Customer experience (CX) is a differentiation strategy often chosen by companies. But several aspects can hinder the realization of this strategic change: Existing routines, strong silo thinking among departments, and other circumstances work against the creation of a holistic CX. There is very little guidance in the literature about becoming more customer centric in practice. Within design practice, customer-centric thinking and working are key aspects. Therefore, this article addresses the question of how a design approach can facilitate a company’s change process from the abstract strategic direction of focusing on CX to a way of working in practice. The article is based on a practice-led case study of an airline company where the first author worked from within the company to test solutions directly in daily practice. We conclude that in order to move from the strategic direction of a CX focus to an applicable proposal, designers can support both top-down and bottom-up processes. A trial-and-error approach and boundary objects can be useful in finding emotional triggers for employees to reflect about their own roles.

**Key words:** customer experience (CX), strategy, internal change, design approach

**Introduction**

Services, experiences, and their seamless connection to brands are becoming increasingly important in companies (Pine and Gilmore, 2011; Sandström, Edvardsson, Kristensson, and Magnusson, 2008). Creating a high-quality customer experience (CX) is a differentiation strategy often chosen by companies to enable a connection between experience and their brand. Examples are Deutsche Telekom, Philips, IKEA, Virgin Atlantic Airways (Roscam Abbing, 2010), Starbucks (Michelli, 2006), and IBM (Badgett, Boyce,
and Kleinberger, 2007). Like agile management (Beck et al., 2001), another model underlying these strategic decisions is the Value Discipline Model presented by Treacy and Wiersema (1993). When focusing on creating “customer intimacy,” as opposed to “product leadership” and “operational excellence,” a company should “continually tailor and shape products and services to fit an increasingly fine definition of the customer” (p. 87). By providing experiences precisely created to fit a company’s most valued customer segments, these customers’ loyalty can be enhanced. Although the Value Discipline Model has also been criticized (see, e.g., Bick, Brown, and Abratt, 2004; Sherman, 1996; Sobel, 1995), Treacy and Wiersema (1993) acknowledged that future winners would have to excel at two value disciplines (Bick et al., 2004). The overall approach is a strategic mechanism, nowadays also being promoted by consultancies (Boston Consulting Group et al., 2015), involving an internal change process within the company. To achieve its strategic goal, a company can opt for CX-focused tools like customer journey mapping (Rawson, Duncan, and Jones, 2013).

Several aspects can hinder such a change: Existing routines, strong silo thinking among departments with little knowledge exchange, and other circumstances work against the creation of a holistic CX. A simple and fictive, but probably recognizable, scenario could be that a marketing department aims for a certain CX and thereby creates high expectations among customers, who unfortunately are often disappointed by the company’s operational departments that have not yet fully embraced the focus on CX. So how can companies overcome these internal hurdles and successfully change their daily practices toward a focus on CX?

There are general recommendations in the literature regarding the concept of CX (Mascarenhas, Kesavan, and Bernacchi, 2006; Shaw and Ivens, 2005; Verhoef et al., 2009) and its differentiation from Customer Relations Management (Meyer and Schwager, 2007), with advice for the different department roles in the transformation. Berry, Carbone, and Haeckel (2002) described measures to study CX and gave general outlines on how to use the findings in managerial steps. Frow and Payne (2007) presented the examples of TNT and Guinness, also with general recommendations to have “all staff and departments in an organisation collaborate in a cross-functional manner” (p. 99).

Nevertheless, applicable concrete steps on how to achieve this customer centricity in practice and in each department have rarely been described. Examples are often limited, such as Jacobs and Heracleous (2007) providing an example of “playful design as a practice of strategizing” to make a Swiss-based bank’s service more customer focused, for example, by using toy bricks for visualization. Gruber, De Leon, George, and Thompson (2015) went into detail about the design of a new consumer experience, closely related to a new workplace experience, for which six design principles were created. But what do these principles look like when they are translated into practice and evaluated within the context of use?

Within design practice, customer-centric thinking and working are key aspects. Therefore, in this article we address the question of how a design approach, as described by De Lille, Roscam Abbing, and Kleinmann (2012), can facilitate a company’s change process from the abstract strategic direction of focusing on CX to an approach applied in practice.

Method

This article is based on a practice-led case study of an established airline company with >30,000 employees where the first author worked from within the company to directly test solutions in daily practice over a period of eight months. Review of the literature, firsthand observations, 28 internal interviews, and 13 external interviews with professionals from companies and CX consultancies formed the basis for creating hands-on, practical solutions. These were developed in an iterative design process and with short feedback loops with several employees of the airline.

Project background

Financial pressure and strong competition are the main reasons why the airline in this study started its internal transformation program. Several
initiatives were started to make the company competitive again, among them the development of a high-quality CX. This strategic direction emerged from benchmark analysis and is closely related to the company’s tradition, although the official focus on CX was new to the company. As part of the transformation, a CX Program team was created as part of an overarching transformation team and a chief of CX became part of the company’s management board. The first author worked in cooperation with the CX Program team to develop a strategy and hands-on tools to support the internal change toward a more customer-focused company. Within this framework, the discussed research took place.

Insights
Multiple internal challenges for the airline were observed during the project. To define the project scope and to have the outcome be influential in this big organization, the internal research focused on the CX Program team, which consisted of the newly developed CX manager positions and their surrounding project teams and committees in the new organizational structure. Although the complete company change includes many more (potential) struggles, in the following section only challenges concerning these employees are described. The discussed insights provide the basis for designing applicable solutions that bring the CX strategy to the daily working environment of employees.

As a first step, the researchers needed to identify the current internal difficulties in the change process, to understand the company’s own perception of the CX strategy and to create an applicable approach for it.

Internal challenges in becoming a CX organization
Several internal challenges for exploring and realizing the focus on CX emerged from interviews and observations, clustered in the following topics:

- The creation of a CX vision by the CX Program team
- Fear of interrupting daily operations when focusing on CX
- The necessary change in the company’s mindset on how to innovate
- Converting abstraction into concrete measures
- A need for learning methods for research and communication of more qualitative, deep, and specialized customer insights
- Facilitating the CX organization development
- Potential struggles to keep in line with the rules of how to work CX focused

The creation of a strong and compelling CX vision by the CX Program team was mentioned by interviewees as a very important top-down measure to outline the new strategy to colleagues and to convince and motivate them for it. Management can communicate it to their project teams as a common mission (corresponding with Campbell and Yeung, 1991), but it is a challenge to design this vision in such a way that it fits the different department languages and is a consistent and understandable message to the whole company.

For realizing the CX vision, linking it with daily operations and work practices is essential. Without understanding this link, the motivation for a CX improvement will only be extrinsic, via common key performance indicators and potential bonus payments. In the airline context in this study, the more technically focused departments in particular struggled with changing their own perspective and with taking CX into account. This struggle has been found in upper management as well as in innovation project teams and in daily operations. In the following example, this mismatch between the vision of improving the CX with a holistic way of working and the current reality, in which some teams do not see their link to the CX yet, becomes clear.

There was this whole thing in the newspaper: […] On a flight from Beijing there was a customer, who was, three hours before landing, trying to commit suicide in the toilet upstairs […] in a 747 in business class. […] And then [after the incident] there was this conference call with the crew and with operations on what was going on. But we [Commercial Desk] were not included in that. […] And we asked, but there was resistance against us all the time. And now of course, everyone wants to know:
when the customer was upstairs, what was announced on board, or at all anything? Should we apologize to the other customers remaining? […] They just want to know whether the crew is ok, well that is important, and when the plane is going to land, whether there is a delay and so on. […] But not the soft factors like “what has been announced on board?” “Is the whole aircraft aware? Or is only the upper deck aware?” Because we also want to contact the customers afterwards and see whether we can do anything for them. (Member of Commercial Desk)

Management needs support in spreading the word to lower management levels, so that these teams also see, carry, and create the change in the organization. Only by including a perspective on CX in daily operations will situations such as that described above be avoided in a sustainable manner.

Another challenge we found is changing the mindset of how to innovate. To take CX into account for innovation, knowledge-sharing approaches like co-creation with colleagues and customers can help as bottom-up initiatives, but this challenges the existing way of working in the organization. A change in corporate culture is needed toward more empowerment of employees and more flexibility in management styles to increase the innovativeness of the company. The airline needs to learn not only how to overcome department silos with different ways of thinking and working but also how to break the barrier to real customers and how to directly include them in innovation processes. The customer does not limit itself because of a departmental silo; it perceives the company as a whole. This strengthens the need of an organization to collaborate across silos when choosing a CX strategy. A more outside-in approach instead of process-driven thinking is needed. In learning how to work across department boundaries in multifunctional teams, the abilities to switch between different abstraction levels and to handle uncertainty and surprise while designing a solution need to be acquired. Differences in these capabilities became explicit, for example, in cooperation between product managers and frontline staff in discussing abstract CX insights.

Research has also shown that the airline is challenged to find out more specialized customer insights and to communicate them. Project teams need to know the underlying problems of a negative CX. Only then can they improve products, services, and the CX in a sustainable way. Although the customer insights department could support project teams as data consultants, they do not have the resources to support each project team. Thus, the project teams need to have more user-friendly research tools and at least a basic understanding of how customer research functions to gain a certain level of independence. To describe CX insights and present them as convincing arguments, the visualization and communication skills of project teams also need to be improved. Very often, customers are represented only as numbers within the company so that the richness and tangibility of different CXs get lost. The rich personal stories of customers (like the example above) are no longer present, lowering the opportunity to empathize with the customer and be inspired and engaged to respond.

Facilitating the internal change has been found to be a challenge in the airline in this study too. For example, when using a method like interviewing, a project team might want to learn first from an expert on how to do this correctly. Those experts can facilitate the use of new methods and provide guidelines on how to work CX focused. Several new CX manager positions are to be created to fill this role, but their high workload at the start of the CX organization and the many colleagues and uncertainties in their precise tasks probably make support in facilitating the CX focus necessary. This means that the top-down approach—new CX manager positions—can be completed with a bottom-up approach.

Finally, there is the potential struggle in keeping in line with the rules for becoming a CX-focused organization. These rules include working transparently across department or team boundaries, trusting experts on CX (e.g., the above-mentioned data consultants), and making decisions based on objective CX findings instead of subjective experiences.
A designer’s approach
Following Junginger and Sangiorgi (2009), the chosen project approach had an emphasis on “open, participatory and iterative design processes that build capacities from within and see users and service staff as co-producers and co-designers of the final solution” (p. 4340). After an analysis of the context, the problem was reframed by the embedded designer–researcher (Dorst, 2010; Paton and Dorst, 2010). The required qualities used to evaluate the solutions’ value for the client were formulated, and a range of initial concept ideas was presented and rated. These formed the starting point for the iterative design process with regular client feedback, in which various visualization methods such as interaction visions, personas, service blueprints, storyboards, mind maps, and collages were applied. Storytelling, gamification, prototyping, and other creative approaches helped with detailing the strategy and measures for creating the CX focus in practice. Here, the design mindset of creating new possibilities for solving the given challenges, instead of choosing from given solutions (Collopy, 2004), led to a range of applicable outcomes to improve the future workplace experience (Gruber et al., 2015) that were evaluated in the context of the company (see Figure 1).

Results
A range of applicable solutions was designed using the above-described insights as the starting point: a company-wide crowdsourcing campaign, a digital toolkit, a prototype of a CX lab to interact with customers, and proposals for a new informal team role and leadership styles.
Crowdsourcing campaign
For the official start of the CX organization, a campaign based on the input of employees was developed. All departments were asked via an internal news channel: “What is your way to improve our customer experience?” The employees could send in methods, tricks, and solutions of daily work on how to take the CX into account. They could participate and win a prize by uploading photos, videos, and short descriptions with their contact details. This concept follows the advice from external sources to create a clear urgency for the topic of CX in the company and emphasize what employees already do with CX in their daily practice. Realizing that each employee’s own job does not always fully contribute to the CX was described as the first step to improvement. The campaign also helped in identifying existing CX experts within the company and making their expertise available to fellow colleagues.

Digital toolkit
This crowdsourcing campaign led to a digital toolkit to share the submitted CX methods. They are clustered into methods to research a CX and those to communicate a CX. Examples were described with text, pictures, and/or videos; included contact persons; and could be rated by users. These first two measures make methods easily accessible, invite different departments and individuals to reflect on their own impact on CX, increase the knowledge exchange within the company, and use practical examples to trigger customer-centric thinking among employees. According to the CX experts we interviewed, these characteristics are among the most useful approaches to introducing a CX focus.

CX Labs
By introducing the concept of CX Labs, that is, physical spaces to co-create with customers, the change process is made visible and tangible to both employees and customers. According to external research, this visibility of physical changes and the attractiveness of the new environment support the learning-by-doing process in the company: CX projects become hands-on and provide inspiration for what the CX strategy implies in day-to-day work. This kind of room becomes a dedicated area equipped specially to create an open, creative, and inviting atmosphere, which influences the way people behave in it. CX Labs can easily be connected to trainings and other development initiatives within the company. It was prototyped, as visualized in Figure 2, in company facilities with airline passengers and various kinds of employees.

Networker role and rotating leadership
As a means to implementing the new rules of working in the company, a new informal Networker role was created and rotating leadership was proposed. These measures use the social aspect of organizational change. As found in external interviews and literature research (Dougherty, 1999), technical solutions should not be overrated in achieving change. Face-to-face interactions have a high impact and were therefore given considerable attention. The rotating Networker role is given to a team member, who then creates events or short trainings fitting to his or her project. By connecting people on events in which the CX can be discussed, and which break the barrier between the customers and employees, the change is made as a social event that increases knowledge exchange face-to-face. The boundary to learn via direct customer contact can be overcome with a playful approach. The Networker role can rotate in combination with the team leadership so that different ideas and expertise can influence the team and its project. Through rotating leadership, the boundaries to address teamwork problems directly are lowered and the dialogue between different parties can be eased. As research has shown, these measures are useful to increase the innovativeness of a team (Davenport and Prusak, 1998; Dougherty, 1999).

The presented solutions aimed to activate the knowledge exchange within the company about CX, while both social and technical solutions were taken into account. Enforcing direct customer contact for innovation projects was the major underlying social approach to enhancing internal reflection on CX. Making CX-related tools and methods more easily accessible was one of the technical support measures.
The various solutions were also designed to reinforce each other: The CX Lab as the first prototype of the new CX-focused project work advertised the customer-centric approach for a first, small audience within some departments. Later on, the crowdsourcing campaign widened the scope on the complete company. The digital toolkit grew from the CX Lab as well as from input of the designer, the CX Program team, and the customer insights department. The collected knowledge can be applied in the CX Labs as a sort of lexicon while also supporting Networkers because they can look up previous CX events on the digital toolkit. Furthermore, Networkers can profit from the inspiring atmosphere in CX Labs for their events.

Teams are generally free to pick from these measures what works for them, although social solutions such as the Networker role need to be accepted and tested by each team individually. Compared to a solution like the digital toolkit, which has a certain date from which it is technically able to work, a change in group dynamics depends on the individuals in a team.

**Discussion**

The internal focus of the research gave a fresh perspective on the change, its dynamics, and potential challenges. The insights also led to a new discussion of a bottom-up approach among upper management. Although some of the ideas were already present in different teams, they had not been made explicit for decision makers. Doing so demonstrates trust in the creativity and power of their own employees (e.g., to see them as method experts), which is needed for the introduction of a more empowered and CX-focused way of working.

But why hadn’t the company previously come up with this range of solutions on its own? This is probably the case because the open discussion between hierarchy levels was missing, which is why the internal research findings were so interesting to upper management. The often-mentioned transparency in working across department boundaries of the CX organization was not found to be a strong part of the corporate culture yet. Next to this, the reflection in teams and committees was missing: It appeared as if a discussion about their own way of
working hardly ever took place in this company.

Furthermore, the observed implementation difficulties and unexpected problems during this research project need to be discussed. With the company being under financial pressure, the costs of an internal campaign and a digital toolkit were considered as critical factors for their realization. This is why, for example, the digital toolkit was modified and implemented in combination with other internal applications.

For the CX Lab prototype, contacting customers turned out to be difficult in practice: Online communities of the customer insights department turned out not to be useful for organizing such customer sessions within a certain time frame and with personal attendance. Also, the level of English, the free time that passengers are willing to invest, and the comfort of customers were obstacles to overcome. The fast-paced and high-security environment of an airport was found to be an ambitious place for customer research. The relaxing lounge area was found to be helpful for customer contact.

Another difficulty for implementation, such as for the CX Lab, is the risk of having a high level of attraction in its starting phase that is not then sustained. The right means to keep a strong involvement of employees over time still need to be tested. The successful use of the presented bottom-up measures partly relies on the engagement of individuals in the company.

We found that in moving from the strategic direction of a CX focus to an applicable proposal, designers can support both top-down and bottom-up processes. Top-down processes are powered by sponsors of the strategic direction in upper management, whereas bottom-up initiatives come to life through change ambassadors all over the organization. For both, designers can be facilitators and a useful addition to the traditional management approach because internal change to a different way of working can be described as a complex and “wicked problem.” These types of problems “aren’t definitive—they don’t have what decision theorists call ‘a stopping rule,’ which makes it clear when to stop refining the solution. They are messy, persistent, and complex, and they are always symptoms of other problems. While possible solutions to wicked problems can have good or bad outcomes, no solution is clearly right or wrong, and different views of these problems can lead to very different solutions” (Collopy, 2010). According to the literature, designers “follow the respected tradition of ‘questioning the brief’—a method that encourages them to dig deeper and question their assumptions” (Collopy, 2010) and provide the skills and mindset to tackle such wicked problems. For the discussed internal change to a CX focus, this means that designers can support top-down initiatives like presenting the customer perspective inside the company, communicating the CX vision, or explaining how working with a CX focus can increase innovation process efficiency. Bottom-up initiatives can be supported by designers, such as by introducing a learning-by-doing approach, in which employees can use customer-centric methods and experience a certain “wow” effect about working with a CX focus. By training with concrete examples, employees can find their own approach for improving the CX so that the intrinsic motivation and responsibility for the change increase.

A trial-and-error approach, as used in the design process, turned out to be useful to find emotional triggers for employees to reflect about their own roles. By using such an iterative design process, feedback loops with company representatives were shorter, which made the creation of suitable solutions faster. The high volume of feedback and co-creation triggered the airline’s imagination about the outcome and their new way of working, while the definition of underlying problems in the company and the mentioned emotional triggers could be refined by the designer.

Literature about innovation processes in new product development (Barrett and Oborn, 2010; Carlile, 2002) and about strategy development (Spee and Jarzabkowski, 2009) uses the term “boundary objects.” We see an opportunity for boundary objects to facilitate an empathic mindset and can be applied internally to co-create the future workplace experience. Carlile (2002) described the process of knowledge sharing in which boundary objects are useful: “I start
with the premise that knowledge in organizations is problematic; specifically, in new product development, knowledge is both a source of and a barrier to innovation. The characteristics of knowledge that drive innovative problem solving within a function actually hinder problem solving and knowledge creation across functions. [...] The concept of a boundary object, [...] describes objects that are shared and shareable across different problem solving contexts” (p. 451). Common experience descriptions, methods, and concepts for the internal change have been visualized and made explicit by the designer using an empathic approach to adapt to the different viewpoints. These visualizations with regard to boundary objects can be used by managers or teams in various contexts as the basis for discussion, to make communication about something as intangible as CX clearer, and to stimulate interaction between departments to then develop further. Boundary objects used for this change process include process overviews, drawings, photos, a movie, and session prototypes for the CX Lab in which decision makers took part (see Figures 2 and 3).

Furthermore, simultaneous efforts to create support in higher management partly made them problem owners, which also triggered a change in mindset within management. As Junginger and Sangiorgi (2009) described it, the designer took the role of an “enabler,” a “facilitator,” and a “connector” for the new CX mindset and CX-focused way of working. By researching and visualizing the ideal CX mindset and skills as well as internal problems for reaching this ideal, the transformation management team was inspired to consider new perspectives on the company’s change. Including project teams, sessions for direct customer contact were developed and customer-centric methods were introduced in daily practice. The designer connected management teams and their given ideas in the company across departments, not only along the project process, but also by creating ownership for the final outcomes across departments.

Overall, these solutions were designed to make the CX strategy applicable through the inclusion of real customers, which made the CX strategy tangible to the inside (employees) and to the outside (airline passengers). Testing the CX Labs concept in practice helped in evaluating and improving it. This involved co-creating with employee teams so that a learning-by-doing process was started directly. Additionally, building upon given ideas within the organization, making them explicit and prototyping them were important to show how the CX strategy could be integrated with the daily practice of employees. Finally, the range of solutions takes social aspects into account: Employees should enjoy the change of their company if possible, which enhances face-to-face knowledge exchange and eases innovative CX improvements through more holistic considerations across department boundaries.

**Limitations**

There are limitations to the design approach in discussing areas such as
leadership styles and organizational structures. The boundaries of the designer’s qualifications that are usable in such organizational transformations are described by Sangiorgi (2011), who states that “service design is entering the fields of organizational studies and social change with little background knowledge of their respective theories and principles” (p. 1). Here, designers need to learn from organizational studies and management disciplines, because “designers are not necessarily trained to work on highly complex issues or to direct their work toward transformational aims. The traditional design consultancy may need to change its practice and relationship with clients and reconsider its identity within design interventions” (p. 31). With this in mind, the designer’s role as transformation agent was handled carefully. As a result, structural changes like rotating leadership had to be formulated as an open proposal to management.

Implications

The findings of this study contribute to the discussion of the designer’s role in organizational transformations (Sangiorgi, 2011). We show that applicable approaches, supporting both top-down and bottom-up initiatives for internal change, can be the results of the combined efforts of management and design. The above findings and conclusions apply to practitioners from both fields: Designers should not underestimate the power of creating clarity in discussions through visualizations and should use their outsider role and fresh perspective to facilitate change in a company by training internal trainers.

Managers who are challenged by such a transformation can use the potential of design described in this study. Management can be supported by designers by iteratively creating triggers to change corporate culture. The project has also shown that introducing a CX focus can be a learning experience for everyone in an organization. This is why an open discussion to reflect about each individual’s own way of working should be created in such change processes, from frontline staff to higher management. We suggest making the CX facilitator a clear role within an organization and staying patient and strict in achieving the CX focus.

Future research needs to be done on how a company’s change can develop and be supported over time, measuring the success of design approaches based on a range of key performance indicators. Also, the wider picture should be taken into account: How do cultural differences between companies influence each other in cases of mergers and acquisitions? And how can these differences be overcome through a design approach?

Acknowledgments

Many thanks are due to the participants of the study and the airline.

Reprint 18121SCH28

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