged since the rise of service design and design thinking. The subsequent application and adoption of these methods into daily practices have been observed to be challenging, but the reason for this is not clear. Often organizations have not been built based on human-centered design principles. Moreover, the organizational context, in which these design-oriented approaches are introduced, contradicts current operating models. How does the organization overcome these fundamental barriers and create a more humanistic environment for applying humancentered design? Built on previous research, we developed a workshop methodology to enhance human-centered design principles in organizations. Here, we draw attention to the boundary between the human relations inside (employees) and outside (customers) organizations. The paper presents the foundations, methodology, and preliminary results as well as future avenues for humanizing organizations.

KEYWORDS: service design, design thinking, humanizing, organization, human-centered design

1 Introduction

Service design (SD), as a human-centered design (HCD) approach, focuses on the customers, users, employees, and stakeholders—all the humans involved, touched, or affected by the service or project in general. SD aims to look at systems at scale to gain a holistic understanding of their current state and to make improvements or derive new solutions (Miettinen, 2016). Inside companies, the aim of SD has been to bring a deep customer focus into product and service development by, for example, introducing new human-centered methods, hiring designers and design-minded people, or acquiring design agencies (Maeda, Xu, Gilboa, Sayarath, & Kabba, 2016). Nevertheless, when looking beyond processes, the driving actors are the people involved in designing the service. Still, human factors, such as interaction, behavior, and values, are often overlooked in comparison to

¹ University of Wuppertal, Germany; ² Service Design Consultant, San Francisco;

³ University of California, Berkeley; ⁴ University of Lapland, Finland; ⁵ Aalto University, Finland mail@andreaaugsten.de

systems optimization and technological functionality when organizations are driven by the principles of scientific management (Drucker, 1995).

Next to SD, the phenomenon of design thinking (DT) has gained tremendous popularity across disciplines and divisions, especially in marketing, human resources, and business development. The term originally gained traction in design research during the 1960s to explain design practices outside of design teams, and design thinking has been applied in progressive business environments since the 2000s. DT can be perceived more broadly but fuzzier by management (Johansson, Sköldberg, Woodilla, & Çetinkaya, 2013; Camposano, 2018), while SD is mostly applied to ensure concrete customer outcomes (Stickdorn, Hormess, Lawrence, & Schneider, 2018). Recent studies about DT have mainly focused on specific methods, their application (Carlgren, Rauth, & Elmquist, 2016), and the role of designers in general (Tan 2012; Yee, Jefferies, & Michlewski, 2017), but rarely on the organizational context (Elsbach & Stigliani, 2018). Conversely, discourses in service design are already looking at broader design targets, such as transformation design (Burns, Cottam, Vanstone, & Winhall, 2006), system readiness for innovation (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004) and organizational change (Junginger, 2015). Introducing and embedding SD and DT as HCD approaches nudges an organization as a whole.

In research, discourses of SD and DT have different roots. In practice, they are often introduced simultaneously and follow the same purpose: humanizing products, services, and processes. In organizations, both SD and DT are mainly applied in isolated organizational capsules—such as innovation labs—whose peripheral positioning allows little strategic alignment (Cooper, Junginger, & Lockwood, 2009; Junginger & Sangiorni, 2009; Schmiedgen, Rhinow, Köppen, & Meinel, 2015). Without this alignment, no "organizational backbone" can develop to embed new practices and propel an organization in a more humanized direction.

Humanizing an organization, from our perspective, means taking the time to understand the profound needs of all involved humans and reframing the activities in the organization based on those human needs (Pinheiro, 2014). Internal humanizing might result in, for example, employees working flexible hours, input on and control over the details and scope of each project, and advancement opportunities. Meanwhile, external humanizing can resemble speaking the customer's language and providing services when and how the customer wants them. When design decisions are made, values and success criteria for humanizing are based on the needs of all the humans involved—on human dignity. Buchanan (2001, p. 36) speaks to this point: "Human-centered design is fundamentally an affirmation of human dignity. It is an ongoing search for what can be done to support and strengthen the dignity of human beings as they act out their lives in varied social, economic, political, and cultural circumstances."

Referring to the above-mentioned literature, it seems that human relations are at the core of the organization. Hence, our proposed concept for humanizing an organization via SD offers an approach for investigating the human relations of the organization as well as ways for designing compelling, creative pathways towards sustainable and healthy growth.

To explore the topic of humanizing organizations, an action research study was conducted as a co-creation workshop at the ServDes 2018 conference. The workshop participants were engaged in a collaborative exercise that included assessing the HCD maturity of an organization, identifying organizational barriers through a compass tool, and ideating solutions using SD methods. The goal of the workshop was to discover and advocate the topic of humanizing an organization and to gain insights on how design professionals perceive the topic.

2 Literature review and defining the problem space

The research motivation for the workshop and this paper is based on our personal experiences in research and practice in Germany, Finland, and the US. We share an understanding that HCD approaches are being grounded on the needs of human beings. Nevertheless, the increasing dissemination of design techniques, tools, and methods, often labeled as DT or SD in business (Junginger, 2016), nudges prevalent processes, principles, and narratives inside organizations (Junginger, 2008; Augsten, Gebhardt, & Maisch, 2016). Being aware of the possible effects of introducing SD and DT approaches in trainings (Augsten, & Marzavan, 2017) or of in-house designers acting as change agents (Mäkelä Klippi, 2018; Minder & Lassen, 2018), we realize the need to consider the whole organizational environment. The question of what is needed in terms of design to overcome emerging organizational barriers and make them more human-centered (Geuy, Hollowgrass, & Jylkäs, 2017) needs to be further acknowledged in future research.

The question of what constitutes an "organizational design narrative" (Junginger, & Bailey, 2017) and how it should be designed to exploit the full potential of HCD inside an organization has been mostly overlooked by scholars and practitioners. Scholars such as Junginger (2008), Buchanan (2015), and Elsbach (2018) argue about the relevance of design in organizations on a theoretical basis. However, even though the dependencies between HCD and the organization might be plausible, empirical data about how HCD influences cultures in organizations is rarely existing.

Re-valuing the uniqueness of human beings

Connected to the rise of design methods, several reports indicate the presence of an era of human beings. While naturalists call the current geological era the Anthropocene, viewed as the period during which human activity has been the dominant influence on climate and the environment (Anderson, 2015), the World Economic Forum (2016) ranks complex problem-solving, critical thinking and creativity as the top three human skills needed in 2020. The International Organization for Standardization's norm on a human-centered organization (ISO 27500:2016) defines the principles of a human-centered approach as capitalizing on individual differences as a strength in the organization; making usability and accessibility part of the organizational strategy; ensuring health, safety, and well-being; valuing personnel and creating meaningful work; being open and trustworthy; acting in a socially responsible way; and adopting a total systems approach within the organization.

Taking a look at the world of employment, in our view, the barriers are related to processes, principles, and structures affecting the tendency to become more human-centered. Overall, the leading concept of Taylorism, which was popular at the beginning of the industrialization in the 20th century, aimed to optimize work activities by measuring time, cost, performance, and so on rather than by innovating, creating, and reshaping (Augsten, & Marzavan, 2017). Most mature industrial organizations are built on these principles and grew into what we perceive today as silos, structures, and hierarchy (Kwon, 2017; Laloux, 2017). With the rise of approaches like SD and DT, and with the changes in sentiment towards valuing human uniqueness, the principles of Taylorism might be requested.

To solve complex global challenges, it is proposed that the society should leave the well-trodden paths and instead value the courage and risk-taking of humans to explore new ways of creating instead of fulfilling given tasks (Morgan, 2014). From our point of view, if standardization and job fragmentation were previous principles for increasing efficiency, today uniqueness, diversity, and continuous improvement might help to enhance the capability and potential for adaptability as well as the necessary agility to meet changing market needs (cf. McKnight, 2013).

Customer-centricity fostered by the need to innovate

The introduction of approaches such as SD and DT has been primarily motivated by the need to innovate and not by the idea of humanizing an organization. Saturated markets (in the western world), resulting from the successful era of industrialization and mass customization, require companies to reshape their organizational design narratives (Junginger & Bailey, 2017). New competitors, shorter (digital) production cycles, servitization (Lusch & Vargo, 2014), and the need for speed, transparency, and collaboration are increasingly evident in digitalization (McAfee & Brynjolfsson, 2012) and highlight the changing role and power of the customer.

Besides demographic numbers, the value of understanding the customer has reshaped the process of research, insight gathering, and creation towards a more inclusive and cocreative approach. Driven by the idea of designing a "better" solution for the customer, there is growing utilization of more qualitative approaches (Sanders & Stappers, 2008). The customer is perceived as a holistic human being and observed, questioned, and met in real-life situations. Delivering a service or interacting with a customer also requires a human counterpart inside an organization. In order to value the interactions and service creation, an expanding HCD approach, aimed at the employees in the organization, is also needed (Miettinen, Jylkäs, Jeminen, & Tikkanen, 2016).

Defining the problem space

In this research, we focus on human relations, including all humans involved in organizations, both internally and externally. Humans inside an organization can be defined as employees. Humans outside an organization could be partners, customers, users, or stakeholders. Human relations, both internally and externally are built based on a shared purpose. Here, we argue that if both sides—the design of the customer relationship as well as the employee relationship—are equally taken into account, the humanization of organization can be applied. We further argue that humanizing an organization goes beyond the current application of human-centered approaches such as SD and DT by nudging cultural changes in organizations. Following the different levels of change in SD activities by Sangiorgi (2011), we propose that in order to humanize an organization, a focus on service interventions is needed in addition to a practical level of SD, which Sangiorgi calls service interactions design.

The recognized challenges in the practice of embodying SD and DT methods and the missing empirical data motivated us to discuss and elaborate on the topic of "humanizing an organization" with design experts to reveal blind spots and get a broader understanding of the design possibilities in the realm.

3 Research methods

Methodological approach and workshop set-up

The workshop concept was applied to broaden previous perspectives on the topic and reveal blind spots. It was developed collaboratively and facilitated by us, with a duration of 75 minutes and with 40 international participants as designers, design researchers, facilitators, consultants, social entrepreneurs, and managers. Working materials, such as sticky notes, blank paper, markers and pencils, and prints of the provided templates were given to each team. The workshop's aim was to explore, test, and validate the concept of humanizing the organization, including the developed compass tool. The workshop was divided into five steps (Fig. 1), which are described below:

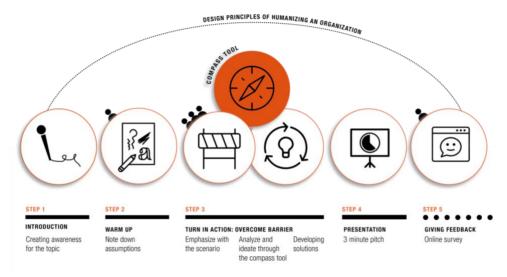


Figure 1: Workshop outline

The workshop started with a brief introduction (step 1) of the topic, followed by the presentation of the proposed compass tool and design principles. Afterwards, the workshop participants were divided into eight teams of five people.

As a warm-up (step 2) to enhance interactions and group dynamics, the participants were asked to write down a word related to the topic of humanizing an organization and then to visualize the chosen word with a sketch (Fig. 2). The participants then used the visualizations to introduce themselves to their teams. The warm-up allowed the participants to articulate their starting assumptions, share ideas, and reflect to the researchers the group understanding of the workshop topic.



Figure 2: Input talk, Warm-up sketching, design principles

Next (step 3), the participants were asked to turn the given insight into action. Five humanizing design principles were briefly introduced. They were posted on the wall of the workshop room and also included as a set of cards in the workshop materials on each

table. The derived principles offered foundational standards for assessing the human-centeredness of an organization, as follows:

- Remain flexible and adaptable. Maintain a critical eye towards organizational standards.
- Value the uniqueness of each individual.
- View customers and team members as whole people. Do not reduce anyone to a role or demographic category.
- Walk the talk. Strive for an authentic execution of humanization.
- Ensure alignment between internal and external culture.

Acknowledging the principles, the teams were directed to read and discuss the barrier that was given to their team (Fig. 3). We defined a barrier as a situation in which an organization is not exhibiting or operating in a human-centered way, and we developed scenarios based on our own experiences, which we asked the teams to discuss and ideate on. There were eight barriers in total; half of them referenced scenarios inside an organization focusing on an employee's perspective, and the other half centered on a situation outside an organization from the customers' viewpoint. The scenarios, in the use case format, included a story of a persona describing how somebody experienced a lack of humanity on the part of the organization. Each barrier was prepared with notes based on the compass tool's three areas of actions, engagements, and interactions, which were listed in the bottom quadrant of the printed barrier (Fig. 3). After familiarizing themselves with the barrier and discussing the situation, the team started working with the compass tool.



Figure 3: Example of a barrier scenario

The compass (Fig. 4) is a critical element of the workshop, functioning as a tool for assessment and ideation. The compass is a circular graphic image divided into four quadrants describing the key topic areas and two nested circles describing the contexts inside (employees) and outside (customers) of an organization. The white circle between the two layers represents the—according to previous research (Augsten, Gebhardt, & Maisch, 2016; Augsten, & Marzavan, 2017)—rarely recognized transition between the two.

Of the four compass quadrants, three were predefined for the workshop as *actions*, *interactions*, and *engagements*. Actions include the work and tasks a participant would do or any other related actions. Interactions include the form and content of communication. Engagements include the relationships between people. The compass quadrants could overlap with each other, but they serve as different lenses for evaluating the given barrier. Additionally, each quadrant is supported by hashtags and trigger questions (Table 1). The fourth quadrant was left blank to encourage the participants to consider adding missing

criteria. The participants were asked to use the compass tool to assess the barrier and then to ideate and develop a solution for it.

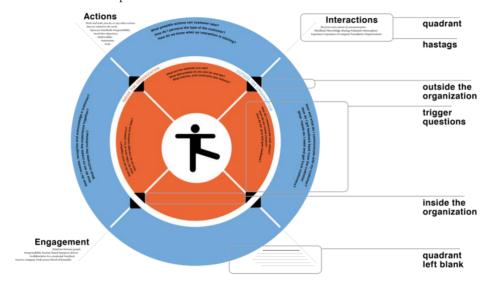


Figure 4: Compass tool

Quadrant	Inside the organization	Outside the organization
Actions	What are the methods you use? What deliverables do you aim for and see? What informs and constraints your actions?	What possible actions can customers take? How do I perceive the type of customer? How do we know when an interaction is starting?
Interactions	How do I communicate with others? How do we create content? How do we give and receive feedback?	How and what do I communicate with my customer? How do I get feedback back from the customer? What inputs do I need and get from customers?
Engagements	How do we work together? How do I take care of my relations? How do we manage conflicts and risks?	How do I assess, recognize, and acknowledge a customer? How do we co-create the experience together? What motivates the customer?

Table 1: Trigger questions per quadrant of the compass tool

The compass is based on two assumptions: First, it emphasizes the dependencies of the interactions among employees inside an organization and the relationships between employees and their customers. Second, we believe the quadrants of the compass and our methodology would enable a team to recognize situations they encounter at work, through a methodology that goes beyond "gut-based" or emotionally driven discussions. To scrutinize these two assumptions, we developed the compass tool as an instrument to assess and ideate on the humanization of organizations embedded in the described workshop concept.

Through the use of the compass tool, the teams gained insights that were used as a basis for developing concrete solutions to remedy the barrier. For the development of solutions,

paper prototyping materials were provided for the teams. At the end of the prototyping, teams presented their created solutions to other teams through a three-minute pitch (step 4). After the workshop, the participants were contacted via email and asked for their feedback (step 5). About 20% of the participants replied to the survey and left feedback.

4 Research Data and Analysis

For data collection, we divided our roles in the workshop as follows: the presenter for the topic introduction, facilitators for the teamwork, and a documenter, who captured the outcomes of the workshop through audio, images, and video clips. Each participant was asked to sign a consent form for all recordings before the start of the workshop. The teamwork (steps 2–3) was recorded partly as audio, with two recorders on two team tables, as well as video clips and images from all teams throughout the workshop. All digital data were kept associated with the paper materials produced by each team. The aim of the workshop was to test the framework (concept), the compass tool, and the principles to learn and gain feedback about the validity and utility value of the methodology. To do so, we evaluated the data set based on the following questions (Table 2).

Count	Documentation collected	Evaluative questions
8	Set of written text, notes & visuals and sketches, one per team	Did the team complete the assignment as expected and using the prescribed methodology? What challenges did the teams uncover with the tools and methodology? What additions did they make to the compass, and did they recommend an additional quadrant? Other insights?
5	Debriefs of the authors	Insights, observations about methodology & concept
1	Written field notes of one author	Additional context about the tool and methodology in practice
11	Participant feedback (via online survey)	What additional insights did we gain from the participants' retrospectives?
9	Videos and audio files taken by the conveners	How successful were the teams at completing the assignment, and what can we infer from the solutions presentations?

Table 2: List of evaluated data

Guided by the questions above and inspired by Grounded Theory (Charmaz, 2014), we analyzed the data through manual coding in three cycles and discussed the findings after each step. For all cycles, the whole data set was analyzed. The first cycle was inspired by open coding, focusing on unexpected, surprising, and extreme aspects and resulted in a list. The second cycle looked for patterns and relations between the findings of cycle one, which are summarized in concepts resulting in the first findings of the analysis, presented in the next section.



Figure 5: Different applications of the compass tool

5 Findings from the workshop

After the first run-through of the concept, we were able to gather initial results. Some of them were expected, especially those concerning the time constraints and the complexity of the workshop topic. For instance, the short time-slot eliminated fruitful discussions and feedback and, therefore, reduced our ability to gather richer or more complete information. Others were surprising and will be discussed along with ideas and avenues for possible additions or modifications of the compass tool as well as the methodology or the integration of an organizational context.

Overall, the topic of "humanizing an organization" has attracted considerable interest, and the workshop was filled to capacity. As one participant stated, "Just acknowledging that we are not machines, but we are some biological organism, is really interesting especially when [the use of] machines right now is increasing as well." The strong interest and fruitful discussions highlight prospects that are both encouraging and challenging. The strong promise of the title and the easy-to-grasp concept of the barriers indicated to us that there are everyday needs in organizations that demand new methods for developing solutions that place humans in the center.

Looking at the workshop methodology, the set-up can be viewed as a first prototype. Humanizing an organization is a complex and under-researched topic, but the workshop participants gave feedback that, even though the proposed compass tool may not support the full complexity of a situation, provided a good starting point for assessment and ideation. The workshop concept could serve as a starting point for humanizing an organization that can be undertaken, for example, at a local or department level. However, to adapt it to a real-life situation, an approach for capturing emerging barriers needs to be developed. Further research would offer the opportunity to seek additional input, to confirm the hypothesis, and to investigate if ideating barriers through the compass contributes to solutions for a more humanized organization.

The participants understood and used the compass tool to unpack a barrier situation, with the compass criteria. It also helped lead them through ideation and to solutions. Three teams, at our request, proposed additions to the compass quadrant. They suggested adding "physical environment (be together)" or "results" as the fourth area. One team suggested that we rename the four quadrants as *actions, actors, atmosphere*, and *artifacts*, referring to the existing tool as a (x 4) user-centered method for designing experience by Paul Rothstein (2000). Our proposed approach focused on interpersonal interaction and did not mention any tangible artifacts such as the working environment or working materials. It seemed to be challenging for participants to perceive an organization without its artifacts, such as spaces, buildings, and furniture.

We learned during the workshop that the participants were much more comfortable assessing internal barriers than those involving customers. Looking at the backgrounds of the participants, some of whom are consultants, we know that they work on customer-facing issues regularly. It seems that the teams had greater empathy with scenarios inside an organization, and there is an opportunity to address the reasons behind this finding in future research.

The participants in the workshop were invited to join a team with people that they did not know. Based on the workshop results, this might imply that working in a non-facilitated way as a newly-formed team might increase the teams' sense of uncertainty about how to use the compass, and it might fostered the behavior of jumping to problem-solving despite their lack of comprehension and interpretation of the compass.

To conclude, the developed concept was generally accessible, even if certain aspects need to be refined. The compass tool and the methodology show considerable potential, and they have promise in terms of helping people to assess human issues in their organizations and opening up ways to humanize and positively shape their cultures. However, as mentioned above, more workshops in different contexts and with real scenarios would be needed to test, improve upon, and evaluate the methodology and to further develop it as a concept.

6 Key learnings

Besides the previously mentioned findings, three key learnings emerged, which indicate possible directions for further research.

Empathize with the audience: Jumping from insights straight to solutions

Because the participants in this workshop were experienced designers, they are trained in developing solutions. Nevertheless, after presenting a problem, we first asked them to familiarize themselves with the problem, before ideation. This should allow them to base the solution on true insights gained from using the compass rather than on their preconceived assumptions. Interestingly, even though the participants mentioned not fully empathizing with the barrier, they started ideating anyway. All groups came up with at least one idea. To confirm this insight, we would need to run the workshop with the same time constraints and non-designers, to see if they behave similarly.

The fact that the participants jumped from insights straight to solutions leads to the question of the value of process steps. It might indicate that for those less familiar with design practices, steps provide safety, structure, and reduce uncertainty. Uncertainty may block creativity and the development of solutions. Experienced designers, like those in this workshop, may overlook steps when moving towards ideating. It could be valuable to introduce methodological interventions to avoid falling into well-trodden paths for ideation.

Linking analysis with ideation: A skinny thread

In practice, and particularly in large organizations, people are still prone to separate analysis (referring to "thinking") from the development of solutions (referring to "doing"). This phenomenon is well known (cf. Martin, 2009) but challenging to overcome, as it is accompanied by many cultural aspects inside organizations, such as hierarchy, power, and the value of steering instead of executing. Until now, design activities have mostly been delegated to a design department or outsourced to an external design agency, leaving strategy development and decision-making outside the realm of where traditional design activities have been applied (cf. Schmiedgen et al., 2015).

The intent of the compass tool is to combine the understanding of a problem with an approach for developing solutions and to strengthen the link between analysis and ideation. However, the participants found it hard to grasp the way the compass aims to link the two aspects. One participant said, "It was not intuitive to understand how to practically use the compass. Is it suited for analysis or to assess ideas?" To conclude, the tools' suitability for linking analyzing with ideating needs to be prototyped and retested.

Dealing with diversity: Understanding different design narratives

Many people have received training or a formal education on design and design methods. Rarely, however, are they able to understand or translate how their learning can be applied within the organization (cf. Weick, 1996). Perceiving designing as an activity or, according to Simon (1969), as "... courses of action aimed at changing existing situations into preferred ones," occurs in every organization (Junginger & Bailey, 2017). Hence, every organization has a design narrative regarding "design issues, design practices and design principles that dominates organizational life" (Junginger & Bailey, 2017, p. 35). However, those activities do not necessarily belong only to the role of a designer.

Designing is an activity that occurs in every organization, even if people are not aware of it. To emphasize the organizational context, the prevalent design narrative needs to be acknowledged so that solutions can be adapted to it. Addressing this issue is only the beginning, as one participant in the workshop acknowledged: "For me it was quite interesting, when we went from the ideation into something that already exists, how do we map and understand these different logics. What is the logic we are running into when we are designing solutions, and what is the logic the organization already has?" Regarding the whole framework, it would be valuable to examine how and what kinds of barriers emerge to decode existing narratives of the organization and make sense of them while designing.

7 Conclusions

In this paper, we have introduced a workshop methodology, conducted through action research, to explore the topic of humanizing organizations among design experts. We presented a compass tool, accompanied by principles and an overarching methodology in order to emphasize the relevance of designing the organization as an "artifact" (Herfurth, 2017), besides products and services. The methodology functioned as a first prototype to concretize current situations in organizations and to provide a starting point to ideate and design solutions towards a more humanized organization.

Through the research we identified possible areas for further research, including additional development of the compass tool and its application in the workshop environment as well as in practice within organizations. Due to its complex nature, the topic of humanizing an organization has many angles and approaches that must be addressed; this research has provided one approach.

The key findings indicate that we are in a first discovery phase for the organizational realm in regard to SD in practice. Further, we learned that even though phenomena such as the Anthropocene, or DT, face similar challenges in their fields, it is too early to determine whether these fields will merge in the future or if there is a tendency for more separation between practice and research. However, regarding organizational change, fields such as organizational studies or approaches such as system thinking might offer information and solutions that could positively influence the SD discourse.

References

Anderson, K. (2015, July). Ethics, ecology, and the future: Art and design face the anthropocene. In Proceedings of the Association for Computing Machinery (ACM) SIGGRAPH Art Papers (pp. 338–347). Los Angeles.

Augsten, A., Gebhardt, V. K., & Maisch, B. (2016). Change by design? Organizational learning barriers in the German automotive industry. In *Proceedings of the 20th Academic Design Management Conference (ADMC16)* (pp. 1529–1545). Boston.

Augsten, A., & Marzavan, D. (2017, June). Achieving sustainable innovation for organizations through the practice of Design Thinking. A case study in the German automotive industry. In *Proceedings of the 28th International Society for Professional Innovation Management Conference (ISPIM)*. Vienna.

Buchanan, R. (1992). Wicked problems in design thinking. Design Issues, 8(2), 5–21.

Buchanan, R. (2001). Human dignity and human rights: Thoughts on the principles of human-centered design. *Design Issues*, 17(3), 35–39.

Buchanan, R. (2015). Worlds in the making: Design, management, and the reform of organizational culture. *She Ji: The Journal of Design, Economics, and Innovation*, 1(1), 5–21.

Burns, C., Cottam, H., Vanstone, C., & Winhall, J. (2006) Transformation design. Red Paper, 2. London, UK: Design Council.

Camposano, J. C. (2018). Reconciling the Academic and Enterprise Perspectives of Design Thinking. In B. Shishkov (Ed.) Business Modeling and Software Design. BMSD 2018. Lecture Notes in Business Information Processing, Vol 319. (pp. 18–31). Cham: Springer.

Carlgren, L., Rauth, I., & Elmquist, M. (2016). Framing design thinking: The concept in idea and enactment. *Creativity and Innovation Management*, 25(1), 38–57.

Charmaz, K. (2014). Constructing grounded theory. Thousand Oaks, California: Sage.

Cooper, R., Junginger, S., & Lockwood, T. (2009). Design thinking and design management: A research and practice perspective. *Design Management Review*, 20(2), 46–55.

Drucker, P. F. (1995). *People and performance: The best of Peter Drucker on management.* Oxford: Routledge.

Elsbach, K. D., & Stigliani, I. (2018). Design thinking and organizational culture: A review and framework for future research. *Journal of Management*, 44(6), 2274–2306.

International Organization for Standardization. (2016). *ISO 27500: The human-centered organization -* Rationale and general principles. Geneva, Switzerland. Retrieved from: https://www.iso.org/standard/64239.html

Geuy, B., Hollowgrass, R., & Jylkäs, T. (2017, October). Humanizing an organization through digital experiences. In *Proceedings of the International Association of Societies of Design Research Conference 2017* (IASDR). Cincinnati.

Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *The Milbank Quarterly*, 82(4), 581–629.

Herfurth, Lorenz (2017). Organisations as artefacts – An inquiry into hidden design activities within situated organisational contexts (Unpublished PhD thesis). Lancaster University.

Andrea Augsten, Bernadette Geuy, Rachel Hollowgrass, Titta Jylkäs, Marjukka Mäkelä Klippi 1240

Johansson-Sköldberg, U., Woodilla, J., & Çetinkaya, M. (2013). Design thinking: Past, present and possible futures. *Creativity and Innovation Management*, 22(2), 121–146.

Junginger, S. (2008). Product development as a vehicle for organizational change. *Design Issues*, 24(1), 26–35.

Junginger, S., & Sangiorgi, D. (2009). Service design and organizational change. Bridging the gap between rigour and relevance. In *Proceedings of the International Association of Societies of Design Research* (pp. 4339-4348). (IASDR). Seoul, Korea.

Junginger, S. (2015). Organizational design legacies and service design. *The Design Journal*, 18(2), 209–226.

Junginger, S. (2016). Thoughts on design as a strategic art. In S. Junginger & J. Faust (Ed.) *Designing Business and Management* (pp. 37-50). NY: Bloomsbury.

Junginger, S., & Bailey, S. (2017). Designing vs designers: How organizational design narratives shift the focus from designers to designing. In D. Sangiorgi & A. Prendiville (Ed.) *Designing for Service: Key Issues and New Directions* (pp. 33-47). NY: Bloomsbury.

Kwon, C. K. (2017). Book review: Reinventing organizations: A guide to creating organizations inspired by the next stage of human consciousness.

Leopold, T.A.; Ratcheva, V., & Zahidi, S. (2016). The future of jobs: Employment, skills and workforce strategy for the fourth industrial revolution. Geneva, Switzerland: World Economic Forum. Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf

Lusch, R. F., & Vargo, S. L. (2014). The service-dominant logic of marketing: Dialog, debate, and directions. Oxford: Routledge.

Maeda, J., Xu, L., Gilboa, A., Sayarath, J., & Kabba, F. (2016). *Design in tech report 2017. KPCB.* Retrieved from http://www.kpcb.com/blog/design-in-tech-report-2017

McAfee, A., Brynjolfsson, E., Davenport, T. H., Patil, D. J., & Barton, D. (2012). Big data: The management revolution. *Harvard Business Review*, 90(10), 60–68.

McKnight, L. L. (2013). Transformational leadership in the context of punctuated change. *Journal of Leadership, Accountability and Ethics*, 10(2), 103–112.

Mäkelä Klippi, Marjukka (forthcoming). Designers as organizational change agents in Digitalization. In *Proceedings of the 21st DMI: Academic Design Management Conference: New Wave*. London, UK, August 2018.

Miettinen, S. (Ed.). (2016). An introduction to industrial service design. Oxford: Taylor & Francis.

Miettinen, S, Jylkäs, T., Jeminen, J., & Tikkanen, H. (2016). Service design for business: Value creation opportunities through service design research. In *Proceedings of the 20th DMI Academic Design Management Conference: Inflection Point. Design research meets design practice* (pp. 22–29). Boston, USA, July 2016.

Minder, B., & Lassen, A. H. (2018). The designer as jester: Design practice in innovation contexts through the lens of the jester model. *She Ji: The Journal of Design, Economics, and Innovation*, 4(2), 171–185.

Morgan, J. (2014). The future of work: Attract new talent, build better leaders, and create a competitive organization. Hoboken: John Wiley & Sons.

Pinheiro, T. (2014). The service startup: Design thinking gets lean. Hayakawa, Altabooks and Createspace.

Martin, R. L. (2009). The design of business: Why design thinking is the next competitive advantage. Brighton, MA: Harvard Business Press.

Rothstein, P. D. (2000). The challenge of understanding and designing user experience. 2000 IDSA Design Education Conference. Industrial Designers Society of America.

Sanders, E. B. N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. *Co-design*, 4(1), 5–18.

Sangiorgi, D. (2011). Transformative services and transformation design. *International Journal of Design*, 5(2), 29–40.

Schmiedgen, J., Rhinow, H., Köppen, E., & Meinel, C. (2015). *Parts without a whole? – The current State of design thinking practice in organizations* (Study Report No. 97). Retrieved from http://thisisdesignthinking.net/why-this-site/the-study/

Simon, H. A. (1969). The sciences of the artificial. Cambridge, MA: MIT Press.

Stickdorn, M., Hormess, M., Lawrence, A., & Schneider, J. (2018). *This is service design doing*. Sebastopol: O'Reilly.

Tan, L. (2012). Understanding the different roles of the designer in design for social good. A study of design methodology in the DOTT 07 (Designs of the Time 2007) Projects (Unpublished doctoral dissertation). Northumbria University.

Weick, K. E. (1996). Drop your tools: An allegory for organizational studies. *Administrative Science Quarterly*, 301–313.

Yee, J., Jefferies, E., & Michlewski, K. (2017). *Transformations: 7 roles to drive change by design*. Amsterdam: BIS Publishers.