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Design thinking in the organizational development of a 350-years old university library

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Abstract

The purpose of this conference paper is to showcase how the user experience (UX) methodology of design thinking can facilitate organizational change processes in situations of multiple and often conflicting values and opinions in university libraries. The paper also elaborates on the application of design thinking under both normal circumstances and Covid-19 restrictions. The conference paper is based on a comparative analysis of three cases of using design thinking for developing the information desk function at the main library at Lund University in Sweden. The analysis indicates that design thinking concerning experienced problems around the information desk facilitates deeper, shared understanding of the problems and can produce surprisingly quick and simple solutions to previously experienced deadlocks. The methodology has proven useful also under the present pandemic, although Covid-19 imposed limitations on its practical application. The findings suggest that the nonlinear, iterative process of designing and testing prototypes in design thinking can facilitate overcoming political impasses, organizational paralysis and resistance to change. This by helping to understand and challenge the assumptions of different staff and managers, to engage and empower them to contribute, and to provide an environment to experiment and experience potential solutions, without having to make binding decisions on beforehand. This is particularly useful in relation to complex, ill-defined problems.

Introduction

Academic libraries are experiencing needs to change to meet the future needs of their users at the same time as they often embody significant resistance to change (Pinfield et al., 2017). This may be particularly challenging in old universities, whose identities are largely based on traditions and history, where it may feel like implementing innovative ideas clashes with sustaining the traditions (Priestner and Borg, 2016). Facilitating change is further complicated by multiple and often conflicting values and opinions among different groups of people working in the library about what is the best course of action. Instead of continuously developing the organization to meet the needs of the users of the library, little happens as the organization either gets stuck in perpetual debates over what change is needed, or becomes quickly overwhelming by the search for a final ideal solution.

The University Library (UB) at Lund University in Sweden was founded in 1666. It is the central library of a decentralized library organization. In contrast to the other 24 faculty and department libraries, the University Library is both an academic library and a legal deposit library, has a broad range of special collections and around 500 study places. It is located in a building from 1907, which is regarded as one of the most beautiful in the country. The library has, thus, very diverse groups of visitors, spanning from students to tourists, and from researchers to private individuals interested in the collections. Moreover, the University Library also provides a range of central services to the library organization as a whole. It is, as such, the largest library at the university, with 100 staff members, covering a broad range of responsibilities. The library has several years of experience of working with UX methods to explore and understand the public space and other areas (e.g. Forsberg, 2017).

The information desk is among the most central functions of the University Library and must continuously develop to meet the changing needs of the various groups of visitors. It is also intrinsically linked to most of the other functions at the library,

which means that developing it involves many colleagues with different perspectives and opinions. The information desk is a vivid example of a function remaining more or less in status quo, regardless of substantial attempts to spur change over the years. To attempt to break this virtual impasse, the Section of User Services at the Department of Library Services has applied the user experience (UX) methodology of design thinking to facilitate concrete development in and around the information desk. The purpose of this conference paper is to share the results of these cases to showcase how this particular methodology can facilitate organizational change processes in situations of multiple and often conflicting values and opinions in university libraries. Since most of the cases were at least partly implemented during the Covid-19 situation, the paper also elaborates on the application of design thinking under both normal and extraordinary circumstances.

Design and approach

The conference paper is based on a comparative analysis of three cases of using the user experience (UX) method of design thinking to develop the information desk functions at the Lund University Library in Sweden. UX is the result of an interaction between the user, the system and the context, especially relevant to libraries since the focus is primarily on the user and the users' experience of the library services (Priestner, 2016). It is partly about designing, testing and evaluating prototypes that aim to address specific problems (Arvola, 2021). It is important to note that prototypes are not comprehensive, but work as a filter to focus the attention on certain aspects and ideas (Lim, Stolterman and Tenenberg, 2008). Design thinking is a powerful method for organizational development. It is different from traditional linear problem solving, by allowing explorative and iterative updates of the prototype during interaction with the stakeholders to the problem being addressed (Ideo, 2015). In this way, it is possible to challenge assumptions, get feedback directly from stakeholders and, with the help of a deeper understanding of their needs, reach solutions that were not obvious from the start. The design thinking method was therefore used in the three studied cases.

While the same design thinking method was used in all three cases, slightly different data collection methods were used for them. The first focusing on creating physical space behind the information desk, the second to increase flexible staffing of the information desk, and the third to make the public space around the information desk more easily accessible.

1. Up or Down

The space behind the information desk holds the in-house reading books and book trolleys. The purpose of the prototype *Up or Down*, were to free physical space by changing the placement of the books on the shelves from lying down to standing up. The prototype was simply tested by rearranging the books and placing an opinion box with an explanatory sign to our colleagues about our need for their contribution concerning their experience working with this prototype. The sign where placed next to the box and also included an email to enable flexibility to leave opinions when it suited them. We got feedback from most of them that it did not work as it was more difficult to read the ordering tags without moving the books. After changing the ordering tags to address the issue, the feedback was still overwhelmingly negative and the books were reverted to lying down again.

2. Librarian on call

During certain periods of the day there is no need to be 2 people staffing the information desk, but there is a need for someone to be close by to be able to quickly assist if needed. The purpose of the prototype *Librarian on call* was to create a more flexible staffing of the information desk to free up time for other duties while maintaining the same level of service. During Covid-19 the available staff became fewer due to health reasons and restrictions on using public transport and the need for flexible staffing arrangements got even more important than before. The prototype started out as a simple workspace nearby with a table, office chair, a computer and a bell, which the colleague at the information desk could ring to alert the one on call when needed. Opinion boxes were placed at the information desk and the on-call workspace, with similar signposting as for the previous case. We also made a survey to be able to identify when during the day they got called out and for what kind of

questions. The feedback on the first prototype described needs for the librarian on call to be able to perform their other duties more efficiently while on-call. The prototype was updated with more options to connect laptops and charge mobile phones, better chairs and more space. The result of the survey suggested changes in the scheduling on the when the *Librarian on call* was needed, which were implemented. While the updated prototype has been in use for a couple of years, with a gap during part of the Covid-19 situation, it is still under evaluation as several colleagues dislike staffing the information desk alone.

3. Orientation map

As mentioned before, the present library building was constructed in the beginning of the 20th century. Since then, it has been extended several times with the unintended effect of producing a layout that is difficult to navigate. In order to make it easier for our visitors, we introduced the prototype *Orientation map*, which is in essence a large map placed on a pillar close to the information desk. Opinions, experience and ideas were collected through opinion boxes targeting both staff and visitors. A box was placed in the public space together with a sign asking our visitors for opinions and ideas. Another was placed inside the information desk. We wanted to know how if the map worked in practice and what question our colleagues got concerning the map. All signs were placed next to the box and also included an email to enable flexibility to leave opinions when it suited them. After a couple of weeks, we compiled the gathered information and made updates to the prototype. For instance, highlighting the group study rooms with another color on the map, simplifying the map by using less text, using larger text, and changing the lighting of the map. The prototype is still active and we don't know the final outcome yet.

Findings and analysis

A number of themes arise when analysing the findings of the three cases of applying design thinking to address particular issues experienced in and around the information desk at the University Library in Lund, which help to structure this section. These are (1) engagement, (2) trust and support, (3) old ideas, new entrance and (4) Covid-19.

Engagement

Perhaps the most conspicuous finding concerns the engagement of colleagues in the design thinking process. Regardless of prototype, the method clearly engages and empowers colleagues to contribute, both by trying and submitting feedback about the prototypes themselves, and by suggesting new and inspiring ideas on what to do regarding experienced issues in completely different areas of the library. It was, in other words, not at all difficult to engage the colleagues, as suggested by Wahlgren (2020). This may be explained by the method providing a safe and relatively neutral environment for trying and adapting potential solutions for particular problems experienced in different ways by different people. This more iterative process may therefore be experienced as less threatening than more conventional linear approaches to problem-solving with strictly consecutive phases of investigation, design, decision and implementation. The positive engagement of colleagues may also be explained by the process helping to understand and challenge the assumptions of both staff and managers, which seems to facilitate the formulation of common goals.

Trust and support

Secondly, the findings suggest the importance of trust in both the process and the people facilitating it. Both staff and managers got positively inclined to the process of design thinking as soon as they realized that the suggested solutions to the identified problems were simply prototypes to test and not strict solutions that have already been decided, as in conventional problem-solving. It was therefore a lot less threatening from the beginning, as everybody understood that it was only a prototype (Priestner, 2021). This seems particularly useful in relation to complex, ill-defined problems. The findings also suggest that this crucial trust is largely founded in the active participation of the people who are supposed to benefit from the prototyped change (cf. Wen, 2018). Then, when a prototype was rejected as it proved not to provide enough benefit to justify the change, as in *Up or down* (Case 1), the trust in the process seemed to increase further. Finally, the findings indicate the importance of support for the process by the management of the organization, as also highlighted by MacDonald (2017). Although being

positive to UX from the start of our cases, the management of the University Library has more recently officially embraced and committed to this approach. For instance, by stressing it in the organizational planning and investing training workshops for selected staff from all departments.

Old ideas, new entrance

The findings demonstrate how design thinking can evoke old ideas that been suggested in the past, without ever being implemented for various reasons. All three prototypes in this paper are based on ideas that have been up for discussion in one way or the other over the years. While the ideas behind the prototypes were not new, it was only when they were framed as prototypes that they got tested by putting them to practice. This is a striking finding indeed, and a main argument for UX in general and design thinking in particular. This by showing how these processes can help stopping issues from either getting stuck in perpetual debates, or becoming overwhelming as the search for final ideal solution tend to spin out of control. Although UX has been suggested a mindset, and not a quick fix (e.g. Friberg, 2020 p:13), it provides opportunities for actually producing quick and visible results that serves to mobilize increased engagement in organizational development. This irrespective of the final outcome of the process in terms of the adoption or rejection of the prototype.

Covid-19

Finally, it is worth noting that the prototypes were partly tested during the Covid-19 situation, with implications on prototype testing. While the University Library never closed completely, different restrictions on opening hours, study places, number of visitors allowed, social distancing, etc. were in place during different periods. This had obvious impacts on the three cases concerning interaction with both colleagues and visitors, since less people were around in both categories. Mainly by restricting our choice of data collection methods when testing the prototype *Orientation map* (Case 3) during the Covid-19 restrictions and temporarily stopping the testing of the prototype *Librarian on call* (Case 2). Luckily, the former is still ongoing now when the restrictions are currently being lifted, and the latter will be up and running again shortly.

Conclusions

The findings suggest that the nonlinear, iterative process of designing and testing prototypes in design thinking can facilitate overcoming political impasses, organizational paralysis and resistance to change. This by helping to understand and challenge the assumptions of different staff and managers, to engage and empower them to contribute, and to provide an environment to experiment and experience potential solutions, without having to make binding decisions on beforehand. This indicates that design thinking concerning experienced problems facilitates deeper, shared understanding of the problems and can produce surprisingly quick and simple solutions to previously experienced deadlocks.

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