

## Service Systems Design AALBORG UNIVERSITY COPENHAGEN MASTER THESIS



**Title:** Briefing for Service Design Projects A Case Study of New Service Development at the Black Diamond, Copenhagen

Semester: 10th

**Project Period:** Feb 2016 - May 2016

#### Collaboration with an Organisation:

Det Kongelige Bibliotek (The Royal Library)

#### Place of the Organisation:

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Copies: 1
Pages: 131

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Finished: 02.06.2016

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### **Abstract**

This thesis provides a discussion on briefing as a process, in relation to service design projects. The research revolves around a case of new service development at the Black Diamond in Copenhagen, conducted from February through April 2016. The case was concluded with a design for a service called Crowd Curation, which enables students using the Black Diamond's culture department's offerings, to suggest and vote for which speakers should be invited to present at the venue. Grounded in exploratory user-research, the service concept was tested using pretotyping and finally delivered with concrete guidelines for further testing and suggestions for cost-effective implementation.

Based on the case, the later sections of the thesis reflect on and discuss the implications of the briefing process on the service design process, and provide concrete recommendations for how service designers and prospective clients alike may approach the service design pre-project phase from both sides of the table.

#### **KEYWORDS**

Service Design, Briefing, Client-Consultant Relationship, Libraries, New Service Development, Co-Creation, Crowd Sourcing, Crowd Curation, Participation, Business Reframing, Service Systems

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## Acknowledgements

Maria Christensen, Service Coordinator at Royal Library (KB)

Lise Bach Hansen, Producer at KB

Uffe Paulsen, Communication Coordinator at KB

Poul Erlandsen, Senior Librarian at KB

Christian Lauersen, Head of Faculty Library for the Social Sciences at Copenhagen University (KU)

Simon Bentholm, Behavioral Designer, KL7

Morten Barklund, Developer

Jane Rasmussen, Customer Service Coordinator at Statsbiblioteket

Jesper Kikkenborg Rossel, Communication Coordinator at Statsbiblioteket

Ellen Vibeke Knudsen, Director of University Library Division at Statsbiblioteket

Gitte Duemose, Educational Strategy Advisor, Ph.D. at KU

Shanna Hjorth, Administrative Officer at KU

Priya Dershini Parmalingram, Ph.D. Student at KU

Joachim Nørregaard Sørensen, Bachelor Student at KU and Intern at KB

Aksel Nok Leth, Bachelor Student at KU and Student worker at KB

Andreas Jonsson, Masters Student at Aalborg University (AAU)

Katrine Petri, Bachelor Student at Aarhus University (AU)

Maria Bjørn, Bachelor Student at KU

Benjamin Egelund-Müller, Bachelor Student at KU

Georgios Triantafyllidis, Associate Professor at AAU - Medialogy

Amalia de Götzen, Supervisor, Assistant Professor at AAU

Nicola Morelli, Supervisor, Professor at AAU

Harald Sævareid, Studio Lead, Halogen Stavanger

Harald Lamberts, Founder & CEO, Essense

And all the staff at the Royal Library who has been so kind to help us as participants in workshops and through the house in general. Also, a big thank you to our fellow students who have helped us with feedback and critique during our process.

## **Learning Goals**

In this section we will describe the official learning goals for the thesis, as well as our own personal learning goals.

#### STUDY GUIDE GOALS

Study guide states the following qualifications to be obtained:

#### Knowledge

- Must have knowledge about the possibilities to apply appropriate methodological approaches to specific study areas.
- Must have knowledge about design theories and methods that focus on the design of advanced and complex product-service systems.

#### Skills

- Must be able to work independently, to identify major problem areas (analysis) and adequately address problems and opportunities (synthesis).
- Must demonstrate the capability of analysing, designing and presenting innovative solutions.
- Must demonstrate the ability to evaluate and address (synthesis) major organisational and business issues emerging in the design of a product-service system.

#### Competences

- Must be able to master design and development work in situations that are complex, unpredictable and require new solutions (synthesis).
- Must be able to independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility (synthesis).
- Must have the capability to independently take responsibility for own professional development and

specialisation (synthesis)." (Aalborg University, Faculty of engineering and science, Board of studies for Media technology, 2012).

#### PERSONAL GOALS

In addition to goals that provided by the study board, we developed our personal learning goals that we want to examine through this project:

- Learn about how to handle client organisation's expectations from the beginning.
- Learn about co-creation with a public organisation.
- Go through a complete service design process

# Introduction

## Introduction

Service design is rapidly being established as a approach to problem-solving and is expanding as a field of research. With several international conferences and networks of professionals, a growing amount of literature and multiple dedicated higher education programmes, the field gathers interest from industry, the public sector and academia alike. The approach is a way to new opportunities, where ownership is replaced with access, users are recognised as part of the value-creation process and understanding of experience is a driver for innovation.

Plenty of successful cases highlight the usefulness of the approach (see for example Service Design Awards and the Danish Design Awards), and the process and tools has been well-described (Stickdorn, Schneider, Andrews & Lawrence, 2011; Polaine, Løvlie & Reason, 2013; Klaar, 2015).

Success stories are interesting and motivating. But our research question for this thesis is how does a service design project actually start up, and what kind of briefing does it take to get the most out of such a project - for both the client and the service designer? And what does this require of the client-designer relationship? Asking these questions are key to getting closer to how the actual practice of service design can be shared, and outcomes can be maximised (Boyer, Cook, & Steinberg, 2013).

For this thesis we have been working with the Black Diamond in Copenhagen, on the development of a new service offering for students, as a case from which to learn about exactly these questions. We finished the case itself a month before actual thesis delivery. We did this in order to take a step back from the service development itself, and review the process with the client. We have also gathered insights from professional practitioners through interviews and presentations. In the end, the goal of this thesis has been to contribute to the field of service design, by formulating tentative guidelines or advice, on how to deal with the process from both sides of the table.

## Structure of the Thesis

This thesis consists of two reports. A process report and a product report. The process report is divided into two primary sections. In the first section we present the case description of our work with the client. In the second section we reflect on the case with regards to our theoretical framework, and discuss what has been learned about what the service design process requires of client relationship management.

## Theory and Methodology

In this section, we will briefly introduce a theoretical overview of the concept of briefing, which relates to the main focus of our research in this thesis. We explore briefing processes in new service development and service design practice. We will present some stated differences between *a* brief and briefing here, and will discuss the implications of this difference as it relates to service design in the discussion section. The discussion will primarily be inductively based on the case with the Black Diamond.

#### **BRIEF AND BRIEFING**

In their book Managing the Brief for Better Design, Blyth & Worthington defines briefing as "an evolutionary process of understanding an organization's needs and resources and matching these to its objectives and its mission. It is about problem formulation and problem solving. It is also about managing change. Ideas evolve, are analyzed, tested and gradually refined into specific sets of requirements." (2001, p.3). Design briefs as a static object are not very useful, as they are acting as a contract with deadlines and deliverables (Petersen, 2010).

The first step on the road to realizing a project is the briefing process. Ill-structured briefing process can result in unusable work, waste of money and demotivated designers and clients. In some cases, the term briefing might be confused with brief; hence, it is important to distinguish between these terms (Field, 2003). Blyth & Worthington makes this distinction by stating that briefing is a process that begins without pre-conceived solutions, where options are reviewed and requirements articulated.

Whereas a brief is a product of that process that formalizes the key decisions and instructions in the project (2001).

The perception of briefing shifted from a process of discrete steps where design could not begin until the briefing stage completed, to articulating the aspirations of the client, and stimulating the design team (Blyth & Worthington, 2001). When we look into the service design field from a process perspective, Service Design is an iterative, complex and ongoing process (Stickdorn, Schneider, Andrews & Lawrence, 2011; Moritz, 2005). This matches well with the processual understanding of briefing, and we will discuss this later.

#### **CLIENT RELATIONSHIP**

Much has been written about the methods deployed in service design processes, but not much has been written about what the practice of service design requires of the client-relationship. From briefing to transparency. Some reports and papers have explored the actual deployment of service design (Akama, 2009; Kimbell, 2009) and some publicly funded projects were meant to make the benefits of service design available by outlining how to approach external agencies (Thoelen & Cleeren, 2015; Sangiorgi, Prendiville, Jung & Yu, 2015). These publications provide various degrees of insights into the process of working with service design, such as the general relationship-types Parallel, Collaborative and Integrated (Sangiorgi, Prendiville, Jung & Yu, 2015).

A parallel relationship is characterised by a traditional expert-client relationship, where the designers are hired for a job, which they then execute in parallel, or away, from the client, only to come back with a solution. A collaborative relationship is characterised by the designers leading the process after being hired, but still maintaining a very transparent workstyle. The process is of a more agile nature, which relies not so much on a final, polished deliverable, as on recurring reviews of progression with the client.

An integrated relationship relies not so much on the execution of designers' skills as the presence of them in the client organisation. This relationship is seen when the overall objective is to transfer the designers' mode of working to the client organisation.

These kind of descriptions are no doubt helpful in understanding what type of relationship might fit in a given context, but few insights are provided about critical factors in the client-relationship. So in order to look outside our own case, we expanded our literature search to the more established field of management consulting for a little inspiration. Of course the aim and scope of management consulting and service design consulting can differ quite a lot, but the fundamental aspects of outside experts coming in, may be a common point.

In their 1996 article "Consultant and client - working together?" Fullerton & West refers to a summary of three critical factors in client-consultant relationships (Fullerton & West, 1996). These are: 1. The fit between consultant skills and client needs. This is crucial to get to the best possible solution. 2. Interpersonal fit. This denotes the conduct and general likability of both sides. 3. Ground rules. This factor refers to how mutual expectations to the consultancy process should be aligned from the beginning, with a clear explanation of the consultants' approach.

As an extension of the first point, which also hints back at the relationship-types outlined above, Williams (2001) point out that knowledge is not so much transferred as it is negotiated and framed as a story. This aspect of consulting aligns very well with the co-creational mindset of service design (Sanders & Stappers, 2008; Stickdorn, Schneider, Andrews & Lawrence, 2011), which tells a believable story, rather than lecturing.

#### **METHODOLOGY**

We approach the design process through the double diamond framework (Design Council, 2007). The double diamond approach (Figure 1) is an effective visualisation of the design process, particularly in the way the two divergent phases of discover and develop hints at what has been named a cornerstone in the so-called design attitude which is characterised by embracing discontinuity and open-endedness (Michlewski, 2008).

Working with our client, we felt this aspect of our project was both the most rewarding, as well critical to explain early on. This is a point we will return to in our reflections on the case.

The double diamond is useful in describing key aspects of service design. First of all, the discover phase highlights the evidence-based nature of the methodology. In the same vein, it emphasises the fact that service design is grounded in a certain context, which designers become aware of through research. In this sense, along with more widespread understanding of the value of service design, the expectations towards the designer's role are changing. Rather than starting to design or develop a solution from day 1, designers are expected to base their decisions on

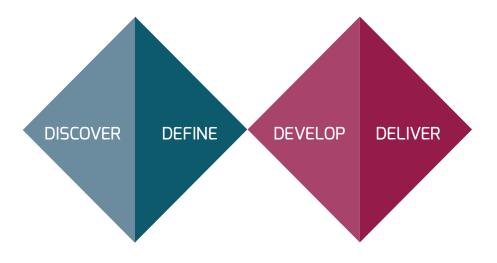


Figure 1. Double Diamond Framework

insights drawn from research.

This is also a cornerstone in the human centered design principle (IDEO.org, 2015), which emphasises an ethnographic understanding of the people we are designing for - whether they are users or employees. To this point may be added how the research and subsequent solution development is holistic (and thereby cross-silo). This means that rather than being focused solely on the user's experience of using a product or service, the implications of this product or service in the grander context of the organisation (or backstage) is also taken into account (Stickdorn, Schneider, Andrews & Lawrence, 2011). To this end a co-creational mindset is often necessary to include all stakeholders in the process, and make the

service design process beneficial for all parties. As stated in our personal learning goals, we were intent from the beginning to go through a complete design process. This meant that during the process we took on many of the various roles of the service design practitioner, identified by Akama (2009). These elaborate on the phases of the double diamond and include negotiation, ideation, facilitation, production, collaboration and organisation. She also mentions crucial skills, that often go underappreciated such as guidance, critique, constructive proposals, listening, communication and acceleration of discussion.

## Case

New Service Development at the Black Diamond

### CASE INTRODUCTION

In this section of the thesis, we will describe the background of the case and the design process of the case. The case project was initiated when our contact person at KB, Maria Christensen, enquired about students for a thesis project at the institution, because she was interested in trying to work with designers. The Finnish service design agency Hellon has identified two client archetypes, the solver and the advocate, which are characterised by their aim with soliciting a collaboration with service design professionals (Einiö, Franck, Parts, and Ranta, 2016). The solver is focused on a specific task at hand, while the advocate is trying to introduce the approach to the organisation. We identified Maria as an advocate early on, and she has been a tremendous help in involving staff in the process, which is a crucial activity to ownership and common purpose when working with service design (Akama, 2009).

The background for the case-project was that in the end of 2015, it was announced that the government will require of cultural institutions across the nation to take budget cuts, in order to redistribute the funds to other areas. For the National Library specifically, these cuts might add up to as much as DKK 30 million. Combined with the expiration of grants, the cuts mean that in 2019 the institution will be working with a budget that is shrunk by up to 10% from current levels (Mønsted, 2015).

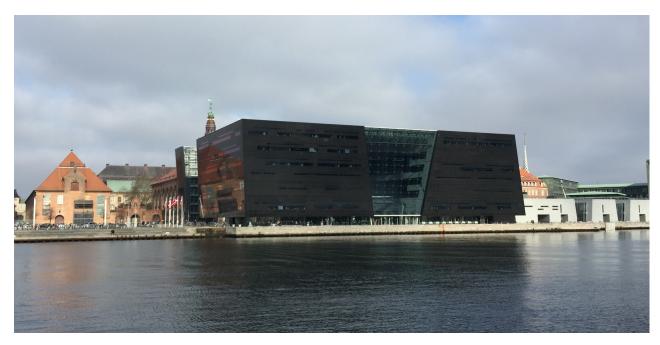
"The library recognises that the national grant will diminish even further through the coming years, and that the demand for financing growth and development through other sources of income will therefore grow." (Det Kongelige Bibliotek, 2014: p8 - our translation)

#### THE BLACK DIAMOND

In this section we will briefly introduce the Black Diamond.

The Black Diamond was completed in 1999 and was built as an extension of the Royal library of Denmark. It acts as a conference center, a museum, a concert venue and provides space for study and research on all levels.

Royal Library of Denmark consists of two libraries; the National Library and the Copenhagen University Library. The Royal Library states its mission as promoting education, research and information in the present and the future. Its vision is to be Europe's leading library amongst national and university libraries (The Royal Library, 2014, p233).



The Black Diamond - the Royal Library of Denmark

#### THE NATIONAL LIBRARY

The National library is responsible for managing the cultural heritage of both Danish and international works including books, periodicals, newspapers, pamphlets, manuscripts, archives, maps, pictures, photographs and sheet music (The Royal Library, 2014).

The National Library is responsible for various tasks such as the statutory legal deposit or organising events like concerts, exhibitions, lectures about the collections and the duties of the library, publishing research publications; and supporting researchers using library's collections. The Library also manages the digital collection of materials and the digitisation efforts of material (ibid.).

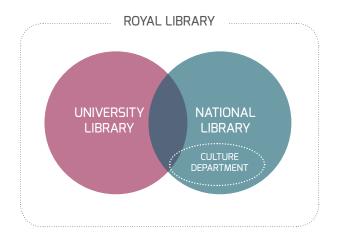


Figure 2. Divisions in the Royal Library

#### THE UNIVERSITY LIBRARY

The Royal library's main mission as a university library is to support the research and the teaching at the university by accommodating the needs of students and faculty staff for the information resources. In addition to this they should offer special services to students, researchers and the teachers of Copenhagen University in terms of making information available (The Royal Library, 2014).

The Black Diamond is popular with students from many different faculties at Copenhagen University, as well as with people from different universities. This is not least due to its central location and lack of affiliation with any faculty in particular (Figure 3).

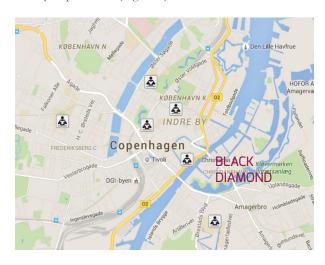


Figure 3. University Libraries of KU

#### **CULTURE DEPARTMENT**

The culture department is the department in charge of organising concerts, exhibitions and lectures. It was the service coordinator, Maria Christensen, who proposed a project around service design.

#### Students Only!

The culture department is also responsible for the loyalty programme "Diamantklubben", as well as the free student benefit programme "Students Only!" which has over 9000 members. The Students Only! club delivers discounts to normal events, as well as exclusive student-events in all categories.

## Pre-Project Phase

In the pre-project phase we had two meetings with our contact person to clarify expectations around the project, and this was a crucial period in establishing the open-ended design process. We presented our suggested timeline for the project (Figure 4), as well as how we were going to approach the project by outlining the phases of the double diamond described on page 11.

#### WHAT IS THE PROBLEM?

The first problem statement we were working from was about improving user experience for students at the Black Diamond. Specifically the contract states:

"How might service design help the Royal Library with development of services to the students at the Black Diamond? Potentially through co-creation over the next 4 years." (See Appendix 3)

Referring back to Hellon's experience in working with clients, they categorise problems into one of the three following kinds: well-structured, ill-structured and wicked problems. (Einiö, Franck, Parts, and Ranta, 2016) Well-structured problems are well understood and are easy to solve and test. Ill-structured problems are non-defined problems with no obvious right answer. Rather, there are many different ways to approach the problem. Wicked problems are unstructured, unique and very hard to test reliably.

We consider the problem we were presented as an illstructured problem, that should be approached with an open mind. We did have some guiding constraints to conform our solution to, which helped us direct our creativity and keep our focus on implementability and viability for the client.

Our project was delineated by the constraints outlined in the following section.

#### **CONSTRAINTS**

The main concern from the client was the fact that due to the budget cuts, they have very limited if any funds, to explore new concepts. For our approach, this meant that we have questioned every service component and decision in our design process, in this regard.

Moreover, KB is not in a position to hire new staff - quite the contrary, they have had to lay off staff - so whatever the solution would be, it would have to be based on existing personnel. This would have implications for our concept presentation as well as our suggestions on how they might proceed with our proposal. A final important requirement was the designated target group of students using the library.



Figure 4. Expected Process Flow

## Discovery

In this section we will present what we did to explore and understand the context of the project. It has been argued that the explorative aspect of the design process, where the context around the brief is explored, is what really sets apart evidence-based disciplines such as service design from a more traditional, intuition-based design practice (Normann, 2016). Furthermore, the discovery phase is highlighted as embodying much of the value-creation merit of deploying service design (Reason, Løvlie and Flu, 2016). This happens when the designers examine and question the context of the design brief, and open up the opportunity space.

In the beginning we decided to approach the organisation as a whole, looking at the main function of the house which is a library, as outlined in the introduction section on page 13. With this approach, we began our enquiries by focussing on libraries in general, then to what role they play in the lives of students and based on the learnings we obtained there proceeded to focus the research on what learning means to the contemporary Danish university student.

#### RESEARCH ACTIVITIES

Because of the very open brief, we started our inquiry out very widely. And because of the exploratory nature of our enquiry, we focused on qualitative research that could give the project direction, and help us ask better and more relevant questions.

#### CONDUCTING IN-DEPTH INTERVIEWS

When we conducted the interviews, we were preparing by reading up on the interviewee and preparing unstructured, open-ended questions. During the interview, one was always taking notes while the other was conducting the interview, in order to keep the conversation natural and create a friendly atmosphere. Once the interview was over, we made a point of conducting a daily interpretive analysis (Salkind, 2012). With this method the interview is talked through, and notes are made which there was not enough time to do during the actual interview. This provided us with an interpretive story (Mc-Cormack, 2000) that ensures we are both on the same page about the content and significance of the interview to the process.

#### RESEARCH ACTIVITIES



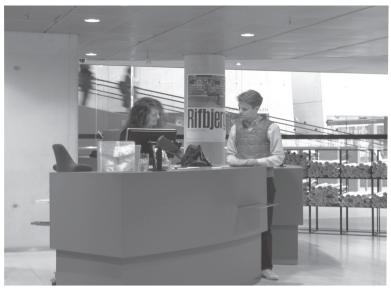
Figure 5. Discovery Phase - Overview of the Research Activities

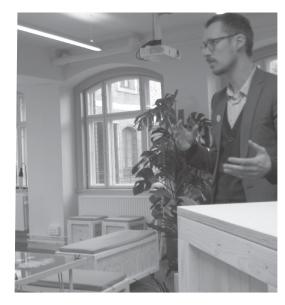
We approached the organisation by asking ourselves where the concept of a library is moving, and what is being done around the world to bring libraries forward. We looked for recent reports on libraries and library strategy, and we searched the global TED-database (TED, 2016) for TEDx-presentations from diverse stakeholders

around libraries on different topics they were concerned with. But the main source of material was in-depth interviews with various stakeholders. We interviewed students from BA to PhD level about their habits around library usage. Furthermore we had interviews set up with staff in both library and culture departments of the Black

Diamond, and also went to Aarhus to interview experts from the State library, which is similar in function to the Royal library.













Pictures of research activities. Clock-wise from top-left: Black Diamond observations, front-line staff observations, interview with Christian Lauersen, Daily Interpretive Analysis, Contextual Enquiry, Interviews in Aarhus at Statsbiblioteket.

These are the TEDx-talks we looked to for inspiration on what was being said and done about libraries around the world. This particular medium allowed us to quickly get an overview of what kind of tendencies we should be aware of when approaching our subject matter.



Get a read on this – libraries bridging the digital divide: Andrew Roskill at TEDxCharleston



What to expect from libraries in the 21st century. Pam Sandlian Smith at TEDxMileHigh



Prototyping the Library of the Future - Today | Annemarie Naylor | TEDxBrum



Can public libraries survive the electronic age? | Laura Heinz | TEDxTexasTechUniversity



Librarians of the future: Lis Pardi at TEDxSomerville



TEDxRainier - Chrystie Hill - Libraries Present and Future



The library is not a collection of books: Charlie Bennett at TEDxTelfairStreet



Collaboratories and bubbles of shush – how libraries are transforming | Helen Shenton | TEDxDublin



The library of the future | Melanie Florencio | TEDxCreativeCoast



Libraries of the Future: Tod Colegrove at TEDxReno

TEDx-talks about different aspects of libraries (TEDx Talks, 2011, 2012, 2013a, 2013b, 2014a, 2014b, 2014c, 2014d, 2015a, 2015b).

#### **KEY FINDINGS**

In this section key findings from the research phase are presented.

First of all, it became clear how diverse the library as a concept is, and how adaptive the concept is to the context it is embedded in. The user-base catered to is very wide-ranging for public libraries. (Tedx Talks, 2011)

For research libraries such as the Royal Library, one might have thought that they do not face the same kind of challenges, as they have a clearer audience to focus on. But that turns out not to be the case. Research libraries are struggling all over the world with the same challenges in terms of providing real value to their users (Erlandsen, 2016, 46:00). The challenges stem from changing userbehavior in light of progress within information technology, as well as greater demand of library services due to the greater number of enrolled students at universities and through online education (Det Kongelige Bibliotek, 2014). The library has to find ways to serve the demand for knowledge. Denmark's Electronic Research Library (DEFF) remarks that the research libraries could take up new functions to support innovation and tasks to deal with challenges for the information and knowledge system (The Lime Guild, 2009, p. 16).

It is a recurring point that libraries have traditionally been focused on access to information, and not on the access to create or share information as such. In an age where information is delivered almost instantaneously, or with such ease that people may choose to pay for access because the free, library-provided alternative is too cumbersome, some might argue that the library is dying - or at least under severe pressure. But this is not the case

everywhere, as more and more places are looking to diversify their offerings (Tedx Talks, 2014a; Tedx Talks, 2012). One of the opportunities recognized is the space that can be opened up, and used for other things (Tedx Talks, 2013b). The Black Diamond is a good example of this, as there are no books available for casual browsing, but only for reading ordered materials - and reading in general. The Black Diamond thus may be said to transcend one traditional understanding of the library-function. Instead, the Black Diamond wants to adopt the position of a "third place" between home and school. A place which "is neither home or work, but a place which provides space and opportunity for inspiration" (Det Kongelige Bibliotek, 2014: p23 - our translation from Danish).

From an expert interview with the director of the faculty library for the social sciences, we heard how some actors within the library-community are questioning the core competencies of the library. Specifically whether the library is simply a place to access information and consume it there, or if there is not still something that sets the library apart in modern society (Lauersen, 2016, 35:40).

The Black Diamond is also special in the sense that it is not a campus library as such, serving a specific faculty. It is a public center in the middle, which also acts as a museum and concert hall.

The Diamond was opened in 1999, and as we went to Aarhus to see one of the newest public libraries, the DOKK1, it was clear how the Diamond was reaching into the future, with its role as a cultural institution. The DOKK1 is located in a huge open space, serving as a multi-use house of culture. These developments are very

concrete manifestations of the evolution of the library, and how the function and role of both public and research libraries are being negotiated.

From interviewing students we realised that they are spending a lot of effort learning outside of class.

"I go to lots of these things outside of my course. Like in my free time. But, it's very rare that they invite like some entrepreneurs over and they'll be like, 'hey, look at that, you can do all these cool things if you study computer science." - (Egelund-Müller, 2016, 20:54)

Leaving the discovery phase, the points we most frequently returned to in our discussions going forward were these:

- The notion that students are looking to learn outside of the classroom.
- The fact that due to future cuts, the Black Diamond has to look for income generating activities.
- The shift towards the library as a place for inspiration in broader terms than access to information.

### Define

In the define phase all the research gathered is examined to give direction to the project. I.e. define the problem to be worked with. At the end of this phase we should have a clear idea on what kind of design we should look into to meet the different stakeholders' needs and expectations. In the context of new service development (NSD) this has also been called the "identification and matching of actual and emerging needs and technologies" (Makkonen and Komulainen, 2014). In this sense NSD should feature in a network, and is not linear. The designers cannot simply present a final concept, because it has to answer to the needs of multiple stakeholders, and so it must be "played up" against all stakeholders until it fits, so to speak.

#### SYNTHESISING FINDINGS

Having done a lot of research, we took some time to go through all of it individually, and then met up again to hold a compressed "download"-session (IDEO.org, 2015). In this session we wrote down different things that had stood out such as needs, trends or ideas. During the session we acted as interpreters (Akama, 2009) of the gathered material, and this is a turning point in the design process, as different foci appear.

The synthesised findings were then grouped into thematic categories as can be seen in the following diagram Figure 6. The three major groups were self-learning, curation of information and curation of people.

As we looked at the categories and discussed the implications of the contents to our project, we saw that the categories could be thought of as playing into two different paradigms surrounding libraries. A service paradigm and an access paradigm.

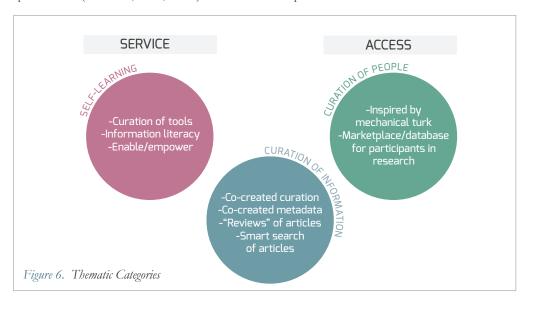
Within the access paradigm, the main role of the library is to provide access to information. This is the classic role of libraries, and it is arguably this discourse that is under pressure from the rapid proliferation of easy, free, online access to information (Det Kongelige Bibliotek, 2014; Tedx Talks, 2011).

On the other hand, under what might be called the service paradigm, the library is considered a service provider which delivers services around information. This way of thinking was also found in our expert interview with Christian Lauersen, who specifically mentioned how thinking about the library as a service provider might open up new possibilities (Lauersen, 2016, 35:40).

"Providing access to digital content is not innovative. It's just keeping up." (Tedx Talks, 2011).

In terms of providing relevant value to stakeholders, people are aware of where the paradigm of libraries as a place for access might lead. The medical faculty of Copenhagen university for example, is only buying electronic materials. (Kikkenborg Rossel, Rasmussen & Knudsen, 2016, 01:22:05) Decisions like this hints at a future, where the library can be reduced to a server that provides access to all material digitally.

Furthermore, a key component of the current library offering is the space and quiet provided to patrons who are looking for a place to concentrate. For students, it acts as an office space or the third place for inspiration they aspire to be.



#### MAP OF CURRENT OFFERINGS

During our session we also decided to map out our understanding of the ownership of the many different services the client presents on their website (Figure 7).

The map shows that few services were shared between the departments. The exercise of mapping the service offerings was really helpful in changing our perspective of the organisation. From viewing it as a fragmented one, based on the way we were talking about the project with our contact person, to a more holistic perspective where departments' offerings are supporting each other - however incompletely.

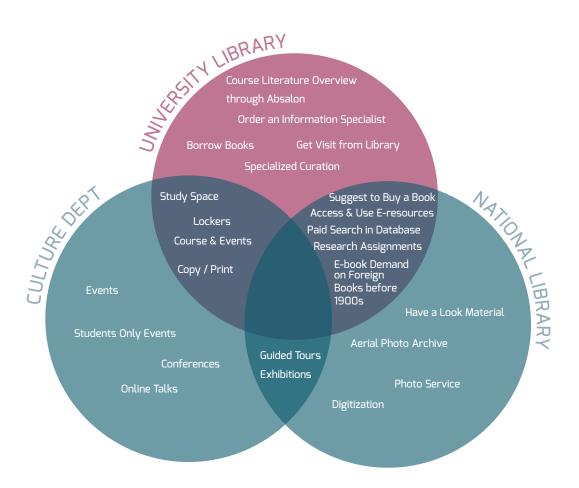


Figure 7. Map of Current Offerings

#### **DEFINING TANGIBLE ISSUES**

Through the interviews and observations, it was clear that there were a handful of diverse problems which could all be solved with small, focused projects. Since the client does not have any research about the target group, our research validated some of the problems that the library staffs were aware of. These included issues such as too few reading room seats, too expensive coffee and printing to noises in the old reading room and a rather confusing homepage.

In a sense these issues confirm the staffs' understanding that the library functions as a sort of office for the students, who in turn thought of it as a space they could go to focus.

Figure 8 represents the visible problems and advantages that was confirmed (Red is concern, blue is advantage.). This illustration was shared with the client, along with casual recommendations for how they might deal with them.



Figure 8. Tangible Small Problems that Mapped for the Black Diamond

#### MULTILEVEL SERVICE DESIGN

The multi-level service design-model (MSD) by Patricio, Fisk, Falcao e Cunha, & Constantine (2011) provided an accessible way to put into words what our research meant in terms of organisational impact. The framework (Figure 10) is comprised of the three following hierarchical levels (from top to bottom):

The first level is the service concept and value constellation. This level is a holistic view of what values the organisation is delivering to the user(s), and it is characterised by seeing the organisation's offerings as part of a constellation of service providers. The constellation visualises who provides what to the user. In doing this, the constellation becomes a tool for strategic decision making, as it enables the organisation to see in what ways it could meaningfully evolve.

The second level is the service architecture and navigation. This level is looking at the service architecture, and how it works internally within the organisation. When the propositioned values are defined in on the first level, understanding of the customer journey is used to define touchpoints and what connections exist between them.

The third level is the design of the service encounter. The main tool on this level is the service blueprint, where interactions are laid out in high detail. The work on this level is highly iterative, as many variations of a touchpoint are evaluated in terms of customer experience.

The tangible problems described in the previous section (Figure 8), belong in the third level of the service encounter. During a research phase, these very tangible problems are easy to notice, and important to be aware of, as suggesting solutions for them is a way to create rapport with the client and enable the team to move toward a more holistic customer-centered strategy. (Reason, Løvlie and Flu, 2016; Thoelen & Cleeren, 2015)

This way of looking at organisation through different layers, can be likened to looking at it through what Reason, Løvlie and Flu (2016) calls customer lifecycles or what Norman (2001) calls the difference between inherent and positional value. In this context, the latter might refer to how the value that the library provides increases if it can position itself in the context where it means the most to users.

We used this way of thinking to be aware of what level our considerations were on, and it helped us to begin looking outside the organisation, to understand the value constellations it is part of. These are discussed in the following section.

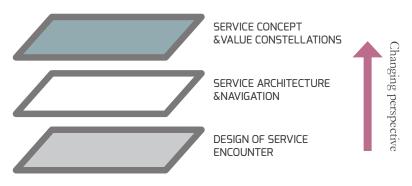


Figure 9. Multi-level service design model (adapted from Patricio et al., 2011)



Figure 10. Different journey-contexts. Adapted from Reason, Lovlie and Flu (2016) and shows how customer lifecycles can be framed differently to uncover different needs.

#### **VALUE CONSTELLATIONS**

Denmark's Electronic Research Library (DEFF) states that in the digital age the historical form of the library which is a building housing books and journals will not remain as a dominant form of the library.

"To build a strategy for the library of the future requires a better understanding of what functions a library serves to create value for its stakeholders, where this value is created, and how value creation proceeds." (The Lime Guild, p. 12).

This means that we are required to look at what larger constellation of value for the users, in our case the students, the client is part of.

First of all, figure 11 shows the four main kind of values we identified as relevant to the users, which the client is providing. These are curation, inspiration, office and access. The two latter ones have been specifically mentioned before, while the two former ones relate to for example the help an information specialist can provide a student with to find material, or the inspiration students can get from some of the many events KB is organising every month.

Secondly figure 11 shows what kind of other actors are delivering similar offerings. Places where the users of KB could go to receive similar value, outside of the KB. Information is the core competency or product of KB. This should be kept in mind when looking into what kind of service might keep the library relevant in the future as well. Although there are competitors to every value-offering, the library is uniquely positioned to work with information in ways that other players cannot. This position is examined in the following section, where we conduct a strength, weakness, opportunities, threats (SWOT) - analysis.

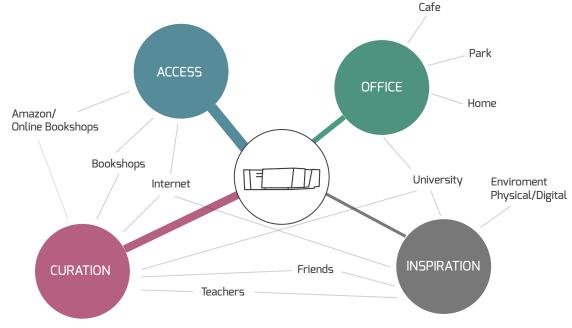


Figure 11. Visualisation of the value constellation that the client is currently part of

While mapping out the values, the underlying scope of this project became clear in that the service should aim to help the library stay relevant to students in the future as well. The key point was that the library does not exist because it has to, the library exists because it is a relevant and value-contributing actor, in students' journeys through their education.

We used this understanding and the visualisations that lead to it, to show what kind of direction our research hinted at. To this end we added a new area of value that the client could be providing to its users. (Figure 12)

In Figure 12 a new area termed "activation" is added besides inspiration. "Activation" refers to an opportunity

for the library to play a more active role in how students might learn outside of the classroom. Students are focused on using what they learn in a realistic setting, and the library has a chance to provide students with what they need, while playing into the library's strengths.

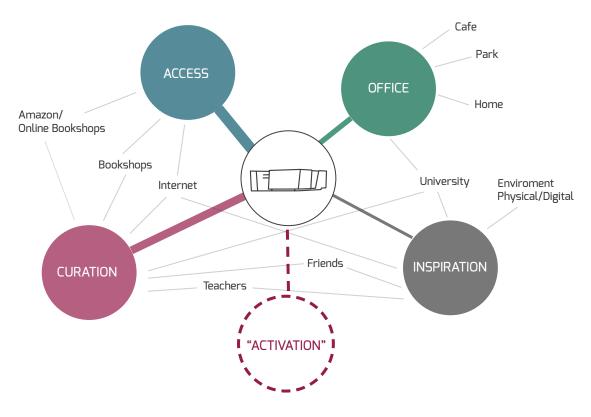


Figure 12. Value Constellations and Competitors

In order to understand the organisation as part of a larger network that creates value in the user's life (Davy, 2005; Norman, 2011), we drew out the service delivery network (Tax, McCutcheon and Wilkinson, 2013) that constitutes a university student's education in Figure 13 and 14. The "Today" side is meant to represent how both institutions are part of the students' journey, but are only statically complementary. On the "future" side, however, we can imagine a stronger complementation based on the library providing the active learning students are looking for outside of the classroom.

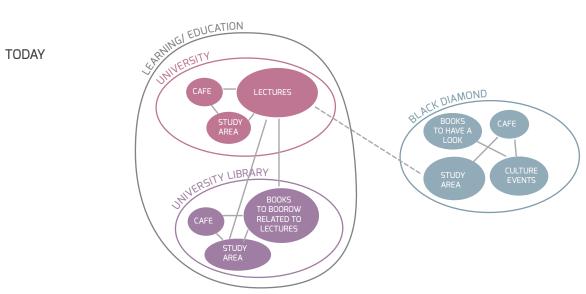


Figure 13. Visualisation of present service-delivery network.

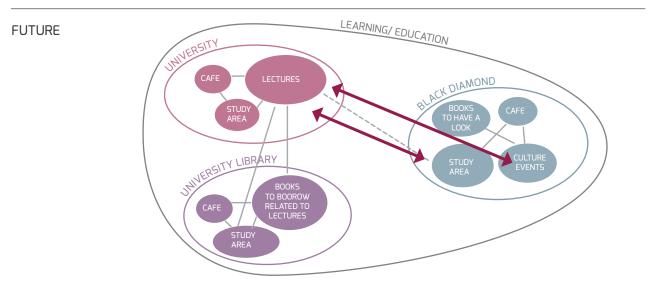


Figure 14. Visualisation of future service-delivery network.

#### **SWOT ANALYSIS**

While illustrating the value constellations, we considered what competencies the library has that given it a relevant place in the value-constellations of Figure 11 and 12.

A SWOT analysis (Figure 15) of the library was done in order to actively discuss where the library is in terms of competitive strengths and challenges. A SWOT analysis examines internal strengths and weaknesses of the organisation, as well as the external threats and opportunities around it. (Simmering, 2016)

#### **STRENGHTS**

Material/Information
History/Authority/Trust
Knowledgable Staff
Location
Strong connections
Place for Everbody

#### **OPPORTUNITIES**

Changing education
-Interdisciplinarity
-Fewer lectures
-Independence
Demand (From Top)

#### **WEAKNESSES**

Obligations
Rigid
Uncertain customer focus (Lack of deep understanding and market research)

#### **THREATS**

Other information sources becomes office space Other inspiration/curation sources library becomes passive Few/no staff

Figure 15. SWOT Analysis of the Black Diamond

#### Strengths

In terms of strengths, it was clear that the library has a lot of material and metadata. Especially the metadata is something that is very hard to replicate (Kikkenborg Rossel, Rasmussen & Knudsen, 2016, 01:36:01). The Black Diamond is also a place which enjoys a high degree of trust from its patrons. It is a place where students count on quiet, and sober, thought-provoking events.(Bjørn, 2016, 15:50; Nørregaard Sørensen, 2016, 26:51; Petri, 2016, 13:33)

The location of the Black Diamond is itself also special, because it has no faculty obligations. That means the space becomes neutral and open to everyone. Furthermore the Black Diamond has strong connections to the university, and can naturally draw on the academic resources there, but it also enjoys authority in the culture at large, as was pointed out by a producer in the culture department. She mentioned that in her experience, there is practically no-one who would not gladly present at the Diamond, because it is such an important venue to many. (Bach Hansen, 2016, 09:00)

#### Weakness

As a national and university library, the Black Diamond has several obligations managing and preserving cultural heritage, digitisation of the materials, material acquisitions, legal deposit, theft protection, maintenance of the buildings etc. (The Royal Library, 2014, p.223-227). Also, as a public cultural institution the organisation is not exceedingly nimble and open to change. Rather it has been characterised as more cautious, which might inhibit the development of radically improved customer experience. In line with this point is the fact that there is very little work done to understand the customer experience and

the customer-base. (Paulsen, 2016a, 09:55; Erlandsen, 2016, 38:05)

#### **Opportunities**

As for the opportunities opening up around the client, the changes that the educational system is going through might prove valuable. Particularly in the way interdisciplinarity is getting more common place, and fewer lectures are offered as the student body grows. There is a shift towards more reliance on the students' ability to learn by themselves (Copenhagen University, 2012; Duemose & Hjorth, 2016, 30:20). Demand from the top ensures that the client will have to actively consider new initiatives, and this may provide an opportunity for the organisation to grow in new ways.

"A very important function of the traditional research library has been to meet the needs of the students in a university, but what students need is subject to change. The majority of research libraries are university libraries (or connected closely to higher education institutions). The needs are different at different levels of higher education and at each level they are also changing." (The Lime Guild, 2009, p.11)

#### **Threats**

Threats to the organisation include the way that libraries may end up as simply a warehouse for students to come and study. Our student and expert interviews indicate that students indeed tend to use the library as their office space to study. To this point, Christian Lauersen uses his personal blog to question whether "tables and chairs is a core competency of the library" (Lauersen, 2015).

As the core competencies are being challenged by new sources of free and easily accessible information, the library might face being side-tracked in terms of the users' information needs. This hints at a need for the library to be more active in how they provide value, rather than staying in the traditional, passive provider-role.

"However, there are also a number of requests which straddle all these user groups and which all call for a more active, progressive and investigative research library. That is a research library which is not a passive communicative knowledge or data, but which is rather able to create relevant universes or scenarios of texts or data. It is a library which can touch and move the user towards what would be relevant for him/her in the given situation." (The Lime Guild, 2009, p. 32)

Finally, the library is facing the pressure of the budget cuts (The Royal Library, 2014, p.226). Since the obligatory costs remain, such as costs of buildings, protection, preservation expenses, customer facing costs and staffer expenses has to be cut (The Royal Library, 2014, p.223-227). This situation might result fewer staffers in the near future. With fewer staffers, the Royal Library and the Black Diamond are confronted with the need to innovate with less available resources.

#### PROJECT DIRECTION

Based on the SWOT-analysis, we began to see some foundational principles that could guide our vision in the definition-process. The principles, or project direction, is laid out in Figure 16.

The project was framed as how the library might service rather than access. How it might become more active and help students gain more practical knowledge by engaging with material in new ways. And how it might become more anticipatory in terms of grabbing opportunities, and thereby providing a more valuable experience quicker.



Figure 16. Project Direction

#### PROBLEM STATEMENT

We phrased the project direction as a problem statement in the following way.

HOW MIGHT THE LIBRARY BECOME MORE OF A PLATFORM
OF LEARNING RATHER THAN A SILO TO ACCESS?

By platform, we mean a place that enables and facilitates meetings between people. The platform concept is meant to signify an active stance in terms of helping users, rather than being a passive archive.

To illustrate our understanding of learning, we took Bloom's taxonomy of learning as model (Figure 17) which was created in order to support and promote higher forms of thinking in education. For example to encourage analyzing, evaluating and creating concepts, processes, and principles, rather than memorising and remembering facts (Clark, 2015). The strategy of the University of Copenhagen points out several instances of how they are shifting educational focus towards connecting knowledge with more participatory and applied activities to create innovative solutions (Copenhagen University, 2012, p.29). From this perspective, the relevance of the direction of the project is corroborated by the university's strategy.

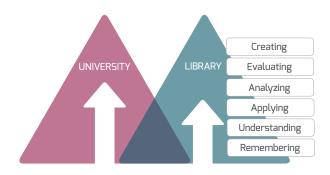


Figure 17. Bloom's Taxonomy of Learning & Shifting Educational Focus

#### **IDEATING WITH STAKEHOLDERS**

We had set a general direction in which to proceed, but in order to keep it relevant to stakeholders, we ran three workshop-sessions. Two were with staff from different departments within the library and Black Diamond, while one was with students from different universities ranging from BA to Ph.D. level.

We decided to involve staff in this part of the process, as it is especially important to achieve stakeholder ownership when dealing with experts. As Davy and Harris describes the importance of felt ownership: "Perhaps the most significant challenge is overcoming a felt threat to professional identity and confidence. Because professional confidence tends to be rooted in expert knowledge, strategic thinking may unsettle that confidence in two ways. First, strategic thinking requires stepping outside the professional's familiar area of expertise. Second, the area the professional must step into is intrinsically different" (Davy & Harris, p 97).





Pictures from ideation sessions and affinity mapping.







Illustration 1: Ideas at Workshop 1 - Culture Department

#### **WORKSHOP 1 - CULTURE DEPARTMENT**

For the first workshop we sat down with three staffers at the culture department including our contact person. The goals of the session was to present our progress so far, hear their comments and do a simple brainstorm activity with them around the problem statement. We were aware that during our synthesis process so far, we had acted as interpreters of a lot of information. So in order to take focus a bit off our judgements, we had made a short video with actual audio quotes from our interviews with students (Grøndal & Becermen, 2016b) so the participants could hear it and interpret it for themselves (Reason, Løvlie & Flu, 2016). The participants agreed with our considerations, and we proceeded to the brainstorm activity where one of us also participated to lead the way. The activity was based on three sets of cards (Appendix 5), where each participant received one of each kind. The cards were a character-card, which we had based upon our student interviews. Then a wish- or statement-card based on an actual quote from our research and finally a lateral thinking card which was an optional help meant to act as inspiration. We did three rounds and discussed all ideas in plenum after each round. The activity yielded many good and diverse ideas (See Idea Catalogue: Appendix 1), and we were confident in using the format for the following workshop as well. But in the end we were advised to prepare some material beforehand, so the next participants would be better prepared.

#### WORKSHOP 2 - LIBRARY DEPARTMENT

The first and second brainstorming groups were very different. For the second workshop we had three staff members from the library department and our contact person. The participants of the second workshop were less used to being in a role where they exercise their creativity. We had sent our presentation-material beforehand, and they appreciated that. We had stressed that they should not limit their scope to space, budget and staff problems, but it was difficult for them in the beginning to imagine substantially different futures. As this was the case, the participation of one of us became crucial, as we made a point of doing a shorter round to begin with and have our team-member present first. It was also very good that our contact person participated, as she provided credibility to the situation and understood the challenge the participants were facing in coming up with new ideas. This workshop yielded a similar amount of ideas as the first one (See Idea Catalogue: Appendix 1), and in the following day we could proceed to sort through the ideas.

Illustration 3: Organising Session - Designers

#### AFFINITY MAPPING

In order to make sense of the ideas we co-created with the two groups of staff, the two of us conducted a session of affinity mapping, where the ideas are grouped according to similarity or affinity. The categories we ended up with included ideas that supported networking in a student-to-student or library-to-student setting. The ideas were further arranged under temporal categories which focused either on services to support students during their studies or support them in preparation for the life after studies. Several ideas were also specific physical space improvements. The groupings may be found in Appendix 6.

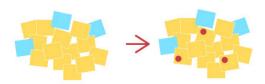


Illustration 4: Critical Review- Focus Group

#### QUALIFIED CRITIQUE

When we had decided on the groupings, we arranged a workshop with three students from different backgrounds. The intention was to have the actual users of the library critique the ideas and the groupings, and so the session was named a qualified critique. We would take an active part in the session, and discuss the ideas and comments as designers of the service concept. We had sent the material beforehand so the participants had a chance to read through them. The goal was to narrow down our topics, to the ones that the students felt was most relevant. For the session itself we prepared cards that each idea is written and placed them on the table.

The discussion began with what they thought of as relevant for the library to do in terms of their study lives. In order not to probe the participants for ideas or answers directly, we tried to gauge the opportunity-space through their eyes. The concrete outcome of this workshop was a dismissal of some ideas, and support around others (Dershini, Jonsson & Nok Leth, 2016).

The ideas which was highlighted were:

- Having students meeting up and discuss.
- Mentoring in terms of sharing of knowledge getting feedback.
- Discussing a day's work at the library with someone else, based on a library service.
- Making meeting rooms available to students.



Illustration 5: Developing Concepts Designers

#### DEVELOPING CONCEPTS

We sketched out possible user journeys for all the ideas highlighted in the conversation, and then proceeded to evaluate them in terms of relevancy to the culture department, excitement exhibited by the students and feasibility and testability.

This process allowed us to narrow down the field of ideas to three candidates. These are presented in the following subsections. These main concepts were presented in this way to our contact person at the Black Diamond.

#### Concept 1 - Match Making

The basic idea visualised in Figure 18 is to connect people based on their interests. The main point is that the matching and interaction is based within the library, so the library can begin to build its image around the activation and discussion of knowledge.

The idea has a couple of touchpoint variations. The point of contact might be a poster or an interactive display. People could have the option to put matters of interest on a sub-site called for example match.kb.dk. Matches might be organised through MeetUps. Input keywords or phrases, and get email when a match is found.

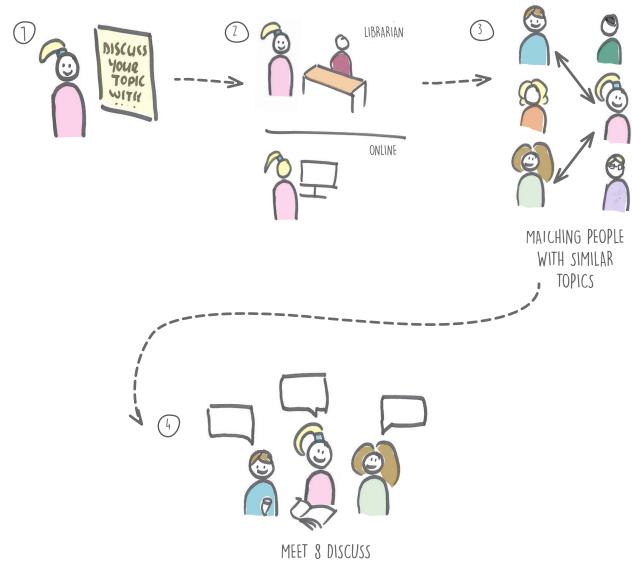


Figure 18.Matchmaking Concept

### Concept 2 - Discussion Forum

The discussion forum visualised in Figure 19 would be a service, which generates and manages events in the open-air space around the library during late-spring and summer months. Like an agora, the stage could be taken by anyone who would like to present their work. Active and engaged students are the "leads" and can create and promote events. Talks might also be planned through automated analysis of searches on REX or by crowd-sourcing speakers to come. The latter structure is based on student suggestions, which will begin a kickstarter-like process. This entails audience paying money for the event in advance, so the library would know how much they have to spend.

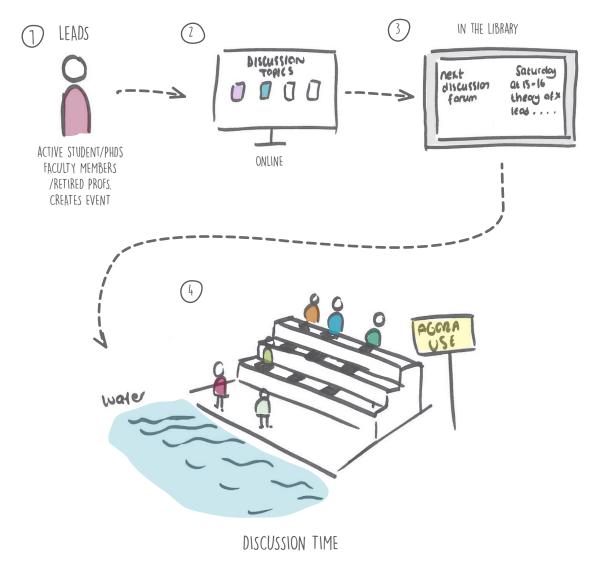


Figure 19. Discussion Forum Concept

#### Concept 3 - Student Corps

The concept visualised in Figure 20 is building on core competencies of the library, while also involving the culture department in a cross-departmental effort to create a community around information literacy.

A student "searcher"-corps is educated by librarians, and could be coordinated by the culture department. Volunteers get to be part of a concrete entity, and help groups start their projects. The basic interaction should be well outlined to align expectations. One problem to be thought of is that there might be little common ground people will stay within their area or field, unless mentors will do more.

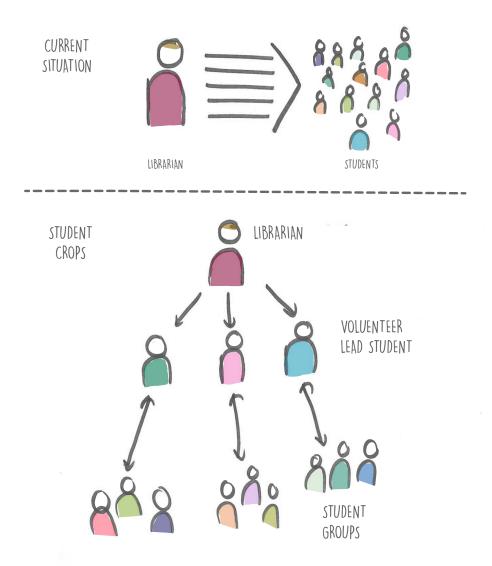


Figure 20. Student Corps Concept

#### **EVALUATING CONCEPTS**

We took the three concept visualisations to our contact person to hear her opinion on it. We started the meeting by going through the whole ideation process to ensure that she understood our process.

We then proceeded to present and discuss the concepts. During the meeting it became clear that the match-making idea (concept #1) was not very attractive due to some obvious weak-points in terms of setting up and actually executing the matching among such a diverse user base. Conversely, the client's excitement was obvious about the crowdsourcing aspect of the discussion forum-idea. She saw a potential in it to help the library stay relevant for students and it would complement their current offerings, be scalable to other libraries, would be anchored in the culture department and avoid any major cost concerns because people would pay in advance.

Concept #3, the student corps, was also found workable and realistic. However, she highlighted concerns about motivation and what the responsibilities of the library would be.

At the end of the meeting a decision was made to move forward with an critical examination of concept #2 and #3. Both concepts are testable and could work to keep the library relevant going forward.

#### CHOOSING THE PROPOSAL

We critically evaluated the two concepts by listing up the advantages and disadvantages of each concept in Table 01.

#2 - The crowdsourcing of event topics	# 3 - The volunteer student corps
Pro	Pro
Augmenting existing offering	Something new
Realistic	Realistic
Black Diamond becomes a platform	Anchored in university library
Client buy-in	Mentors
Anchored in culture dept.	
Anchorable in physical space	Con
	Gaps (how to start, motivation)
Con	Reliant on Faculties
Requires development effort	Blurry connection to physical

Table 01: Advantages and Disadvantages of Concept #2 and Concept #3

By sketching out several scenarios, the discussion forum idea (concept #2) was specified further as a crowdsourcing platform for event facilitation. Having talked through both concepts, we decided to focus on concept #2 based on crowdsourcing of event content, called "Crowd Curation".

The concept we chose to proceed with is well-grounded in a human-centered design process, and as we informed stakeholders about our choice and reasoning we were met with encouragement.

# Develop

In this section, we describe how we developed the service concept under the working title "Crowd Curation at the Black Diamond". After the fundamental concept was agreed upon, the idea was developed and iterated by using several service design tools, critique sessions with the client and pretotype-testing of the service solution. This process of trial and error helped us improve and refine the concept (Design Council, 2007). And we went through the concept with operations staff in the cultural department, to find out which challenges and potentials the concept had. We have also gone over the concept with behavioral designer and co-founder Simon Bentholm of the behavioral design agency KL7.

#### **CROWD SOURCING**

We named the chosen concept "Crowd Curation". It is a kickstarter-esque (http://www.kickstarter.com) platform to suggest and support ideas for events to be held at the Black Diamond - or any similar cultural institution. The notion of having a crowd handle part of the curation-responsibilities of the employees, mimics the foundational principle of crowdsourcing in general (Garrigos-Simon, Gil-Pechuán & Estelles-Miguel, 2015). In order to ensure we do not overlook any crucial components of the crowdsourcing process, we looked to a 2012 literature review (Estellés-Arolas & González-Ladrón-de-Guevara, 2012) on the subject, which highlighted eight key elements to a crowdsourcing effort.

- 1. There is a clearly defined crowd.
- 2. There exists a task with a clear goal.
- 3. The recompense received by the crowd is clear.
- 4. The crowdsourcer is clearly identified.
- 5. The compensation to be received by the crowd-sourcer is clearly defined.
- 6. It is an online assigned process of participative type.
- 7. It uses an open call of variable extent.
- 8. It uses the internet.

## **CROWD CURATION**

The service concept is based on the wish to provide more opportunities for active and ambitious students, to get to see speakers who are relevant to what they are studying or perhaps would like to study. The suggester would receive a sizeable discount as well as for example stage time with the presenter. The voters might receive a small discount compared to the normal ticket price, to encourage engagement.

As it is now, anyone can of course suggest a speaker through unofficial channels such as mail or telephone to the Black Diamond. But the Black Diamond currently has no incentive to look at this proposal further than the mailbox, and there is no established procedure to handle such requests. Meanwhile, students might be discouraged at the prospect of having to arrange facilities and audience large enough to invite a famous speaker by themselves. The proposed platform would help alleviate these two concerns (as visualised in Figure 21), and it would also play into the strategy of the university, which is putting more emphasis on how students can spend time outside of the university more meaningfully as outlined on page 31.

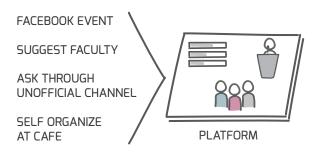
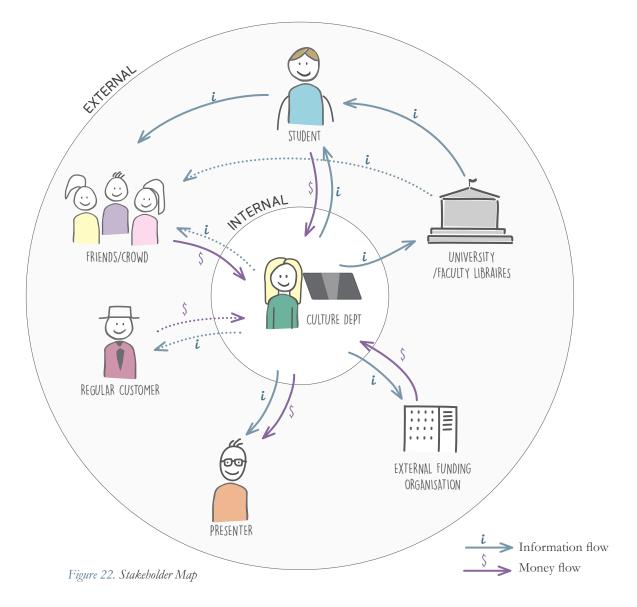


Figure 21. An overview of which alternatives the crowd-curation platform overtakes.

## **STAKEHOLDERS**

The diagram in Figure 22 represents the stakeholders who are involved in the service (Stickdorn, Schneider, Andrews & Lawrence, 2011). It also shows in a simplified way the kind of interactions that goes on between which stakeholders. As a service provider, the culture department is in the center of the map and controls overall information and money flow. The suggester is a student who takes it upon her- or himself to suggest an event. This stakeholder has a significant role to play in informing the crowd about the proposed activity. As a strategic partner of the library, the university is likely to take part in promoting the service to its students.

Due to the economic constraints of the institutions, we proposed that a privately held company can be the sponsor to cover execution cost of the service as is being done with most events already. Our contact person also pointed out that since it is a service targeted at youth, many organisations are likely to be interested in sponsoring. Finally, besides the suggester and the voters, regular paying customers of the events can join the event if the event is not sold out.



# **MOTIVATION MATRIX**

The diagram in Figure 23 shows a matrix of what motivates the different stakeholder interactions around the service.

Alignment of the actors is an essential condition for the success of the service, for this reason, it is crucial to clarify all the motivations and expectations of each actor related to the service (Morelli & Tollestrup, 2007).

As seen in the figure, the service provider and the target customer group are deemed to have more motivations to be part of the service compared to other stakeholders.

GIVES TO	STUDENT	BLACK DIAMOND	PRESENTER	CROWD/ FRIENDS	EXTERNAL FUNDER	UNIVERSITY	REGULAR CUSTOMER
STUDENT	"I want to get smarter. I am curious, interested, active"	-inspiration -engagement -audience	-buzz/attention	-relevant presentation -idea about event they can join		supporting their education (from student perspective)	
BLACK DIAMOND	platform/ opportunity to meet influential people	want to engage student, and be more in the mind of students	-engaged audience -speaking opportunity at the	-relevant event -chance to shape programme	brand recognition	meaningful activities outside of studies at uni	events
PRESENTER	presentation of his/her dreams	relevant programme	-money -prestige -motivated	presentation			
CROWD/ FRIENDS	enable the event	-money -"future audience" -more audience	audience (motivated)	curious, active			
EXTERNAL FUNDER		money			get their name out there		
UNIVERSITY	information	network for promotion /platform		information		support their own strategy about	
REGULAR CUSTOMER		money					entertain/ learn (normal event)

Figure 23. Motivation matrix

#### **BLUEPRINT**

Service blueprinting was used to develop and get an overview of the service concept to identify different phases, touchpoints and interactions of each actor as well as the information flow during the service (Stickdorn, Schneider, Andrews & Lawrence, 2011). During the develop phase, the idea evolved as reactions from feedback-interviews and testing-sessions was incorporated. Figure 24 on the following spread shows the final version of the crowd-curation service concept.

The pre-service part involves initial communication of the service. The culture department is the service owner and promotes the target group through existing procedures and channels such as Students Only.

The actual service phase starts when a student suggests a speaker to the Black Diamond. The suggester promotes his or her suggestion to get votes. A consideration for this phase was how we might get the suggester to actually continue with promotion to reach the necessary votes. To this end we considered the so-called goal gradient hypothesis which was first introduced in 1932, as the behavior was observed in rats and since observed in humans. The hypothesis states that animals and humans expend more effort as they can see they get closer to a given goal (Kivetz, 2006).

This behavioral insight is taken into consideration through notification emails sent out to the suggester with clear visualisations of progression as can be seen in page 58 & 59. When the suggestion reaches a certain amount of interest, and is approved by producers at the culture department, the culture department contacts the speaker,

arranges the event and informs the suggester and voters about the event. As soon as an event is decided upon, the normal procedure for organising events is initiated, and the service does not require any particular effort from staff from this point until it is executed.

After the event is executed, the culture department contacts the participants in order to sustain the interest. The main aim of this activity is to make potential suggesters confident about suggestion new events in the future.

The service blueprint was used to discuss the service concept with the client. The visualisation helped identify weak points in the service concept such as issues concerning pricing, the time required to plan an event, having people for pay an event on an unknown date, and the risk of unavailability of a given speaker. During a small-scale pretotyping-test session more points relating to motivation and behaviors among users were uncovered. These are detailed on page 49 in the pretotype-section.

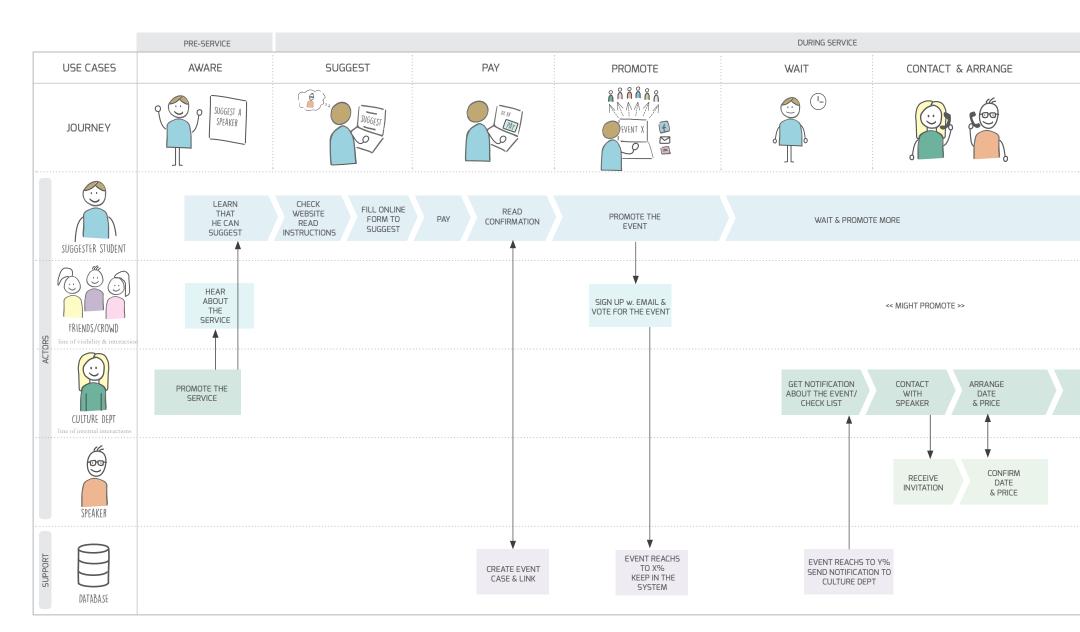
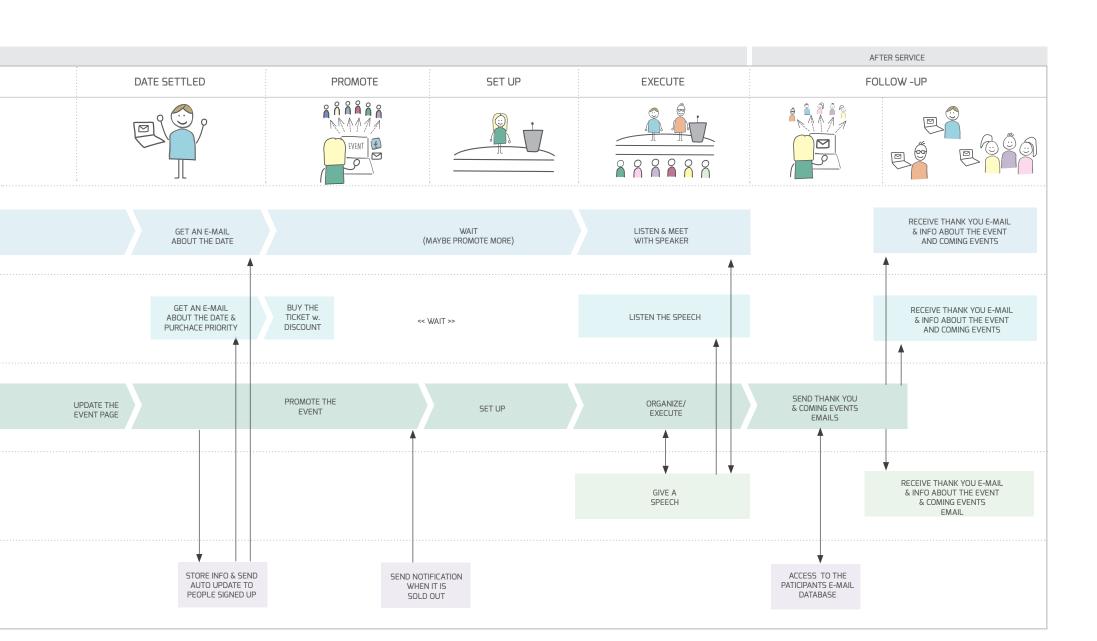


Figure 24. Crowd Curation service blueprint



#### OPERATIONAL FEEDBACK

In service design, it is key to understand the operational requirements and align these with user needs. The service design practice requires open-minded attention to detail and it is concerned with operational realities (Kimbell, 2009).

#### PRODUCER INTERVIEW

As we went through the concept on a very practical level, we were forced to consider money, staffing and time issues. Issues such as these are sometimes easy to gloss over in the development process, and leave to the client to figure out for themselves. In order to evaluate and detail the concept, we talked with Lise Bach Hansen, who is responsible for producing events in the culture department. We asked Lise about her view on the concept and the operational requirements. She informed us about some practical facts including organising, planning, cost and budget.

First of all, Lise was very positive about the concept idea. She found the idea to be very engaging for the students who are considered as future audience. She asked if they would be allowed to realise the project, "because it is an excellent idea. I love this thought of also engaging the students, engaging them in the programming, making them work for it, and being advocates" (Bach Hansen, 2016, 12:40). She highlighted points such as, the fact that the suggester will have chance to meet with the speaker which would create motivation for the student to suggest. She added that it might also be engaging for the speakers to come to an event that is crowd curated.

Lise advised us that it is difficult to arrange international speakers, and that it is important to show that the Black Diamond is only getting money for what it delivers. This means that it is paramount that the suggester get her or his money back if an event is not realised. Lise found that the mechanism of automatically cancelling a suggestion if it does not reach for example 20 percent of the audience's support within a certain time limit, would

be effective in weeding out unsuccessful suggestions. Furthermore, she added that of course the Students Only channel should be used for the initiative.

#### COMMUNICATION COORDINATOR INTERVIEW

After our interview with Lise, we refined and updated the service blueprint to have a brief, informal talk with Uffe Paulsen, communication coordinator of the culture department (Paulsen, 2016b). He is responsible for the Students Only platform, and had been both interviewed and and participated in a workshop in the Discovery and Define phases. After hearing the positive reactions from Lise Bach Hansen and Maria Christensen, our main question to Uffe was what it would require to realise the service in his view. We went through the idea by showing the service blueprint. This session was more critical compared to the previous meeting. He came up with several "what if"-questions, which helped us see the service concept in a new light.

He confirmed that the service might be promoted through the Students Only platform, but that it would maybe require more human resources to actually implement. Additionally he didn't feel that the need for the service had been explained clearly enough. These comments were important for us to hear, so we could tweak the proposal further before handing it over. Uffe was also concerned if the platform might be hijacked for political purposes for example. But to this point we stressed that of course the Black Diamond will have full editorial power, as well as the final say in what events are arranged.

He was also concerned about whether students would actually get involved in this kind of initiative, and why they could not simply do it on Facebook. To this point we pointed out the fact that they have very little Facebook engagement at the moment<sup>1</sup>, and that we would follow up on his concern with our pretotyping test detailed later in this section of the report.

We were also questioned on the branding aspects of the service. Namely, Uffe pointed out that the events could be very wide-ranging, which might dilute the Black Diamond brand. He admitted that they do not have an established branding strategy or any particular values written out, but was still worried if people might be confused about what to expect from the Black Diamond. We understand this concern but according to the official strategy for 2016-2018, the Black Diamond will focus more on facilitating and using crowdsourcing in their efforts to contribute to society (Det Kongelige Bibliotek, 2014). The strategy does mention concerns about maintaining authority in terms of information crowdsourced from users, but at the same time it displays a willingness to trust users and experiment with new forms of engagement. We are confident that any dangers in this regard can be mitigated by the producer's ability to evaluate suggestions.

Finally, we were asked what they might do in terms of longtitudinal engagement, meaning what could make students return.

This consideration had not been taken into account in the blueprint we had prepared for the interview, so we used the discussion in this conversation to hone the afterservice phase, by adding steps involving follow up emails.

As a reflection on presentation of the service concept itself, we experienced that the service blueprint was not an ideal medium. It was easily put aside during our conversations, possibly because the level of detail and the layout is not very accessible at a glance.

<sup>1:</sup> based on a review of the official Facebook-page (https://www.facebook.com/sortediamant/) with 4572 likes on May 29th 2016, and an average engagement measured in number of interactions with posts of 2016 being 70 likes. The separate Students Only! Facebook-page (https://www.facebook.com/studentsonly.dk/?fref=ts) has 3339 likes with substantially lower engagement.

#### **PRETOTYPE**

Savoia defines pretotyping as "testing the initial appeal and actual usage of a potential new product by simulating its core experience with the smallest possible investment of time and money." (Savoia, 2011, p. 24). It is important to make the distinction between the terms pretotyping and prototyping.

"a key difference between pretotypes and prototypes is that the cost and time-frame for pretotyping is at the lowest end of the spectrum that is usually covered by prototyping. For prototyping, spending several months or years of development and big amount of cost is an acceptable situation, whereas that long time frame and cost is not acceptable for pretotyping" (Savoia, 2011, p. 25).

Pretotyping, on the other hand, focuses on answering the basic and crucial question of "is this the right thing to build?". Once that question is answered positively, then it makes sense to move from pretotyping to prototyping. (Savoia, 2011)

To evaluate the potential of the concept, we conducted a pretotype test at the AAU among master students. This test provided encouraging results about the core components of the service, but rather than recommending a full-scale implementation based only on this test, a natural next step would be to develop a larger scale prototype test. In the product report, we detail how the Black Diamond might proceed with such a prototype test in very concrete steps on page 19. It was important for us to emphasise that they could test the entire concept without having to invest in any IT development, so as to make the concept more implementable. (Hansen & Jackson, 2015)

#### **DEPLOYMENT**

In this section we will go through how we deployed the pretotype at AAU, and what we learned from it.

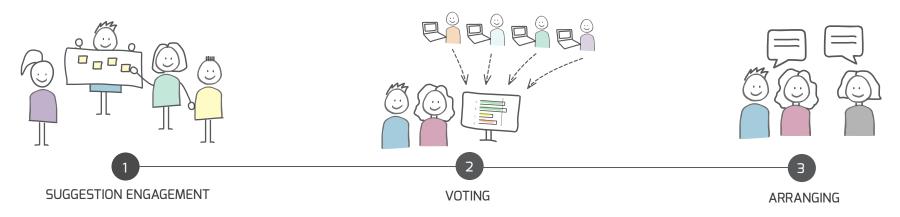


Figure 25. Pretotyping Steps

# 1st step - Suggestion Engagement

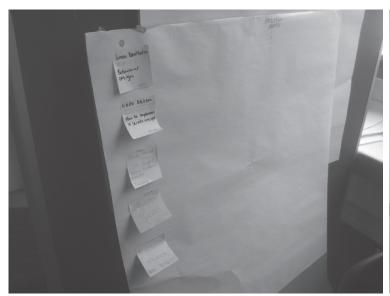
For the first step we wanted to know if students would even be compelled to suggest a speaker and pay a suggester-fee for an upcoming event at the university. We tested this by using a big piece of cardboard that we took around to 15 students. Suggestions were then added with post-its, and the fee was paid on the spot with Mobile-Pay. In order to show how it worked, the two of us had each prepared an idea and put it up on the board as an example. We asked 15 persons of which three made a suggestion. We consider this result encouraging, as it shows people are not inordinately discouraged to suggest someone they would genuinely like to hear, even if they have to pay a small fee.

#### 2nd step - Voting

The next step was to get the students to vote. To keep our test rapid we made a Facebook-poll in a shared group with 58 members. Out of this group 45 people saw the poll and 17 people interacted with it within a realistic timeframe. (See Figure 26)

# 3rd step - Arranging

As the Black Diamond would not allow any tests on their premises, we arranged with our study coordinator to look into the possibility of having it at the AAU. The event was almost realised, but the presenter who received the most votes were not available in the narrow timeframe available. It was highly likely to have happened had the timeframe been wider, which would be the case in the actual crowd curation flow.







Pictures from pretotyping session. Left to right: the board for postits, Esben holding the board and finally approaching the students.

#### **Findings**

First of all it was encouraging to see how people are willing to pay a small fee to suggest, in exchange for cheaper access to their event. It was clear, however, that the benefits of promoting one's suggestion should be highlighted and actively encouraged. Likewise we learned that people are easily interested in considering and voting for the suggestion that appeals most to them, but taking it to the next level and having the voters promote their favorite events proved a challenge. This could be dealt with by introducing a small referral discount where a person would get a small discount for each extra student they got to vote - or it could be introduced later when selling tickets.

When talking to the people who suggested, it was also very clear that trust plays a significant role in the decision to pay money for something that is otherwise uncertain. In our test it was personal trust, augmented by the fact that we had the AAU as a front, and it would seem likely that the principle would be transferrable to the trust and respect people have for the Black Diamond.



Figure 26. Online Poll for Voting -Pretotype

# **User Journeys**

During the process, mainly service blueprints were used to visually communicate and develop the concept. The user journey in figure 27 provides a more approachable overview of the service and the interactions of the stakeholders. (Stickdorn, Schneider, Andrews & Lawrence, 2011). We used blueprinting to show the concept to staff, but as mentioned it was too complicated to use in the situation. These journeys provides similiar information in a simplified way that is easier to understand. We include this illustration as a final deliverable.

His friends see his

suggestion

PRE SERVICE

DURING THE SERVICE



An active student learns about the service



He suggests a speaker to present at the Black Diamond



He pays to suggest -this also counts as his discounted ticket (he gets the money back if the event won't be executed)



He promotes the event suggestion by using social media, sending e-mails and word of mouth



They vote for the speaker suggestion & fill their information

<<< PROMOTES >>>



The Royal Library launches a new service called Crowd-Curation



Culture dept.
promotes the service
in different channels

EVENTS

Culture dept. checks the suggestions from time to time (evaluates)

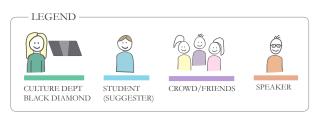


Figure 27. Crowd Curation Service - User Journeys

#### AFTER SERVICE



Voters can share the event to their network



Voters recieve the e-mail about the date of the event and discount info



Voters should buy the ticket quickly to get a discount





Voters get the thank you e-mail and checks the voting list, might suggest a new presenter



The suggester gets the thank you e-mail and checks the voting list and might suggest a new presenter



The suggester recieves the e-mail that confirms the event and learns the date





When the suggestion gets enough votes Culture dept. contacts with the speaker and arranges date

<<< PROMOTES >>>



Culture dept. sends event confirmation and the date to the suggester and all the voters



Culture Dept. might promote more if the event is not sold out



Culture Dept. arranges the event setup



The event takes place and the students who suggests gets 5-10 mins meeting opportunity with the speaker



After the event, Culture dept. sends thank you and information e-mails to all participants



The speaker gets the thank you e-mail

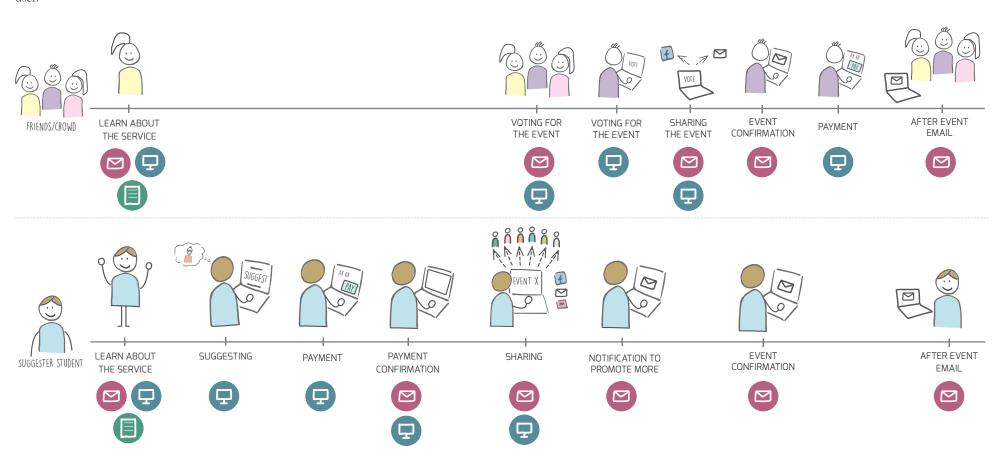


The speaker confirms the speech and the date



# **TOUCHPOINTS**

In this section we present some of the major touchpoints in the service (Figure 28). A touchpoint is a place in time where an interaction happens between a service and the user.



LEGEND E-MAIL

website

PRINTED MATERIALS

Figure 28. Touchpoints

#### **WEBSITE**

We propose a sub-section of the existing website to be dedicated to this service offering. The website will act as an easily accessible platform for suggesting and voting. An interactive mock-up of the website can be seen on https://projects.invisionapp.com/share/H37BBK1MP#/screens/151768899\_PAGE1

#### **INTERFACES - SUGGESTING**

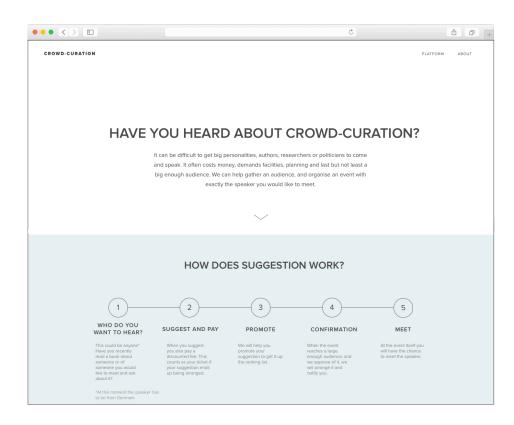
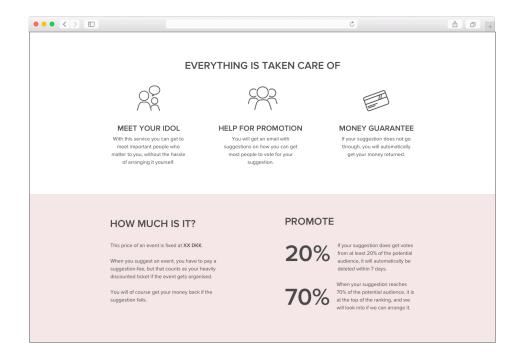




Figure 29. Website Interface - General for Suggesting







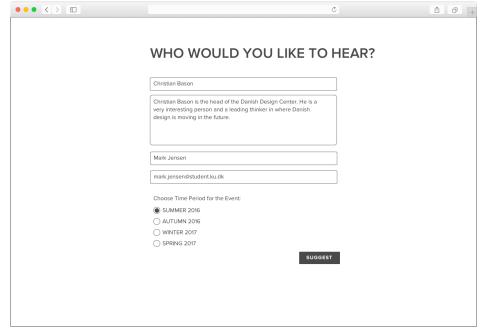
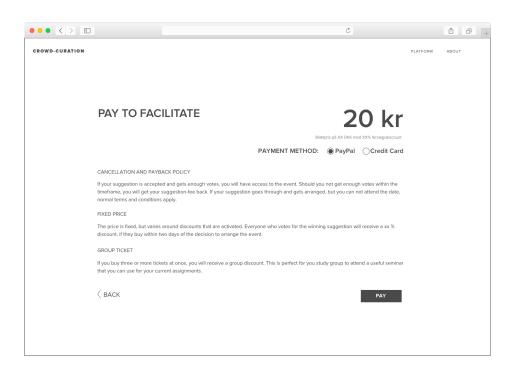




Figure 30. Website Interface - General for Suggesting

Figure 31. Website Interface - Form to Suggest



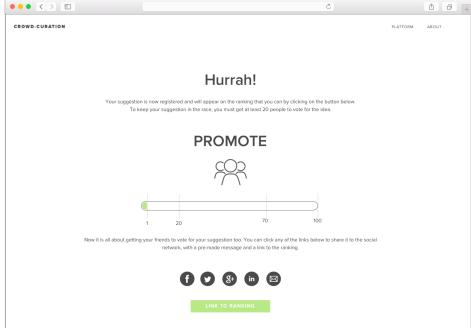
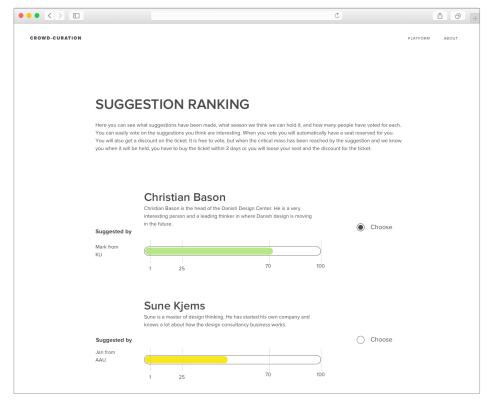


Figure 32. Website Interface - Payment Information

Figure 33. Website Interface - Confirmation and info about next steps



#### **INTERFACES - VOTING**



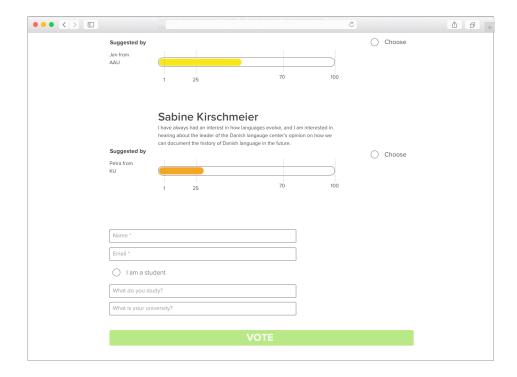




Figure 34. Website Interface for Voting

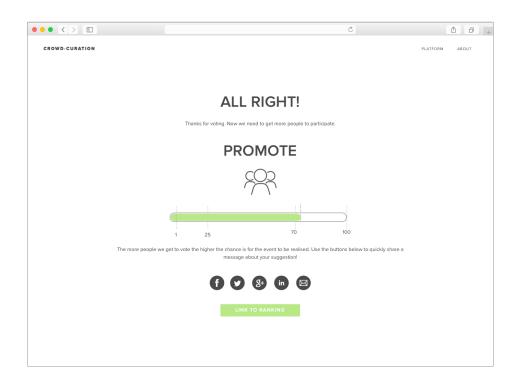


Figure 35. Website Interface Confirmation of Voting

#### **EMAILS**

#### Email - How To Promote

When a student has suggested a speaker, they will receive an email thanking them for their contribution while encouraging them to promote their suggestion to friends offline as well as online. The importance of their promotion will be explained, as well as the incentive structure for more people to vote for their suggestion.

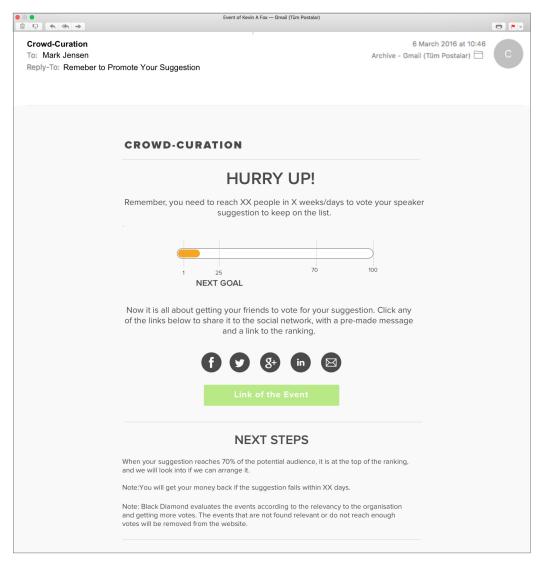
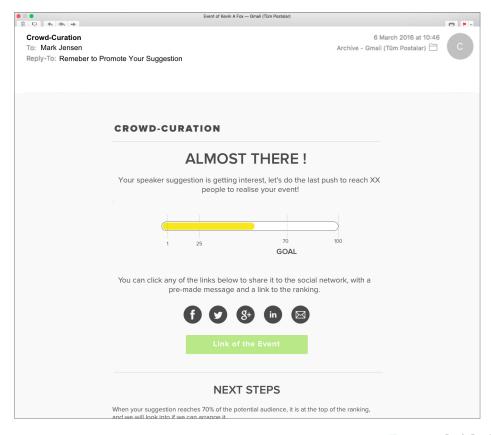


Figure 36. How to Promote- Email For Suggester

#### Goal Gradient Email

In order to sustain engagement once someone has suggested a speaker, we propose to send emails as a so-called goal gradient as explained on page 43. A suggester would get a couple of mails as his/her suggestion reaches different milestones.



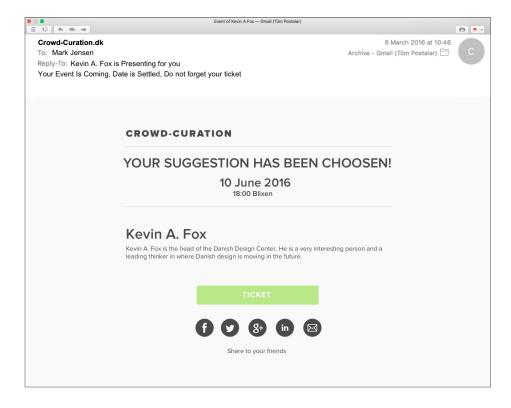
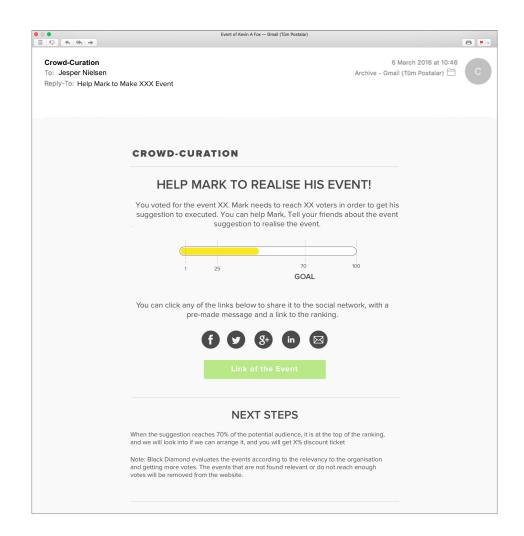


Figure 37. Goal Gradient Emails For Suggester



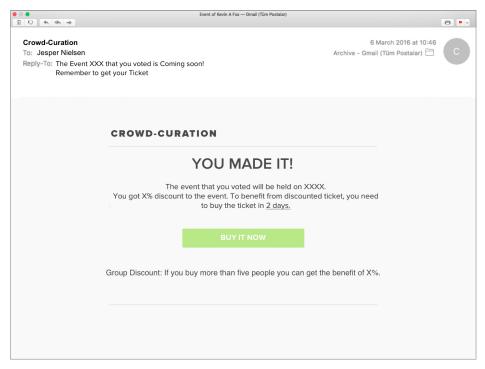


Figure 38. Goal Gradient Emails For Voters

# DATABASE

This basic database structure in Figure 39 illustrates the tentatively required data in order to achieve a functioning online platform.

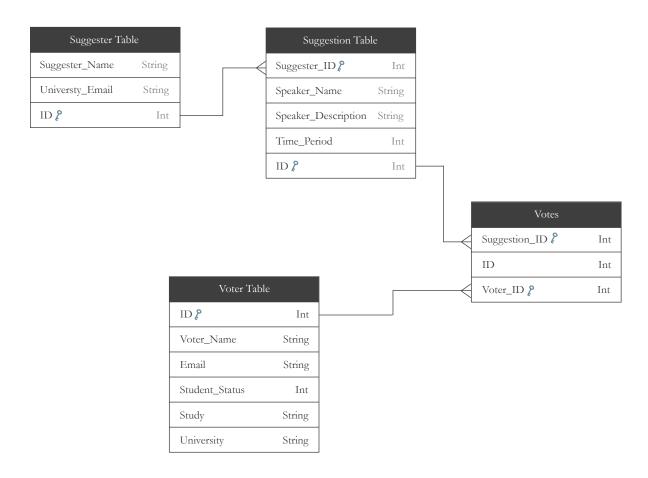


Figure 39. Crowd Curation Database Structure

# CONCEPT CRITIQUE FROM BEHAVIORAL ECONOMICS PERSPECTIVE

Building on the findings we gathered through our test, we also approached behavioral designer and founding partner in the Danish agency KL7, Simon Bentholm, to hear his perspective on the idea (Bentholm, 2016). He was surprised that people actually paid to suggest, as it seems like an unnatural barrier to entry. And he reminded us to think about pre-service activities, in order to get the service benefit as close to the users' everyday as possible. This means putting it in front of students in the library, rather than only advertising it on the website. For this we suggest printed materials such as posters in the Black Diamond and at the faculties and faculty libraries. It could also be mentioned during university introductions to library services in general.

Simon also recommended us to move away from having voters pay in advance, and instead focus on converting them from voters to audience when the event is decided on. This is meant to have more people vote, as paying in advance might be a deterrent for students on a budget.

# Deliver

In this section we will describe what steps we took to deliver the project to the client, and what our intentions were. We will detail the deliverables, who the recipients were, what was done to guide implementation and present reactions to the service concept.

One of our main learning goals would only be fulfilled if and when we reached and completed the deliver phase. In this phase, the design that was developed during the divergent design-phase of the double diamond, is wrapped up in a package that makes sense to the client organisation. The phase was also a time for feedback to the solution, that could be bundled with or in the final deliverables (Design Council, 2007).

"Service design processes can have different kinds of outcomes including: roadmaps concepts and guidelines (im)material prototypes policy recommendations architectural recommendations architectural models implementation scripts" (Thoelen & Cleeren, 2015, p. 50)

# **DELIVERABLES**

This section will provide a short overview of what we are delivering and what the idea behind each deliverable was.

#### **VIDEO**

As a means of showing a potential scenario with the service concept, a video was produced to easily obtain feedback on the concept. The video was intended as an explanatory deliverable (Olofsson & Sjölén, 2007) so it was easier for internal stakeholders to share the idea of the concept within the organisation.



Crowd Curation Service Concept Video (Becermen & Grøndal, 2016).

#### PRODUCT REPORT

The product report in our project (found separately) carries a special meaning in the sense that it was handed over to the client in late April - a month before the delivery of the entire thesis-project. For this reason, the imperative to write the product report specifically with the client in mind was followed quite naturally.



Product Report

The product report presents the proposed service concept and concrete steps to prototype it, as well as considerations and recommendations for the pricing schemes. It was important to us that it encourages further testing. The focus on further testing is meant to make the concept more realisable, as we understand that the client is not in a position to make any explorative investments at this point. The product report is also written in a way that opens up, rather than closes down, the project trajectory. This was done in acknowledgement of the notion that a service design often times requires other, specialised disciplines to actually deploy the concept. (Thoelen & Cleeren, 2015)

#### IDEA CATALOGUE

During the workshops with staff from different departments, the client specifically requested a way to retain the many different ideas generated, as they were based on research. The client acknowledged that not all ideas were feasible, but the hope was that they would inspire future projects. Based on this request we produced an idea catalogue (see Appendix 1).



Idea Catalogue

The catalogue contains a brief overview of the three main concepts proposed in the final stage of the define-phase. The descriptions include visual storyboards to make them relatable. Furthermore, the catalogue contains descriptions of a wide range of smaller ideas, presented in the categories they were sorted in during workshops. The catalogue was bundled together with each copy of the report prepared for delivery.

## **RECIPIENTS**

We delivered the project deliverables to our contact person, the producer Lise, the communications coordinator Uffe and the future service coordinator in the organisation who will be taking over from our contact person. Our contact person was aware of who we should deliver the project to for the most impact. This awareness highlights an important aspect of getting a service design into an organisation, as the soliciting person or department might not be in a position to actually proceed with implementation (Reason, Løvlie & Flu, 2016).

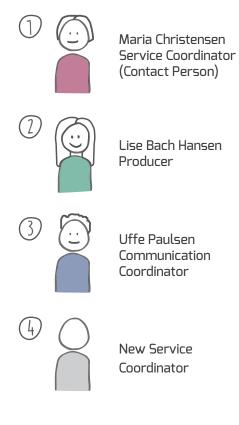


Figure 40. Overview of recipients

#### SUGGESTIONS FOR IMPLEMENTATION

The final concept description was handed over with recommendations for some very tangible next steps, the client might proceed with after we leave the process. The recommendations made was delivered in the way outlined in Figure 41:

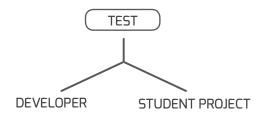


Figure 41.Implementation Suggestions

First of all, we proposed that the client proceed with testing the entire service concept. In the product report, a four-step, completely analogue test is outlined, with comments made about what to be particularly aware about at each step (See figure 42). A description of the test can be seen in the product report on page 19. This acknowledges that the client was not in a financial position to invest in new initiatives. Instead, an analogue test could be conducted to 1) see if the concept would work in its entirety. 2) Show that the Black Diamond might be under pressure to cut in activities, but is still capable to think creatively about what they might do when facing adversity. In this way, if not only the test itself, but also the preparations for and considerations about it is properly publicised, the organisation can display a proactive attitude rather than a reactive, and a creative rather than

#### PROTOTYPE SUGGESTION

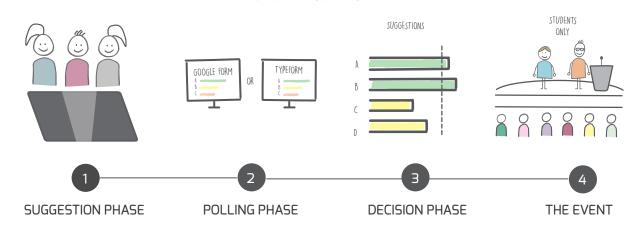


Figure 42. Analogue Test Suggestion

reductive stance towards the general budget cuts. In order to provide as clear an image of how the client might proceed with implementation after the testing, we delivered two possible scenarios.

In order to provide a clear image of how the client might proceed with implementation after the testing, we delivered two possible scenarios.

# Professional Developer

The first scenario was to bring the solution to a professional developer. We contacted a freelance developer to provide an estimate of time and money required to see a working solution. This option would require an initial investment of 68,000 DKK but would come with

guarantee of professional follow up support. Please see appendix 4 for the developer's project description and details of the offer.

## **Student Project**

The second scenario outlined was to bring the solution to a project at a university. For this project, we deemed the medialogy programme at Aalborg University in Copenhagen as fit for the task. To confirm this fit, we reached out to associate professor Georgios Triantafyllidis to ask whether the product report was sufficient material to base a medialogy project on (Triantafyllidis, 2016). He confirmed that it was, and we continued to put the suggestion into the report. The advantages of proceeding with implementation as a partnership with the university,

includes the low cost as well as the feedback and guidance from experienced educators.

To compare the two scenarios, one might say that proceeding with a student project, compared to a professional developer, might deliver a more uncertain result without a channel to complain through. However, there would not be an unnecessary argument over money, should the delivered solution not live up to expectations as well as the feedback and guidance from experienced educators.

To compare the two scenarios, one might say that proceeding with a student project, compared to a professional developer, might deliver a more uncertain result without a channel to complain through. But there would not be an unnecessary argument over money, should the delivered solution not live up to expectations.

#### **FINAL DELIVERY**

After the project was delivered, we asked what the staff thought about it. The idea was in a sense validated as the producer Lise from the culture department had attended a small conference on crowd sourcing during April, and had been very excited about how our idea coincided with this (Christensen, 2016, 16:30).

"...you are asking people, and you are not just asking me and my colleagues, you are also asking the students and you came up with the crowd-sourcing, that was brilliant. I still think it is, because that was obviously, you hit the mark, you hit the target." - (Christensen, 2016, 16:10)

# Case Conclusion

In this section, in order to conclude on the case, we will summarise the benefits of the service concept to the organisation.

Through a transparent research process, we have confirmed some hunches within the organisation, and through enquiry got to see the organisation in general, and the value generated by the culture department in particular, in a new light. Namely, as part of a greater "Education" value-constellation. In doing so, we uncovered an opportunity to involve users, servitize a core offering of the organisation and move the organisation forward in a changing context. Building on this opportunity, we delivered a concrete service concept which is cost-effectively testable and implementable, as well as tangible steps to proceed in this direction.

The service concept is scalable to other similar institutions as well, and this provides the Black Diamond with the chance to show commitment to user-involvement in service delivery.

The service concept stays true to the library mission and vision for the near-future as noted in the organisational strategy (Det Kongelige Bibliotek, 2014). All the while opening up new opportunity space (See the service delivery network in Figure 13 & 14 for an illustration of this space). Richard Norman explains how this happens as "...the fundamental content and concept is extracted and abstracted from basic assets, so that it can be linked - in its dematerialized form - to customers. The result is that one can capitalize on the basic concept by reaching many customers on many occasions in many customer value-creating processes..." (Norman, 2001: p 78). In the Black Diamonds' case, the values of access generated for

students is reframed in a way that involves them in a coproduction process. This happens when the students can affect the service offered to them (suggesting and voting), rather than having to wait for it as is the case with normal event production.

All in all, we are satisfied with the process, and we have had ample opportunity to practice the tools of service design, as well as strategic design in the sense that we got to uncover a valuable opportunity by reframing the organisation's offerings.

# Reflection & Discussion

# Reflection

Building on the case described in the previous sections, the following part of the thesis consists of two sections. The first section is a reflection on the interactions we had with the client throughout the process. The second section follows up with a discussion on what we may learn from the process, and what it tells us about what might be done for managing client-relationships in service design practice specifically relating to the briefing process.

In terms of how our interactions with the client align with the different relationship types laid out in the theoretical overview, it is clear that our process was of a collaborative nature as described by Sangiorgi, Prendiville, Jung & Yu (2015) since we as designers were leading the project but kept our contact person and other relevant stakeholders very close through the process. The relationship-type was further underlined by the way we did not present a supposedly complete deliverable, but rather made a point of enabling the department to go forward with testing instead of going directly to implementation. This kind of agility is essential in a collaborative relationship, and it was something that made our process better.

In the theoretical overview, three points (Skill-need fit, interpersonal fit and ground rules) crucial to client-consultant relationships were outlined. In the following, we will examine how our process fits this framework.

Regarding the first point, we will argue that there was a very good fit between what the client expected us to do, and what our service design approach could deliver. In particular the fact that our process relied on open-minded discovery, made it a very apt approach for the original client request. This stands in stark opposition to general management consultancy, which relies on expertise within

a given field and is supposed to generate answers fast (Bloch, 1999). In addition to this point, general consultancy is often portrayed with a guru-like expert, who paid to share his knowledge (ibid.). The service design approach, on the other hand, requires the client not to be passive, and to get involved in several stages of the process. For example in the way clients have control over information of use, which has to be drawn out and applied in a co-creational fashion (Han, 2009).

#### **PRODUCT FIT**

The original request was very open-ended, and this provided a great context to get the maximum value out of a service design process. First and foremost we were able to ground our ideation in a good understanding of the context, the organisation and of end-users. This was an essential part of the fit between our skills and the client's needs, and was apparently a deliberate choice on the side of our contact person (Christensen, 2016, 05:20). Namely the fact that we were asked to investigate and ask questions, but had no agenda to live up to.

The relevancy of the holistic aspect of the service design approach became clear, as our position allowed us to question everything, and in a way rediscover the organisation with new eyes, and use novel tools to visualise it. The client's feedback echoes a point Thoelen & Cleeren makes when they write "Sometimes you are so 'deep' into the service or organisation you wish to reform, that you are blind to the outside world." (2015, p.45).

These factors enabled us to come up with a solution that made sense to the organisation, but which they would not have come up with themselves. Our position enabled us to ask questions across boundaries, and make suggestions uninhibited by organisational do's and don'ts. Specifically if we hadn't gone through the library research, we would not have seen the culture department in light of learning as we did, because learning was not a discourse they had used at all.

"Being experienced in your own sector might offer advantages, but it certainly also has its disadvantages. Do you have enough distance? Is your perspective broad enough in order to give creative solutions a chance? Are you open to new ideas? A good service designer will help you create that distance anew, broaden your perspective, and open you up. That external view can offer new perspectives and angles." - (Thoelen & Cleeren, 2015, p. 29).

Building on the previous point, we brought fresh eyes and took a solution that has worked in other sectors and framed it for a new context.

# **GROUND RULES AND TRANSPARENCY**

We attempted to lay out some ground rules in the beginning of the process. We did this by having a meeting in the pre-project-phase where we went through a timeline with our methodology and key milestones (See page 15 and Appendix 7). In figure 43 we have mapped out the interactions with actors around the project, as opposed to the stakeholder-map (Figure 22) and blueprint (Figure 24) within the project.

We will refer to Figure 43 in this section as we reflect on the process in general.

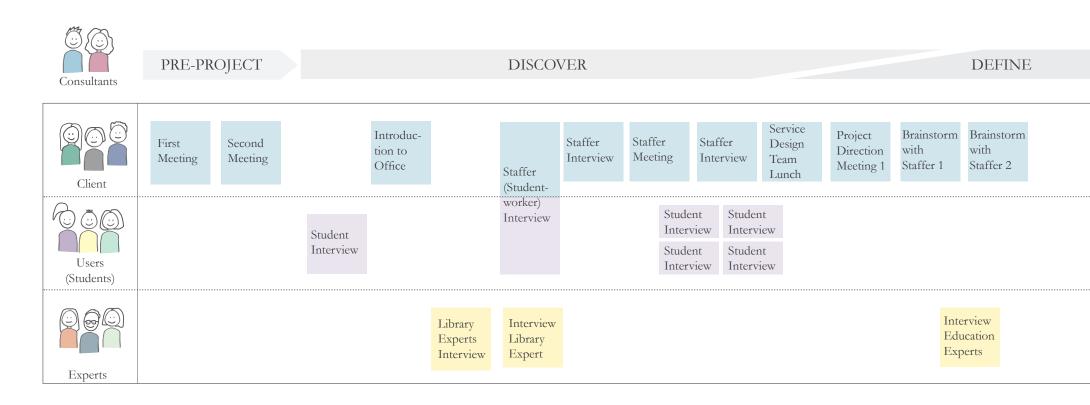


Figure 43. Timeline of entire project process

			DEVELOP					DELIVER			EVALUATION	
Process Update Doc 1		Project Direction Meeting 2	Process Update Doc 2	Next steps Meeting w. contact- person	Meeting w. producer	Meeting w. comm coordin tor	a. a-	Concept Feedback Video		Delivery Report and Idea Catalouge	Process & Project Evaluation Meeting	Final Danish Update Doc 3
v s	Workshop with students (critique)						Pretotype Test with students	Concept Feedback Video				
							Expert Concept Critique	Concept Feedback Video	Implementation options meeting			

Although we attempted to be clear about how we would approach the project from the beginning, we realised that it had been insufficient. When we interviewed our contact person about her experience of the process, we were surprised to hear that she would have liked to see the double diamond-model at an earlier stage (Christensen, 2016, 10:15). One way we might have done this better was to visually merge the double diamond-model and our timeline, instead of flattening out the convergent-divergent dynamics of the approach.

A point to be made about the process facing the organisation internally, is the way we sent out three project updates in Danish (See Appendix 2), to be shared by our contact person within the organisation. Akama (2009) also points out how including the director of the organisation in the twists and turns of the project, is very valuable to gain trust. The Danish reports were our attempt at doing exactly this.

As has been mentioned before, we quickly realised that our contact person was a valuable advocate of the project within the organisation. That is why we tried to empower her to the best of our ability with material about our process. In addition to the Danish report, we always specified recent progress as well as next steps in our meetings, and we shared our more detailed thoughts along the way through a blog (http://www.libraryinnovation.tumblr.com), which we encouraged her to check from time to time. One thing we could have done more of in the process to support her advocacy, would have been to share more anecdotes and method outcomes with her, so she would have concrete examples of potential value to share. We were happy with the way our contact person involved herself in our process, and helped explain not only the

final concept but also the different qualitative methods we deployed throughout the process. This carries an important co-creational point about engaging stakeholders in a way that is more than only exploiting for their knowledge of the organisation.

Another issue we encountered was regarding how the project was laid out in the beginning. Our contact person revealed to us that it had been difficult for her to get her superior's approval, because we had kept saying that we would go through a problem-finding phase, and look for problems to solve. The organisation had apparently been wary of "being found out", and what would happen with the problems that might be uncovered. Would they get published and hurt the brand? (Christensen, 2016, 11:30). The focus on problems emphasises what is wrong, and few people enjoy being wrong or having mistakes or shortcoming found out. Looking back we maybe should have been focusing more on the positive qualities of exploring an opportunity space. In this vein our contact person had been framing the project internally as a way to create loyalty and attract more customers, which is the kind of relatable outcome managers appreciate.

Furthermore a point can be made about how we began our process by listening to client concerns, and laid them out as we confirmed them with our research - even though we could see there was room for generating more value, than simply fixing the lower-level, more tangible issues.

In an interview with Harald Lamberts, founder and CEO of the Dutch service design company Essense, we had this approach confirmed in that they also sometimes get a brief focussed on one deliverable, which is then reframed

through service design tools such as customer journeys, to enable them to commence the higher-level, i.e. strategic, design processes (Lamberts, 2016, 07:30). In our case, this reframing was not achieved through a customer journey per se, but rather through the multi-level service design model and present and future value constellations.

In terms of insisting on a transparent process until the end, we also made an effort to make the implementation as concrete and actionable as possible. This was not a point our contact person particularly noticed, but in an interview with Harald Sævareid, studio lead in the Norwegian service design agency Halogen's office in Stavanger, we had this approach confirmed, as he stressed the importance of having actionable deliverables, rather than a beautiful concept sketch (Sævareid, 2016, 24:00).

A final point to made here revolves around scepticism from key stakeholders. We felt a certain resistance from some interviewees, relating to the fact that we were students doing a student project which could easily be dismissed. Thoelen & Cleeren (2015) mention how resistance to change might be alleviated through honest involvement in the process, and dedicated uncovering of the needs of the people in doubt. In our process, we felt that the problem was not so much relating to dealing with the wrong problem in the wrong way. It was more about giving a satisfactory explanation of the benefits of the service. For example through a visual representation of what strategic impact the service concept might lead to over time, and make clear what future activities could be imagined to support this. In a sense, the idea catalogue could have provided such a roadmap.

#### Discussion

In the introduction, we posed the research questions how a service design project starts up, and what kind of briefing it takes to get the most out of such a project - both for the client and the service design consultant. Including what kind of relationship supports this.

In this section, we will discuss these questions based

In this section, we will discuss these questions based on the reflections on the case with the Black Diamond, as well as on interviews with and presentations from practitioners. We are aware of the bias in the case with us being students, but will qualify the learnings through the interviews. The section will conclude with a list of concrete recommendations, drawn from our experience with the case.

Briefing is a process, not a finished document. This point is especially relevant in a service design context because the approach is open-ended, and since it is fundamentally a human-centered design discipline, it should be based on research which can inform choices. But what does it practically mean that it is a process? The processual perspective acknowledges that the outcome is not clear in the beginning. However, embracing this perspective is easier said than done, because you will often times need to show early on what will be done and when it will be done, like we saw with our contact person's persuasion of her superiors. Having a clear story with cases ready, can help show when outcomes tend to be reached, and what kind of insights can be had to be acted on. So, the way processes are presented make a big difference. Instead of focussing primarily on solutions and outcomes, perhaps more could be done to prime the clients to look more forward to the research phase than the solution outcome.

On the other hand, you may get caught up in the research and not being able to move past insights. Openness is essential to the design process, and to Harald Sævareid, the ideal briefing process allows for questions rather than answers (Sævareid, 2016, 25:30). But there is a balance to be struck, because freedom is both a blessing and a curse. Simon Bentholm, the behavioral designer from KL7, also related how long time they sometimes spend in the pre-project finding out what the actual problem was. They did this by asking "why?" and "what does that mean?" to get to the bottom of the client's problem. We felt something akin to this in our process, because there was no yardstick to measure ideas by. In a presentation by service designer Nils Smed at Aalborg University (Smed, 2016), it was made clear that asking for key performance indicators (KPI) and even asking the client to do research to uncover KPIs was crucial. Conversely, if you are too closed in the request you might not allow for the proper questioning of the premise of the project. However, If you achieve higher buyer competency (Sævareid, 2016, 30:20), you may shorten the pre-project phase substantially. Buyer competency refers to the client's ability to understand the process they are procuring, and what they may expect of it. In the case of service design, it may refer to an understanding on the client-side, that research into current practices and attitudes is crucial to understand which problem to solve, and then how it might be solved best.

To this point, we might say that we had a good process, based on the somewhat narrow target group from the beginning. But as we were told how our contact person had persuaded her superiors to let us do the project by talking in terms of customer acquisition and retention, we might have benefitted if those performance indicators were shared with us. On the other hand, there is also value in having the designers doing the research to uncover what indicators matter. Regular employees will have a lot of non-exploratory tasks to attend to, and so it would be most realistic to have professionals attend to that.

From this perspective the ideal service design process may be said to see the service designer having a say in the whole design process. But this requires a lot of trust, as there are substantial barriers to lay out the entire process from the beginning. Considerations about implementation can not be meaningfully undertaken before the actual concept outline is in place. Thoelen & Cleeren (2015) suggest that public organisations which have little experience with service design, should not start with too complex a project eventhough potential impact is large. Starting with a simple/modest project would show the organisation what they can achieve, in terms of solving problems or finding new opportunities with service design. After having a successful experience, and the service design approach is recognised in the organisation, the organisation can scale up to working with more ambitious, large scale service projects. In our case, it was the first time that the client had service design consultancy. Together with the client, we chose to go forward with a concept which was not too complex, to keep it implementable, taking into account the context of budget cuts and resource requirements. Following this, we also provided an outline and cost structure for the further

implementation of the concept idea. The responsibility of service designers in terms of implementation is an entirely different discussion, but one point to draw from the case in this thesis, is the value of having meetings planned, which emphasises transparency of the past process as well as setting the scope for future actions.

A skill of the service design consultant relating to this point, that really comes to light, is the ability to steward divergence (Boyer, Cook, & Steinberg, 2013; Service Design Network, 2015). Specifically, this is the ability to give direction to a process when you do not know where you are going to end. Stewarding also implies a relationship, which is fundamental to an evidence-based design process, as opposed to the artistic inspiration of a more traditional understanding of design.

"Regardless, the result from a service design process can be miles apart from the original design brief, for instance because half-way through the process your problem definition from the start might turn out not to cover the problem that matters. Nevertheless, it is necessary to get started with a clear design brief. The design brief does not only clarify the assignment for the designers, but also functions as a touchstone for the interviews between the management, stakeholders, employees, policy-makers, workshop participants, etc." (Thoelen & Cleeren, 2015, p. 31).

Going back to the point about briefs versus briefing in the theoretical overview on page 10, the static brief might be said to be a remnant of a traditional understanding of design. This is because a previously common request would be based on a petition for a solution for a problem outlined in the brief. At a presentation at the Danish design agency 1508, Klaus Bundvig talked about how many clients still ask specifically for solutions such as a website or an app without any exploration of whether or not the supposed solution fits the presumed problem (Bundvig, 2016). Actually, the real value is created in the exploration and validation of problems through the discovery phase in the design process and through methods such as pretotyping.

Our design process was characterised by briefing as a process; as shown in Figure 44 it stretched from the preproject clarification meetings through the define phase. The process was grounded in diverse stakeholder input so we ensured a relevant problem statement.

A key consideration for future research on the subject is the implication for current and future ways of service design agencies to present their services. Or put in another way, how agencies might present their abilities in a way that invites requests for questions rather than solutions.

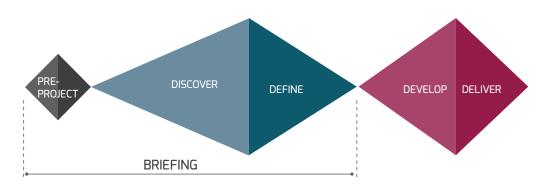


Figure 44. Double Diamond stretched to fit the actual project timeline

#### THE SERVICE DESIGN BRIEFING

The head of the international service design network Birgit Mager has stated that "We shouldn't let ourselves be put into too limited a briefing, or we should reframe the briefing so it guarantees the opportunity to design valuable interventions." (Newhouse, 2015)

Looking back at how we approached the client's expectations with the multi-level service design model (see page 24), it was clear that the different levels of thinking services was not taken explicitly into account when the request was made. The level on which the project should/will be conducted is difficult to determine from the beginning, as the process is based on research, and therefore inherently needs to open up and explore the field first. In our process it was clear that there initially was a misalignment between how we talked about the project and how the client was framing it. But as we were given quite free hands with regards to direction, we had a chance to show the power of briefing as a process which complements the service design approach in a very productive way.

To sum up our discussion, we present concrete advice and guidelines as an outcome of the research. These points are divided into what service design consultancies should be aware of, and what could be said to guide clients through the process of a service design project.

#### RECOMMENDATIONS

#### Service design consultancy

- Don't talk about problems but opportunities, as a means to have a more constructive conversation from the beginning.
- Be clear about explaining the process and show what happens when.
- Get trust by pointing out things relating to what client is initially worried about. This point relates very much to how minor problems were taken into consideration early on, as a means to acknowledge client concerns.

#### Client

- Be prepared for an open process, but have in mind how outcomes might be measured.
- Supply basic facts, and be prepared to be involved in the process. Rather than "leaving the experts alone at it" the process only gets more rewarding with active engagement.
- Briefing is a process, and so it is a disservice to ask for a concrete solution (or even a solution genre like an app or homepage), because it will necessarily have to be questioned.

## Conclusion

### Conclusion

The overall conclusion of this thesis will be that for getting the most out of a service design process, the answer is only as good as the question. To answer the question we posed in the beginning, we have gone through a new service development project with the Black Diamond in Copenhagen, and have used that experience to look at service design briefing from both client and agency perspectives.

To answer our research question on how to start up a service design project to get the most out of it, it is clear that the divergent nature of the beginning of the design process should be reflected in the solicitation of the service design process to begin with. The potential implications of service design in terms of both organisational structure (tasks and relation to users, in our case) and user experience (approachability and self-service, in our case) in a sense demands that question posed should not be too specific, as the specificity of the question would narrow the opportunity space unnecessarily. Rather, a process might be initiated, as it was in our case, with an open-ended request to explore a given business area.

We are satisfied with the process in our case, and hope that the advice we have drawn from it may benefit service design consultants and prospective clients alike, to get the most effective service design processes started up smoothly.

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## Appendix

# Appendix 1: Idea Catalogue



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### Introduction

This catalogue is meant to provide an overview of the ideas generated during the Spring 2016 thesis project between the culture department at the Black Diamond and Esben Grøndal and Begüm Becermen. A lot of good ideas were generated by staffers, and they were further discussed among students, so it would be a shame if they get lost. The main solution proposal is detailed in the product report (separate), and the process which lie behind the selection and design of the ideas is detailed in the process report (separate).

The ideas outlined in this catalogue are not developed in any practical detail, but hopefully this document can provide inspiration in the future.

The catalogue begins with an outline of the main solution proposal outlined in the product report. Then follows illustrations and descriptions of the two runner-up ideas, which were considered for further development. These two ideas are presented with suggestions for how to carry out a pretotype. Pretotyping is an approach to testing which can can provide insight into whether there is any market for a given idea. It does this by making tangible the minimally necessary components of a service, and putting them in front of potential users/customers. Finally the main body of ideas generated during the co-creation session with staff, are presented under the categories they were grouped in. A brief description of each idea is provided.

## Final Concept Idea

### **Crowd Curation**

Crowd Curation allows students to suggest and vote for speaking events. As it is now, anyone can of course send an email to the culture department, and suggest a speaker, but that request will simply be one of the many ideas already in play in the department, and the department can not know if there is an actual demand for the suggestion.



The Royal Library launches a new service called Crowd-Curation



Culture dept. promotes the service in different channels



An active student learns about the service



He suggests a speaker to present at the Black Diamond



He pays XX kr to suggest this also counts as his discounted ticket (he gets the money back if the event won't be executed)



He promotes the event suggestion by using social media, sending e-mails and word of mouth



His friends see his suggestion



They vote for the speaker suggestion & fill their information



Culture tept. checks the suggestions from time to time (evaluates)



Voters can share the event to their network



When the suggestion gets enough votes Culture dept. contacts with the speaker and arranges date



The speaker confirms the speech and the date



Culture dept. sends event confirmation and the date to the suggester and all the voters



The suggester recieves the e-mail that confirms the event and learns the date



Voters recieve the e-mail about the date of the event and discount info



Voters should buy the ticket quickly to get a discount



Culture Dept. might promote more if the event is not sold out



Culture Dept. arranges the event setup





The event takes place and the students who suggests gets 5-10 mins meeting opportunity with the speaker



After the event, Culture dept. sends thank you and information e-mails to all participants

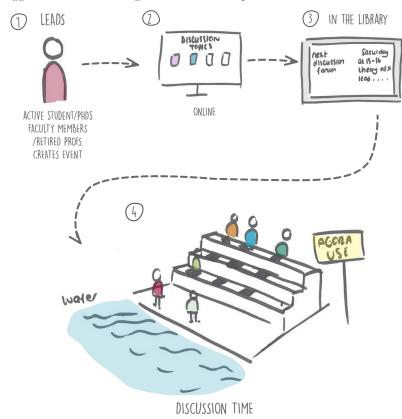


Suggester and voters get the thank you e-mail and checks the voting list and might suggest a new speaker

# 3 Runner-up Concepts

### Discussion Forum

The discussion forum could be a service, which generates and manages events in the open-air space around the library during late-spring and summer months. Like an agora, the stage could be taken by anyone who would like to present their work. "Active" students are the "leads" and can create and promote events. Talks might also be planned through automated analysis of searches on REX or by crowdsourcing speakers to come. The latter structure is based on student suggestions, which will begin a kickstarter-like process.

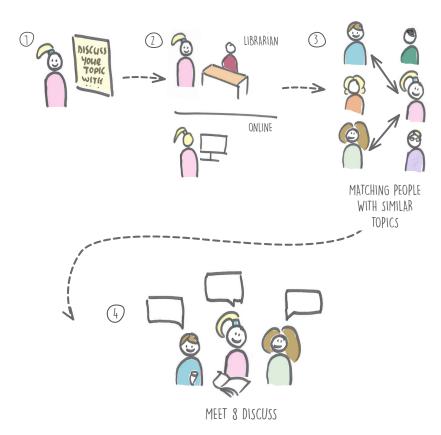


**NOTE:** This idea is the base of final concept and has been pretotyped.

## Match Making

The basic idea is to connect people based on their interests. The main point is that the matching and interaction is based within the library, so the library can begin to build its image around the activation and discussion of knowledge. The idea has a couple of touchpoint variations such as the point of contact, which might be a poster or an interactive display.

People could have the option to put matters of interest on a sub-site like match.kb.dk. Matches might be organised through MeetUps with keywords or phrases, and get email when a match is found.

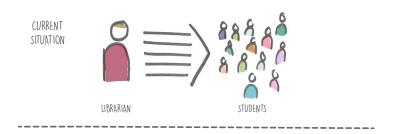


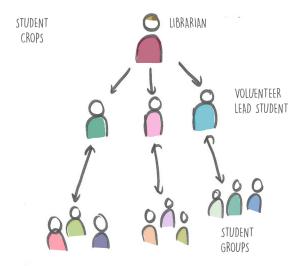
#### PRETOTYPING SUGGESTION

- 1. A staff at the culture department places a board, some post-its and a poster close to reading rooms or near the librarian on C-level.
- 2. Students write their e-mail, the topic that they study and their names to the sticky notes.
- 3. A librarian evaluates the topics and send an e-mail to matching people.
- 4. These people arrange the date through e-mail and meet at the Black Diamond.
- 5. The librarian also joins the event to observe the testing.

### Student Corps

This concept is building on core competencies of the library, while also involving the culture department in a cross-departmental effort to create a community around information literacy. The "searcher"-corps is educated by librarians, and could be coordinated by the culture department. Volunteers get to be part of a concrete entity, and help groups start their projects. The basic interaction should be well outlined, to align expectations. One problem to be thought of is that there might be little common ground people will stay within their area or field, unless mentors will do more.





PRETOTYPING SUGGESTION

1.Student workers could be asked to inform their "active" classmates to be lead or they can be lead themselves - in order to simulate the corps.

- 2.A librarian (information specialist) gives these leads a short introduction to the kind of information searching skills that they see students lack the most.
- 3.Leads contact their study coordinator and tell them about the test.
- 4. Through the facebook groups (which already exist) at the faculties, the leads can spread the word about the test, and ask if any study groups would like help with starting their research for an assignment.

## Co-creation Workshop Ideas

After Study
/ Real Life

## After Study / Real Life

#### MATCHMAKING STUDENTS & COMPANIES

To give students an opportunity to discover what will happen after they graduate. The library can provide a platform to match students and companies with similar interests for a research project collaboration or current and future job opportunities.

#### MATCHMAKING PROFESSIONALS AND STUDENTS

It might be a digital platform which students can use to learn from professionals about the job experience and possibilities after their graduation. This platform might be similar to or different from the mentor platform available at KU.

#### SESSIONS/ MEETINGS WITH WORKING PROFESSIONALS

The library can organise meetings with professionals for students, where they discuss how they used their learning or what they need to learn and spend their time on while in university.

## Supporting Current Study

## **Supporting Current Study**

#### STUDENT HELPS STUDENT

#### **MENTORS**

To give students an opportunity to discover what will happen after they graduate. The library can provide a platform to match students and companies with similar interests for a research project collaboration or current and future job opportunities.

#### HELP WITH SMALL PROBLEMS

Could the library enable or encourage people to help each other more? The solution would get people to help each other with relevant, but not necessarily academically specific topics. Like help with some software that you are using in the reading room.

#### CROWDSOURCED "HOMEWORK HELP"

Could the library get people to help each other with checking papers etc.? You could get connected with a pair of fresh eyes on your report.

#### SHARE YOUR KNOWLEDGE WITH OTHER STUDENTS

Students can make short videos to share their knowledge about the topic or it may be described in long form. There could be a digital platform where students can share their learnings about similar topics. This should be developed in such a way, that it is easier to know what to look for than the existing project banks at the university libraries.

#### WHITEBOARD

A physical or digital whiteboard where you write what you are studying that day, and see what are the others study. It could be placed as a new kind of touchpoint at the entrance to the biggest reading room.

#### MATCHMAKING BETWEEN STUDENT PROJECT GROUPS

Rather than connecting individuals through their studies, it might be better to introduce study groups to each other to practice their presentation skills and create larger feedback-oriented study groups.

#### **GAME/COMPETITION**

Students or project groups can sign up for a challenge to solve a problem and each phase of the project they collect some points. Alternatively the library could organise a competition for best presentation of student research - like the PhD-cup on DR-TV.

#### LIBRARY HELPS STUDENT

#### RECRUITING ACCESS

The library can be a platform to help students with recruiting people for interviews, focus groups or testing. (Either students can help each other or some companies/ organisations/ research institutions might be part of it)

## VIRTUAL CONFERENCE SPACE FOR GROUPS OF STUDENTS TO PRESENT

The online space would allow groups to be "pitched" against each other, and others could vote for different projects. The platform would align with the library providing access and inspiration for different kinds of studies, as well as encouraging the sharing of good work.

#### FEEDBACK SESSIONS

A chance to present your work to students from other studies. Like a PhD-feedback session where you can get input from others with a different perspective.

#### POSTERS LIKE BUSINESS CARDS

To show students who can help them with what, when they need more help in a specific topic. Showing employees, information specialists etc. and their specific competencies. This could be developed together with the staff, to encourage a conversation about skills in the library, and could help towards organisational clarity around skills and competencies.

#### SPACE BASED IDEAS

#### **OUTSIDE READING ROOMS ON TERRACE**

We could put up some parasols on the terrace so people could sit there and read in the summer, and then go for a swim later.

#### LEARNING EVENTS IN MEETING ROOMS

We could use the meeting rooms for small, focused events on for example work life skills that are not taught in the study. It might be students telling about their learnings and experiences from student jobs or internships, so everyone can get something out of it.

#### DATA-LAB

Make a space where digital literacy skills are taught. The university expects it but cannot provide all the teaching that is needed. Might the library fill in the gaps around this issue?

#### **GROUP ROOMS**

There is not really any space for collaborative learning. Should the library focus more on this in the future?

#### MAKE MEETING ROOMS AVAILABLE FOR BOOKING

The meeting rooms are not in use all the time. Maybe the booking system could be opened up for students to use also.

# Communication / Networking

### Communication / Networking

#### STUDENT CAFE

The library could set up a student cafe once a month to encourage interdisciplinary meetings. The café could have a theme and a speaker such as a PhD-student for each time, and have prices that only reflect the cost.

#### PECHA-KUCHA STYLE TALKS

The library could make space available for people to tell about their studies and hobbies and travels (whatever you'd want), in a short timespan that is easy to engage with.

#### CONNECT PEOPLE THAT READING SIMILAR TEXT

The Library can provide to its users a platform to discuss what they learned or thought about a given text or topic.

#### CONNECT STUDENTS THAT ARE HAVING SIMILAR INTERESTS

Get people together around the same topic through an activity or a video. It would work by having students making short videos about their interest(s) and can hopefully thereby inspire others.

## Inspiration /Curation

### Inspiration/Curation

#### **CURIOSITY TOURS**

A corps of students could be organised to give tourist an impression of what student life in Copenhagen is like. Or some active students can organise some tours about their topic, and the other students who are interested in with the topic can join the tour.

#### INSPIRATION PLATFORM

An online space that provides links to other sources of information that might be relevant to whatever you put into it. It would provide the same kind of variety as google, but (much better) curated.

#### AMAZON-STYLE RECOMMENDATIONS

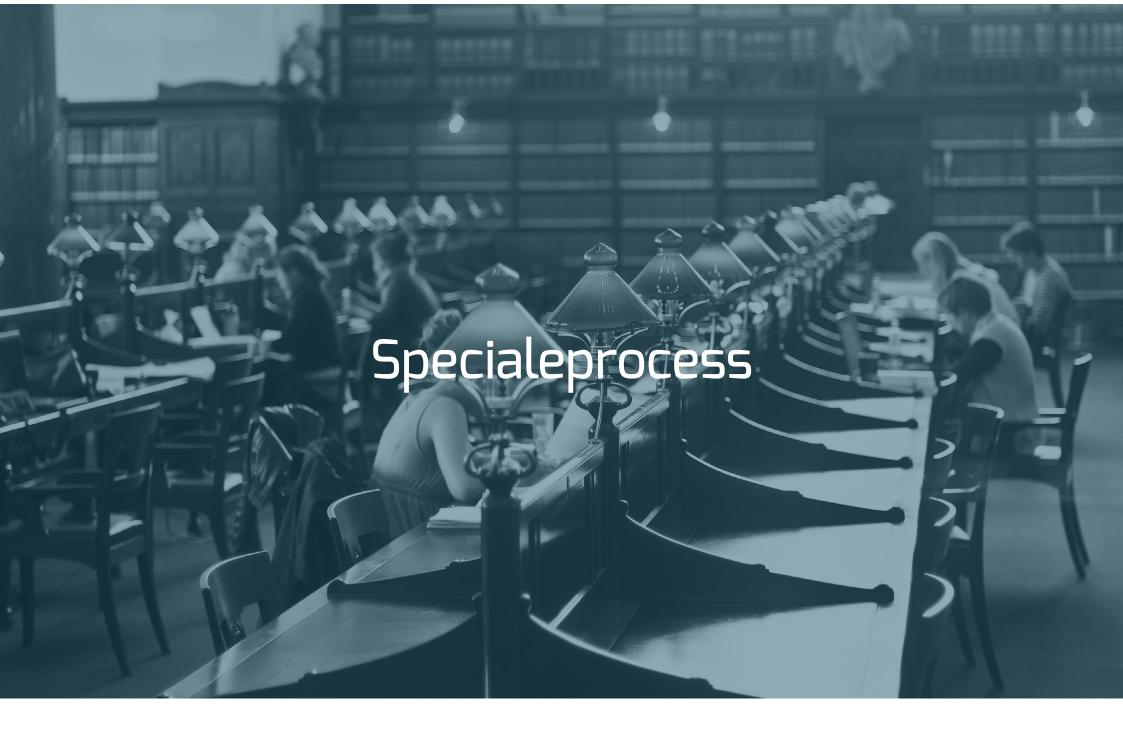
The library catalogue could be enhanced with better suggestions for what to read, based on librarians' input as well as the "network" that the book is part of in terms of what it is borrowed together with and how much.

## Conclusion

## Conclusion

This catalogue has been meant as a means of inspiration for future initiatives at the Black Diamond. The ideas might for example be used for future projects with students, where the Black Diamond can ask a student group to examine a specific idea further.

# Appendix 2: Danish Updates



### Specialeprocess

Vi er igang med vores speciale på Aalborg universitet i København. Vi læser service systems design og skriver om hvad biblioteket kan være for studerende i fremtiden. Vores kontaktperson er Maria Christensen fra kulturafdelingen, og hun har hjulpet os meget i forbindelse med at sætte interviews op med ansatte, og forklare om hvordan huset hænger sammen.

Vi er som udenforstående gået så bredt til værks som muligt. Vi har været på besøg på Statsbiblioteket i Aarhus, vi har besøgt fakultetsbiblioteker i København og talt med eksperter. Vi har talt med studerende inde og uden for biblioteket. Studerende som kommer i Diamanten hver dag og nogen der kun bruger de online tilbud såsom REX. Vi har fået læst en masse rapporter fra de seneste år, om hvor biblioteket er på vej hen, og vi har talt med ansatte på folkebiblioteker om hvad de oplever. Vi har fået set en masse præsentationer fra udlandet om hvad der rører sig der, og det har været interessant at bemærke hvor mange ens problemstillinger der er i biblioteksverden.

Derfor går vi også til projektet med ydmyghed og nysgerrighed - mange, hvis ikke alle, har et forhold til biblioteket, og det gør en stor forskel for rigtig mange.

Efter alt vores undersøgende arbejde satte vi os, og prøvede at få et overblik over hvilken indsigt vi havde opnået. Én ting der var slående, når vi talte med studerende, var at de godt kan lide at få brugt deres viden, og tale om det de læser. Man kunne kalde det "at aktivere" deres læring.

Det er noget Københavns universitet også vil lægge mere vægt på fremover, så måske er der et område dér, hvor biblioteket kan komme med et meningsfuldt tilbud til de studerende fremover.

For ikke at blive fanget i vores egne tanker, prøvede vi at formulere det som et spørgsmål til ansatte ved Diamanten i to omgange. Først til kommunikationsafdelingen, og siden til tre bibliotekarer.

Det var to gode sessioner, hvor vi fik diskuteret problemstillingen og prøvede at få ideer sammen til hvad man kunne skabe eller gøre i fremtiden. Det blev til en hel del ideer, og vi laver en liste over dem som man kan vende tilbage til fremover, hvis man har brug for inspiration. I forhold til at komme videre med den løsning vores speciale skulle dreje sig om, syntes vi ikke at det ville være helt reelt at sætte os ned i et lukket rum og udvælge dem vi syntes bedst om - tankerne omkring de forskellige ideer burde kvalificeres bedre.

Vores seneste aktivitet har da været, at sætte os ned med tre studerende på forskellige uddannelser fra forskellige universiteter, og have en åbenhjertig 90 minutters fokusgruppe. Her fik vi diskuteret de temaer som ideerne lagde op til, og hvad der kunne virke og hvad der ville fejle fra deres synspunkt. Det fungerede rigtig godt, at vi ikke bare spurgte de studerende "hvad vil I have", men derimod gik i dialog med dem om et konkret forlæg, der stimulerede samtalen og funderede den i de ansattes perspektiv.

Næste skridt er at prøve at gå i den retning vi kom frem til, og prøve at forestille os hvordan det kunne tage sig ud.

Vi glæder os til at opdatere igen, men i mellemtiden er I velkomne til at kigge forbi libraryinnovation.tumblr.com hvor vi løbende skriver om vores process og fremgang.

Venlig hilsen

#### **Project Group:**

Begüm Becermen, bbecer14@student.aau.dk Esben Grøndal, egrond14@student.aau.dk



### Specialeprocess 2

Endelig kom foråret for alvor, og med det går vores speciale også ind i en ny fase.

I vores første opdatering beskrev vi, hvilket undersøgende arbejde vi havde lavet i vinters, og hvordan vi sammen med ansatte og studerende generede og evaluerede ideer til nye tiltag, der kan fastholde og forstærke forholdet mellem biblioteket og de studerende.

Vi havde som sagt i sidste opdatering en god session med studerende, hvor vi gennemgik hvilke elementer af forskellige ideer de satte mest pris på. Nogle af de ting der blev fremhævet var mentor-rollen, diskussion på tværs af fag, præsentationer om forskellige emner og nye forbindelser med ligesindede.

Vores process har selvfølgelig været præget af nedskæringerne, og det har været vigtigt for os ikke bare at foreslå fordyrende luftkasteller, men istedet prøve at tænke nyt med det vi har.

Den idé vi har arbejdet på i den forgangne uge, går ud at studerende kunne få adgang til at foreslå foredragsholdere, de gerne vil høre, men ikke har ressourcerne til at invitere selv. Det er typisk en udfordring at samle publikum og at finde de fornødne faciliteter. Her kan Diamanten måske hjælpe. Men fremfor blot at opfordre studerende til at sende mails med forslag, kunne man tage inspiration fra en crowd-sourcing platform såsom kickstarter. Her kan man oprette en idé, som man efterfølgende promoverer for at opnå et minimum antal folk, der bakker op ved at lægge et beløb.

Hvis man overfører modellen til arrangementer, kunne det fungere på følgende måde.

En studerende foreslår et arrangement, og betaler

billetprisen med det samme. Hun modtager en mail med tips til hvordan hun kan promovere det på nettet, for at nå et minimum antal publikum. Såfremt minimumsantallet ikke bliver opnået, fjernes forslaget automatisk og folk får deres penge retur. Er der derimod god opbakning til arrangementet, kan planlægningen af arrangementet begynde med et klart billede af hvor mange betalende gæster der kommer.

Selvfølgelig skulle alle arrangementer ikke arrangeres på denne facon, men hvis det lykkes med nogen kunne man værne sig mod risikoen for lavt billetsalg. Det ville bygge på den Sorte Diamants position som "neutralt" sted uden bestemt fakultetstilhørsforhold, og give mulighed for at hjælpe de studerende med at komme tæt på nøglepersoner inden for deres felt.

Vi er glade for ideen i sig selv, men den næste udfordring bliver at kigge på hvordan den skulle kunne realiseres. Forskellige versioner af ideen skal skitseres, og vi skal tale med på ansatte og studerende om hvilke faldgruber de kan se ved ideen. Hvis det stadigt ser lovende ud vil vi undersøge muligheden for at teste konceptet på mindre skala uden for Diamant-regi, for at se hvordan studerende ville tage imod det.

Venlig hilsen

#### **Project Group:**

Begüm Becermen, bbecer14@student.aau.dk Esben Grøndal, egrond14@student.aau.dk



### Specialeprocess 3

Kære alle,

Så er vi nået til slutningen på vores speciale projekt med den Sorte Diamant.

Dette bliver den tredje og sidste opdatering om vores arbejde.

Vi vil først og fremmest gerne sige tak for den imødekommenhed vi har oplevet overalt i huset, og får de ideer og råd vi har modtaget fra de involverede parter.

Vores arbejde endte i slutningen af maj, da vi overdrog en detaljeret beskrivelse af vores idé til kulturafdelingen. Idéen gik ud på at introducere crowdsourcing, som en måde hvorpå man kunne engagere flere studerende i den Sorte Diamants arbejde, og på den måde gøre institutionen endnu mere relevant for dem. Vi er opmærksomme på, at den Sorte Diamant og det Kongelige Bibliotek ikke er i en position hvor man kan investere i nye idéer efter forgodtbefindende. Derfor lægger vi i vores idé-beskrivelse op til, at man kan teste konceptet af uden nogen større investeringer.

Dette ville give erfaringer man kan bygge videre på, samt vise at den Sorte Diamant nok gå nogle hårde besparelser i møde, men at man ikke lader det stoppe nytænkning.

Det vi overdrog var to hæfter. Det ene var beskrivelsen af idéen, og hvordan den kunne testes og implementeres. Det andet var et lille "idékatalog" hvor vi havde beskrevet alle de idéer vi hørte fra ansatte og studerende under vores arbejde gennem semestret. Tanken er at sådan et katalog måske kunne bidrage med inspiration i fremtiden. Det er ihvertfald synd, hvis alle de mange gode idéer vi desværre ikke kunne tage fat i i denne omgang skulle gå til spilde. Hæfterne ligger i kulturafdelingen, og vi håber I

får mulighed for at kigge på dem engang.

Vi lavede også en video til at præsentere konceptet som kan findes på følgende link til YouTube: https://www.youtube.com/watch?v=YbcBPukrrPE

Vi har været meget glade for arbejdet med udviklingen af en ny service sammen med jer, og vi glæder os til at have specialet færdigt i begyndelsen af juni.

Derudover vil vi bare sige, at vi håber den Sorte Diamant også i fremtiden vil tage studerende ind til forretningsudvikling, da det forhåbentlig giver lige så meget til jer som det gør til os.

Hav en deilig sommer.

Venlig hilsen

#### **Project Group:**

Begüm Becermen, bbecer14@student.aau.dk Esben Grøndal, egrond14@student.aau.dk



# Besøg os på http://libraryinnovation.tumblr.com

## Appendix 3: Thesis Contract

# Specialeaftale

Udførelse af hovedopgave under AAU/Service Systems Design vedrørende udvikling af brugeroplevelsen og services på Den Sorte Diamant - Det Kongelige Bibliotek

## Mellem

## Institution

Det Kongelige Bibliotek (KB) Kulturafdelingen Søren Kierkegaards Plads 1 1219 København K

# Studerende

8

Esben Grøndal Ordrupdalvej 34 2920 Charlottenlund

Amerikavej 14, 2 tv

Begum Becermen

1756 København V

Periode

9. februar til 2. juni 2016

# KBs kontaktperson

Servicekoordinator Maria Christensen, mach@kb.dk, tlf. 91314338

# Opgaveformulering

Aftalen vedrører en undersøgelse af:

Hvordan kan servicedesign hjælpe Det Kongelige Bibliotek med, at udvikle services til de studerende på Den Sorte Diamant? Evt. co-creation over de næste fire år.

# Fremgangsmåde

Undersøgelsen består af følgende aktiviteter:

- Et antal interviews af studerende, der benytter faciliteterne på KB Slotsholmen
  - Et antal interviews med relevant KB personale
- Observation af brugeradfærd på A- og C-niveau på KB Slotsholmen
  - Udførelse af kunderejser
- Afprøvning af løsningsforslag

# Den studerendes forpligtelser

Esben Grøndal og Begum Becermen forpligter sig ved denne aftale til at:



- give en samtykkeerklæring med henblik på indhentelse af straffeattest
- efterleve gældende regler og procedurer på KB
- . give Kulturafdelingen et eksemplar af det færdige speciale til eget brug

# KBs forpligtelser

KB forpligter sig til ved denne aftale at:

- udpege en kontaktperson, der skal fungere som koordinator og vejleder vedr. KBforhold og viden om brugeradfærd
- skal kontaktpersonen kontaktes inden brug. Den studerende skal selv medbringe egen bærbar og mobil. der tilbydes en deltidskontorplads ved siden af kontaktpersonen. For at sikre plads
- yde Esben Grøndal og Begum Becermen relevant praktisk og faglig bistand i begrænset omfang

## Klausul

KB forbeholder sig ret til at:

- være medbestemmende i valg og antal af de interviewpersoner, der er ansat på KB
- godkende spørgeskemaer, der ønskes besvaret i KB's bygninger / arealer
- specialet eller som præsenteres for KB's kontaktperson i nærværende kontrakts lade sig inspirere af, bruge samt iværksætte idéer og forslag, som er indeholdt i
- kendskab til skal behandles fortroligt under og efter specialeforløbet på KB informationer – der vedrører interne forhold på KB og som den studerende skulle få
- KB's kontaktperson skal informere og godkende alle aktiviteter, der planlægges på

## Løn

Specialeforløbet er ulønnet.

## **Evaluering**

efter behov. Specialeforløbet evalueres efter ca. en måned med kontaktpersonen og herefter løbende

## Ændringer



Endringer i aftalens indhold skal underskrives af begge parter og vedhæftes denne aftale som addendum.

# Ophør

Opsigelse skal ske skriftligt til kontaktpersonen med kopi til kontorfuldmægtig Anne Hver af parterne er til enhver tid berettiget til at opsige specialeaftalen uden varsel. Louise Nygaard Westtoft.

# Ansvar

Da Esben Grøndal og Begum Becermen ikke er ansat på KB som medarbejdere, er de ikke omfattet af KBs arbejdsgiveransvar.

Underskrifter

Dato:

Det Kongelige Bibliotek Maria Christensen

Studerende Esben Grøndal

Studerende

Begum Becermen

# Appendix 4: Developer Proposal

# **Developer Proposal**

DEVELOPER PERSONAL CORRESPONDENCE FOR THE TECHNICAL SPECIFICATIONS OF THE OFFER

Personal correspondence with Morten Barklund on April 28th, 2016

#### **DESCRIPTION**

This is an initial non-binding offer to develop, host and maintain a web application for crowdsourcing speakers for the Black Diamond library based on an idea by Esben Groendal and team. This offer is valid until ultimo May 2016.

The application is concerned with getting users of the library to suggest and vote for future speakers for events at the library and for the library to manage and facilitate this proces. This is done by users suggesting speakers, other users voting for speakers and upon reaching a set milestone within a set timeframe having the library make this talk possible by contacting the speaker, arranging the event and contacting all interested users about this.

There are several roles in this project. The library (and their employees) is the administrator of the entire application and has access to all information and can change everything. A user suggesting a speaker can update the information about this speaker as well as delete the request. A user voting on a speaker can only remove his own vote and not alter any other data on service. A user can both suggest speakers and vote for other speakers - thus having different access levels for different speakers. There can be only one "owner" of a speaker and only this user can edit the information.

The milestone required for a speaker to be chosen as well as the timeframe within which this number of votes must be collected can either be set by the owner or the administrator - to be determined later.

The administrators will have access to a contentmanagement where all suggested speakers can be seen, edited and deleted as well as exported to spreadsheets or similar. Furthermore there will be a list of all users having either voted or suggested speakers and these can be seen, edited, deleted and exported as well. The user list can also be filtered by votes on suggested speakers so it is possible to export a list of users having voted for a given speaker.

The system will send emails to users according to a few rules. These are:

-a welcome email, when a user signs up -a success email when a speaker is successfully chosen (one to the submitting user, another to all the voting users)

-a "warning" email to a submitting user when a speaker is about to fail because of the time limit All other emails must be sent by external services - including updates on the status of the event if and when it will happen after succesfull voting. If the administrator decides to delete users or speakers (e.g. due to duplicate entries or similar), the administrator must also manually email relevant parties if so desired.

The web application will be tested on and optimized for modern browsers (IE10+, etc) as well as tested on mobile device down to an iPhone 4 screen size

The web application will besides the content management have a front page, one or more static about pages, a speaker listing with filters for current or past speakers, a speaker entry with information about the speaker, a speaker submit form as well as edit form plus a profile page for users where they can see their voting and suggesting history.

This offer does not include editing the static content - e.g. changing text on the front page, images on about pages or similar. The only content that is editable are the speaker listings. This offer also does not include any event management including emails besides the voting as explained above. Nor are there any payment services or similar included.

#### SCHEDULE AND DEADLINES

The development of the above web application will have a development time of **20 days**. During the development, a test website will be provided for the client to see the project as it develops. At the end of the 20 day period, two test rounds with corrections will take place until final delivery.

Before the project can be started though, a flow, a design, all images and all text must be defined. This is the responsibility of the client to develop this. I will assist with flow considerations and we will create the final flow together. I can find great designers for the designs and images if the client does not have any preference.

When the project is delivered and up and running, I will provide support for all bugs found in the first 2 months after launch and critical (i.e. service breaking) bugs found

the next 10 months. I will also provide free hosting for the first year after which the client will either need to inhouse the hosting or pay annually for the service.

#### **TECHNICAL SETUP**

The platform will be based on the open-source framework Django written in Python. Django 1.9 running on Python 3.5 will be used for this. The database will most likely be PostgreSQL.

The web application will either be classic static HTML-pages with design based on a framework such as bootstrap or similar, or - if the designer and client prefers - be a single-page application based on the newest stable AngularJS 1.x.

The recommended hosting is a Heroku setup with a single standard 1x dyno for the application and another for background tasks. If the application is popular, 2 concurrent web dynos can be run, but this is most likely not necessary.

#### **PRICE**

The total price for this given the above requirements and deadlines is **68.000 DKK**. This is to be payed 50% up front and 50% after final acceptance from the client. All invoices are to be paid within 8 days.

Hosting after the first year will cost **10.000 DKK** per year to be paid at the beginning of each year after initial launch.

# Appendix 5: Workshop Cards

I wish I had an opportunity to work with people/students from different fields

I wish I had the opportunity to practice my knowledge

I wish I wouldn't just get a video to watch instead of lectures!

I wish I had someone to discuss my ideas with!

I wish that I had an opportunity to experience different approaches

How can I show what I have learnt between assignments?



I study alone
I'm focused when I
study, so I can finish
quicky
I am looking for events
to improve myself



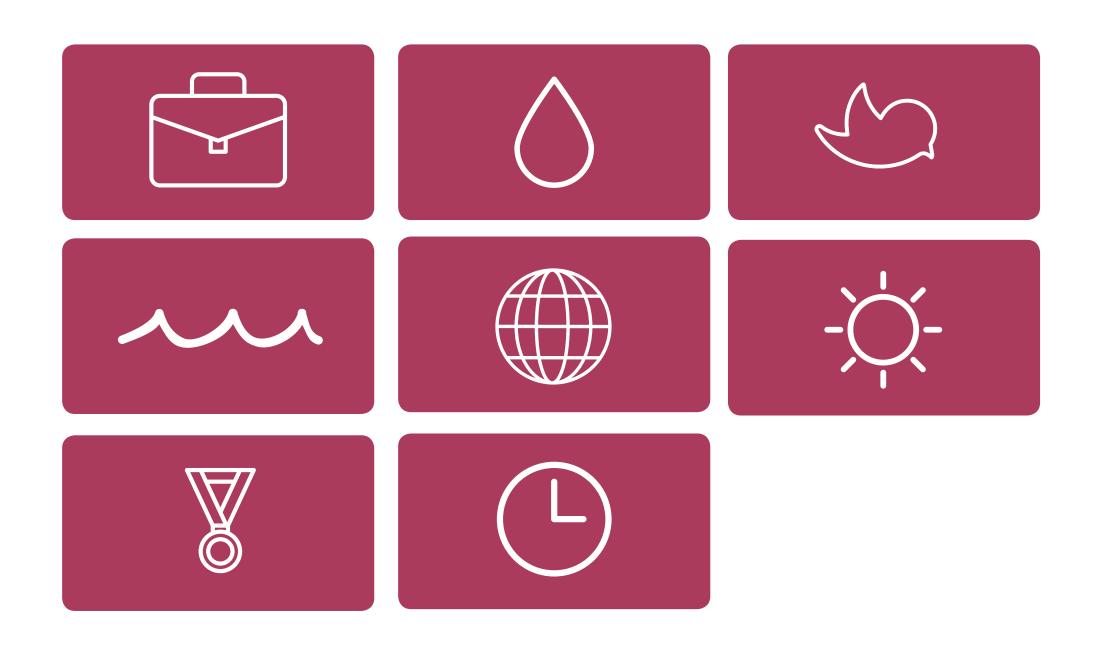
I like spending time with my firends I like working with my friends I follow what they do



I am very organised
I make a plan and follow it
I wish that I could be able to show all my knowledge on the exam paper



I study alone by searching on the web Buy books rather then lending Interviews alot of authors about their work

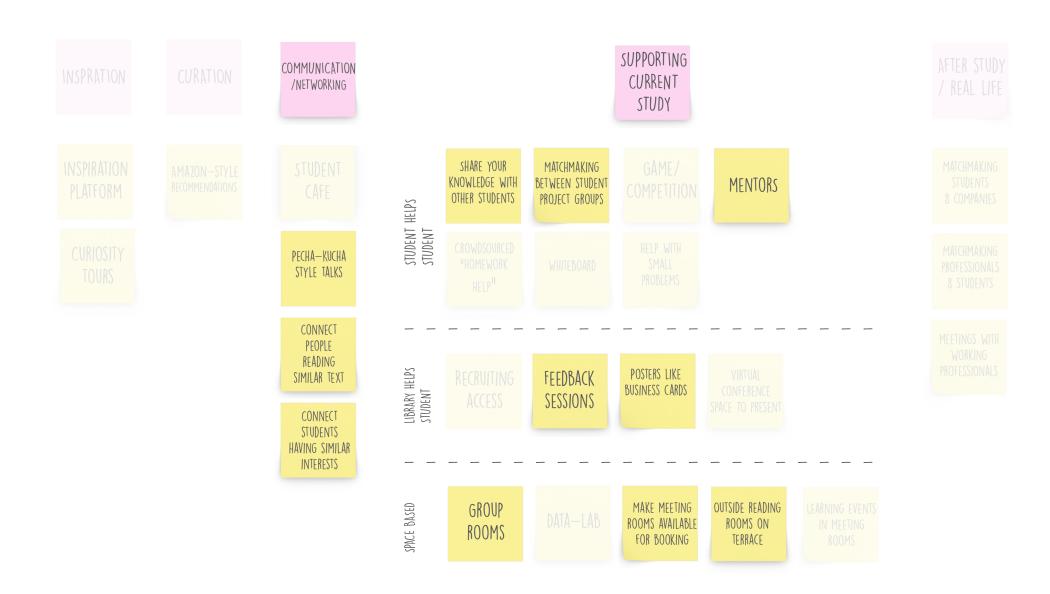


# Appendix 6: Affinity Mapping

# **Affinity Mapping**

SUPPORTING AFTER STUDY COMMUNICATION INSPRATION CURATION CURRENT /NETWORKING / REAL LIFE STUDY SHARE YOUR MATCHMAKING INSPIRATION STUDENT MATCHMAKING GAME/ AMAZON-STYLE KNOWLEDGE WITH BETWEEN STUDENT **MENTORS** STUDENTS RECOMMENDATIONS COMPETITION PLATFORM CAFE OTHER STUDENTS PROJECT GROUPS 8 COMPANIES STUDENT HELPS STUDENT CROWDSOURCED HELP WITH CURIOSITY MATCHMAKING PECHA-KUCHA "HOMEWORK SMALL WHITEBOARD PROFESSIONALS STYLE TALKS TOURS PROBLEMS HELP" 8 STUDENTS CONNECT MEETINGS WITH PEOPLE WORKING READING LIBRARY HELPS STUDENT PROFESSIONALS POSTERS LIKE VIRTUAL RECRUITING FEEDBACK SIMILAR TEXT BUSINESS CARDS CONFERENCE SESSIONS ACCESS SPACE TO PRESENT CONNECT STUDENTS HAVING SIMILAR INTERESTS MAKE MEETING OUTSIDE READING GROUP LEARNING EVENTS SPACE BASED DATA-LAB ROOMS AVAILABLE ROOMS ON IN MEETING ROOMS FOR BOOKING TERRACE ROOMS

# Affinity Mapping - Qualified Critque (Selected Ideas with Students)



# Appendix 7: Program



# Service Systems Design Aalborg University Copenhagen Master Thesis

Title: Research Library Service Innovation

#### **Project Group:**

Begüm Becermen, bbecer14@student.aau.dk Esben Grøndal, egrond14@student.aau.dk

**ETCS Points:** 30 ETCS **Starting:** 01/02/2016 **Deadline:** 02/06/2016

#### Supervisor:

Amalia De Götzen, ago@create.aau.dk

#### Collaboration with an Organisation:

Det Kongelige Bibliotek (The Royal Library)

#### Place of the Organisation:

The Royal Library 1016 Copenhagen K Denmark

#### Contact person:

Maria Christensen, mach@kb.dk

### Introduction

This document is the program for the Master Thesis project, by Begüm Becermen & Esben Grøndal, students of the Service Systems Design Master at Aalborg University Copenhagen. The purpose of this program is to plan and structure the way the project is going to be executed, and provide a clear overview of the semester.



## Learning Goals

#### Study Guide Goals

Study guide states the following qualifications to be obtained:

#### "Knowledge

- Must have knowledge about the possibilities to apply appropriate methodological approaches to specific study areas.
- Must have knowledge about design theories and methods that focus on the design of advanced and complex product-service systems.

#### Skills

- Must be able to work independently, to identify major problem areas (analysis) and adequately address problems and opportunities (synthesis).
- Must demonstrate the capability of analysing, designing and presenting innovative solutions.
- Must demonstrate the ability to evaluate and address (synthesis) major organisational and business issues emerging in the design of a product-service system.

#### Competences

- Must be able to master design and development work in situations that are complex, unpredictable and require new solutions (synthesis).
- Must be able to independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility (synthesis).
- Must have the capability to independently take responsibility for own professional development and specialisation (synthesis)." (Aalborg University, Faculty of engineering and science, Board of studies for Media technology, 2012).

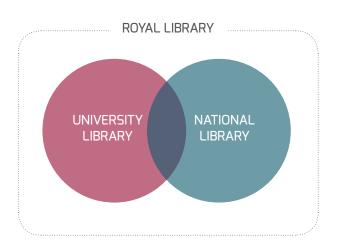
#### Personal Goals

In addition to goals that provided by the study board, we developed our personal learning goals that we want to examine through this project:

- Learn about how to handle 'client organisation's expectations from the beginning.
- Learn about co-creation with a public organisation.
- Learn about the process and impact of servitization.

# The Royal Library of Denmark | Black Diamond

For our thesis project, we will work with the Royal Library of Denmark in the building commonly known as the Black Diamond. Royal Library of Denmark consists of two libraries; the National Library and the Copenhagen University Library. The Royal Library states its mission is as promoting education, research and information at present and the future. Its vision is to be the Europe's leading library amongst national and university libraries (2014a, p233).



#### The National Library

The National library is responsible for managing the cultural heritage of both Danish and international works including books, periodicals, newspapers, pamphlets, manuscripts, archives, maps, pictures, photographs and sheet music (ibid.).

The National Library is responsible for various tasks; the statutory task of legal deposit, organising events like concerts, exhibitions, lectures about the collections and the duties of the library, publishing research publications; and supporting researchers using library's collections. The Library also manages the digital collection of materials and the digitisation (ibid.).

#### The University Library

The Royal Library's main mission as a university library is to support the research and the teaching at the university by accommodating the needs of students and faculty staff for the information resources and offering special services to students, researchers and the teachers of Copenhagen University (ibid.).

#### **Budget Cuts**

In the end of 2015, it was announced that the government will require of cultural institutions across the nation to take budget cuts, in order to redistribute the funds to other areas. For the National Library specifically, these cuts might add up to as much as DKK 30 million. Combined with the expiration of grants, the cuts mean that in 2019 the institution will be working with a budget that is shrunk by up to 10% (Mønsted, 2015).

# Project

The aim of the project is to examine what service offerings from the royal library deliver the most value to students. With this research as a foundation, we will then pursue either an improvement within the existing service system or the development of a new service offering in the same value space. The background for the project is the announced budget cuts for the next four years. The library is very interested in how they can remain attractive to students, by offering lean yet meaningful services.

### **Initial Problem Statement**

How can service design help to improve student services provided through Black Diamond the Royal Library?

# Methodology & Our Approach

The initial design-brief for this assignment is quite broad, so what characterises our approach in the initial phase is speed and variety. Namely, we will be trying to cover as much ground as fast as possible, in order to find the problem- or value-area that we will develop a service within.

As there is no distinct problem outlined for us, one of the challenges in approaching the project, is to deconstruct the normality of everyday, to tease out the problems that lie beneath the surface.

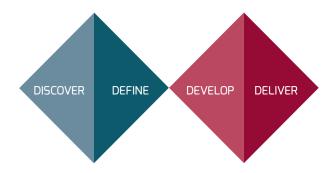
How we will go about doing this, is outlined in the following methodology part.

At this point in time, we see two possible types of solutions. One is about understanding the organisation, and coming up with a service concept, that optimises existing service offerings, or a new concept which plays within the existing value-propositions. The other is about coming up with a service concept, that is more anticipatory in terms of the way the value constellation around the library is evolving.

#### The Double Diamond

We are going about our project using the "double diamond" process model.

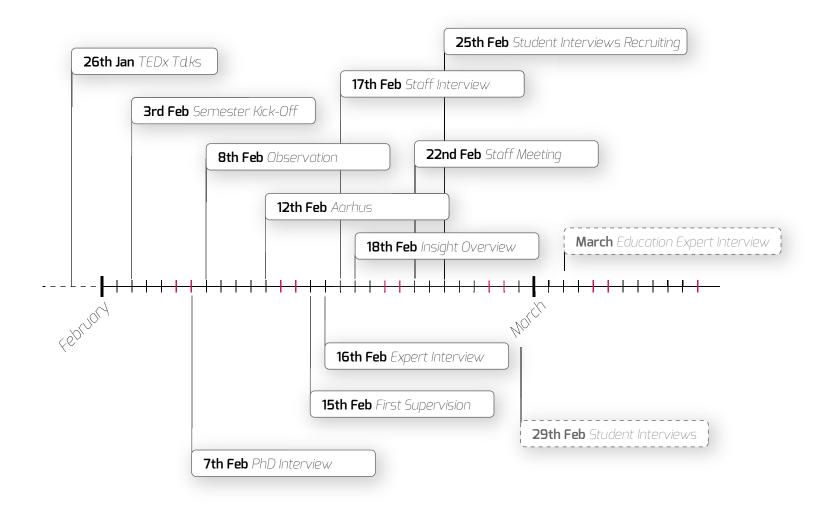
This model visualises a process of four phases: discover, define, develop and deliver. Depending on the clarity of the brief, the discover-phase will be longer or shorter. For our project we have to start our fairly broad and cover as much ground as fast as possible to get a view of the subject-matter from various angles. This will help us define a meaningful problem statement to then design a solution for.



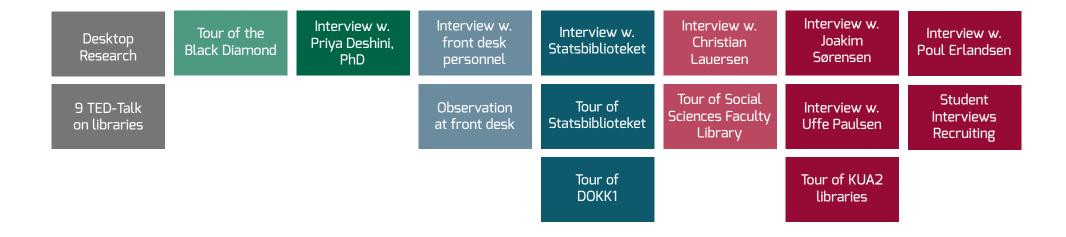
## Tentative Plan



## Work so far



## Research Overview



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#### Images

Cover Photo. List, A. (Photographer). (May, 2009). Det Kongelige Bibliotek (The Royal Library), Copenhagen [Online Image]. Retrieved February 20, 2016 from https://commons.wikimedia.org/wiki/File:Det\_Kongelige\_Bibliotek\_20090502-DSCF1549.jpg. Copyright 2009 by Arne List . Reprinted with permission as per http://creativecommons.org/licenses/by-sa/3.0/

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