Concept Development – FDB Free Aid

Group 1

Oliver Lønberg, ollo@itu.dk 270388-ollo Kristian Sørensen, krso@itu.dk 080688-krso Kim Kragh, kbkr@itu.dk 190173-kbkr Casper Bøje, cabo@itu.dk 070386-cabo Laust Axelsen, lewa@itu.dk 180788-lewa

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Abstract:

In order to provide a solution to FDB's problem with having a huge member base, but marginal activity amongst them. We have come up with a concept that derives from the feeling of helping others, and through this, create a sense of community amongst the members of FDB. Through prototyping and ethnographic studies, we have tried to create a smartphone application which will facilitate the sense of community and network. Members grouping up, to donate already earned points too aid in the third world. By reaching a state of momentum, where the communities within this concept, will become self-sustaining, we believe this concept to become a solution to the whole issue concerning inactive members. Furthermore this concept will create a healthy environment within the FDB association, both between FDB and member, but also amongst the members.

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Introduction

In an attempt to develop a concept to suit the needs and demands of a company, a group of designers must dig into the core basics of development and design. First off, the team of developers must construct a mapping of the company's core areas, interests and goals. Which tasks have they set out, and how can we as developers match that vision?

This particular developer-team, us as writers, were given such a task from FDB. An association consisting of 1.7 million members, a bundle of subsidiary companies such as supermarkets, companies within advertising, real estate and a conference centre.

FDB's core values lies within ethical trading, health, environment and climate (FDB, 2011). When investigating how to develop a concept precisely designed to their needs and goals, we started by looking at their core values. We wanted our concept to have an impact on as many of these values as possible. FDB's association, as mentioned before, consists of 1.7 million members, who have all bought a share of FDB. Unfortunately as of now, only approximately 3.500 members are actually active, and want to express some kind of voice within the association. So our task as developers was to create a concept, which would strengthen the relationship between FDB and it's members, but also the feeling of a community amongst the members. Thus making the members more active. All this should of course happen within the confinements of FDB's four core values (FDB, 2011).

But what does it mean, active users? How do one define an active member? In our paper, and our concept, we see active members as contributors and participants within the concept. They contribute to the concept by commencing a community feeling. Being part of what we believe is a movement - participating in this movement, and thereby establishing a concept that entwine both the members, but also the members and FDB. The fact that the members take a stand, and choose projects to support, group up with friends to support bigger projects are in our view an active member, a contributor.

So how could we design a concept to engage and facilitate this community spread within FDB? We started out by looking at FDB's whole membership package deal as it is today. A member earns points, by shopping groceries in some of the Coop supermarkets. These points can then be used to shop different kinds of material goods on their web page. This was in our mind, a quite boring and not very connecting experience. So we thought about using these points in some other way, and thereby enhancing and facilitating a platform where members of FDB could group up, network and unite. Leading us to our research question, which can be found below.

Research Question:

How can we facilitate the inclination to donate ones Coop points to Aid in Africa, and thereby activate existing members in FDB? Furthermore creating a sense of community amongst the existing members.

Concept Pitch

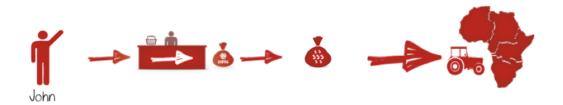
In this section we will briefly cover the general aspects of the Concept. This is to communicate a better overview and transmit the notion of our solution.

Currently, FDB's point-system is structured in a way that only benefits the individual - members can spend their earned points for goods on the CoopPLUS store. According to a study conducted by FDB (FDB K2, 2010), in 2010 there was collected a total of 947 million points by the members. Interestingly enough, only 11% of these points were cashed in at the CoopPLUS store, which could indicate that the current point-system is ineffective or not very well known.

Our concept is called FDB Free Aid. This reflects the core value proposition, that it is free for members of FDB to donate their earned bonus points to a wide selection of Aid projects in Africa. What we propose, and will argue for in the report, is a fundamental change in the point-system. To clarify the concept, we will briefly go through two use-scenarios:

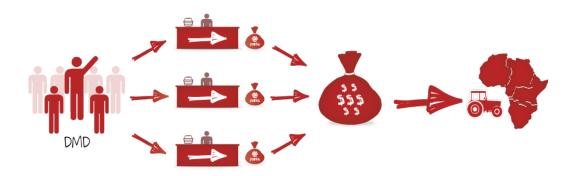
1. FDB Free Aid - One member

This is John. He is a member of FDB and is making a purchase in one of the COOP stores, thereby earning points. John has just signed up for FDB Free Aid, and as a result, the points are now donated to an Aid project of his choice.



2. FDB Free Aid - Group

John is studying Digital Media & Design at the IT-University of Copenhagen. John would like to see the project completed faster and has therefore shared the project and invited his classmates. They have signed up and are now participating to speed up the progress.



Research

In theory we are using a waterfall-method because of the progressive and straight forward overview of our process that it provides, however put into practice there will always occur some modifications. The following report should therefore not be read as a direct reflection of the model, but more as a combination of methods used. We will also conduct interviews by which, we gain insights of our users habits and daily shopping patterns, as well as their correlation with regards to membership points. Stakeholder analysis will also be included in our preliminary investigations, as a way to insure the validity and reliability of our concept. For instance the placement of the product development is fairly early in the rapport, but it should be noted, that it reflects the many iteration rounds between the development and the empirical data we have collected during our research and vice versa.

We need to infuse the target group's shopping routines with the FDB Free Aid concept - in our case we want the users to donate the collected points, instead of keeping them for direct personal benefits. As we discovered earlier, peoples attitudes towards giving aid is not conflicting with our concept goal in any way. Neither is their perception or attitude towards using their collected points for something other than materialistic goods for them selves. According to Fogg (2009) there are three factors that must occur in persuasive design in order to persuade the users to perform a target behavior - In order to accomplish this the user must (1) be sufficiently motivated, (2) have the ability to perform a given task, and (3) be triggered to perform it.

This approach poses several relevant questions for our research. What is the target group's abilities? What is the motivation for using our concept? What could trigger the target behavior?

Fogg emphasises that the ability and motivational factors are closely related - if a

task is very easy to accomplish, it is more likely more motivating as well. On the other hand, if you feel very motivated to do something, even though you may not have great abilities to succeed, you will try harder to accomplish the task. This relationship is also described as the Activation Threshold - in order to trigger a behavior successfully, the activation threshold must be surpassed - the user's ability and motivation to perform the task must be high enough before triggering a signal for the behavior. If this criteria is not met, the trigger will likely annoy the user, who may fail to perform the behavior.

The other aspect of the behavior model deals with the user's ability to perform a certain task. Some of the most common ability factors has to do with required time, money and the level of easiness of the task. Lastly, the service must be easily accessible and available for a very broad audience.

This brings us to the target behavior - how do we trigger it? Fogg (Ibid) divides triggers into three groups: Sparks, Facilitators and Signals. Their strengths and weaknesses are appealing to different segments of the target group - sparks are directed at persons with low motivation, facilitators are directed at persons with high motivation but who lacks the ability to perform the action, and signals are for persons who has both the required motivation and ability but needs a reminder. In order to place the right triggers for the appropriate audience, we need to research our target group and their routines.

In order to persuade the target group to perform the target behavior we need to consider the three factors of the behavior model, and design our research accordingly. This brings us to question which motivators to focus on, how we will appeal to the broad target group in cohesion with their abilities and suitable triggers for activating them. We have used the behavior model to determine direction and pose relevant questions for our research. We discovered that in order to make a change within peoples shopping routines we have to give them the ability and motivation to accomplish the task, and the right trigger to let them know when and how to do it. When dealing with a universal activity such as shopping, you are also dealing with a very broad target group which inevitably have different abilities and different values motivating them - so in order to design a solution that is easily adaptable and engaging we must (1) research and understand the target group in the context of the supermarket, and (2) develop and test a prototype of our product.

In the following section we will present the methods and strategies we chose to use. Subsequently, the data will help create a mental model that will be used to analyse the target group and will serve as the central tool in the development process.

Explorative Interview

In the empirical social sciences, qualitative interviewing is one of the fundamental data collection methods. When combined with creative concept development it is also a powerful tool to gather inspiration, based on the potential users of our

solution. So why do an interview? Besides the before mentioned it also provides us, the designers, access to a better way of understanding the target group:

"The understanding of the life worlds of respondents and specified social groupings is the sine qua non of qualitative interviewing." (Gaskell, 2000)

In order to get an impression of the diversity of our target group we conducted exploratory interviews in the field. We went to one of the nearby supermarkets as a group of three people, one cameraman and two interviewees. The plan was simple, spot and engage a conversation with a broad selection of shoppers that would hopefully give us an insight into their thoughts, feelings and their way of understanding the shopping context. In order to achieve this it was imperative that we introduced ourselves accordingly and assured that the material produced from these interviews, would be kept private and their identity kept anonymous. With this approach all of the five people we asked, agreed to be interviewed.

Since we were in the context of grocery shopping it was decided to try and keep the interview to a maximum of 5-8 minutes in order to not take up too much of the shoppers time and thereby keep the tone light and non formal. Our approach was to keep the interview as fairly open and conversational as possible.

In order to get the most out of our interviews and the short time we had with the participants it was imperative to have some sort of underlying structure prepared. With this in mind we made a topic guide (appendix 1) inspired from George Gaskell and the hourglass approach from Kuniavsky.

"It's an hourglass shape that begins with the most general information and then moves to more and more specific questions before stepping back for a bigger perspective...." (ibid, 2003 pp. 117)

A topic guide in its essence helps the interviewer to keep track of the conversation and makes sure that the subjects and topics that need to be covered, and are of interest, can be checked off the list. There are different types of topic guides such as a tightly structured, semi and completely open structured. We chose the semi structured one since we did have certain topics that needed to be covered in a fairly short amount of time.

One could question why we chose to do these interviews in the actual field and context of shopping, since it obviously gave us some constraints (such as limited time) and why not just set it up in a more relaxed and controlled environment. An apparent reason is the fact that recruiting strangers for interviews that last from 30 minutes to one hour and asking them to show up at a certain time and date, without being able to give any incentive, is extremely difficult. This is based on previous experience from former semesters and therefore we tried to avoid spending too much time on recruiting.

Another reason, and the most important one, is that when you are interviewing

people about how they understand the world within the context, their feelings and attitudes towards a concrete subject, it is more likely that you get answers about their actual present state of mind. Instead of what they think they could feel about a context in an abstracted scenario. Coincidentally Kuniavsky has mentioned a similar observation regarding interviews:

"Use artifacts to keep people focused on the present and to trigger ideas... Bring participants back to their immediate environment by asking questions that have to do with the psychical objects.... The idealized situation people imagine and discuss in the abstract is often different from the practical situation in which they live, and the objects they use help remind them of the grungy details that are missing from the ideal." (Kuniavsky, 2003 pp. 123)

It should be emphasized though that with the interview method it is not possible for us to draw any final conclusions about our target group and potential users, when we have only collected data from four individuals. This is one of the downfalls of interviewing since it can be tempting to generalize and quickly put people into categories in the pursuit of proving a point. Although it is still a useful method to harvest inspirational data for the development of our concept. Also it should be noted that when we make statements, they are based on the gathered data, which is not representative for the population. The statements should therefor only be used as inspiration.

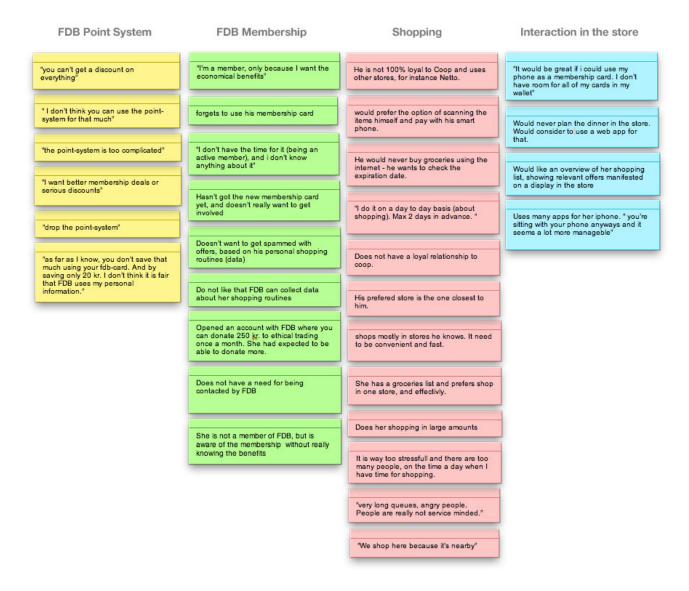
Contextual Design - Mental models

Contextual Design use induction to bring together many instances from individual interviews, building up structure from detail to reveal new concepts and patterns. These form the understanding of the customer and provide the challenge for design. By representing the work practice of a customer population externally, Contextual Design takes part of the design conversation out of the designer's brain and puts it on the wall as a model. The designers then respond to it as an external entity. It holds the memory of the customer and forces designers to be accountable to the customer data." (Beyer & Holtzblatt, 1998).

What Beyer & Holtzblatt are indicating is that, when customers are engaged within the development process, visualizing gathered data from customers can help discover new concepts. When using customer data it forces designers to constantly keep in mind the users/customers while manifesting the design conversation into a tangible entity. One way to do this is to create affinity diagrams or mental models, which Young also describes as:

"The deepest form of understanding another person is empathy...[which] involves a shift from... observing how you can seem on the outside, to... imagining what it feels like to be you on the inside." (Young, 2008, pp. 1)

Young emphasizes the importance of presence of empathy towards the user in the process of designing a product. By considering empathy with the user in the process you are not only studying how a person uses something, you get insights about what the users want to accomplish, their goals and their motivations. A way to embrace empathy and embody it into the design process is by creating mental models, essentially "affinity diagrams of behaviors made from ethnographic data gathered from audience representatives" (Young, 2008, pp. 2). The goal of affinity diagrams is to spot and group related patterns from the gathered data, thus creating a map of data that is easily accessible and explorative - it enables you to discover and prioritize the key problem areas in your field of study. It also serves as a tool to gain confidence, clarity and continuity of your strategy.



Above image also located on DVD.

Initially, the mental model will serve as tool for grouping our findings, discovering shopping routines, get insight knowledge about our target group and for identifying focus areas that needs high prioritizing when developing our prototype. Eventually, it will be used to keep track of, and maintain the users' perspective throughout the development process.

Findings

In the previous section we have outlined research approach and methods which resulted in ethnographic data from members and non-members of FDB. With this data we will be able to pinpoint and deduct a sound strategy on how to precisely hit our target group with the right triggers, based on our evaluation of their abilities and motivations. But before we commence this process it is important to gain a relative frame of our target group which is fundamental to understand the before mentioned elements.

The Target group

Initially, we identified three aspects of interest regarding our target group. Who is our target group more specifically? What is their knowledge and relation to FDB - are they members? What is their opinion regarding the interaction between FDB and their members, and how do they wish to be active within their membership?

Based on our interviews in the context of shopping we discovered that different segments of the target group do indeed exist - in this rapport we have divided these segments into: *Browsers* and *Shoppers*. The Browsers plan their purchase as they go along. They take their time and browse the store for inspiration or interesting offers. They also perform tasks on their smartphones, such as finding recipes, wine reviews, texting etc. The Planners, on the other hand, have planed their purchase beforehand and know exactly what to get in the store. They often shop in stores they know already, and seek to be as efficient as possible.

Overall, the participants had a perfunctory knowledge about FDB and the benefits of being a member. They all knew that by using the FDB card you would receive points that could be used for discounts. They all became members to gain economical benefits, but later experienced that their perception of these benefits shifted, causing the participants to question their membership. Consequently, one participant felt that the personal data traded for the economical benefit was simply not worth it and the remaining participants simply forgot to use it. It also became apparent that despite the participants being members, they frequently shopped in non-COOP stores - mainly due to higher convenience i.e. shorter distance. This indicates that the loyalty towards COOP is not strong enough.

According to our participants they neither had the time or desire to get engaged in the society, which FDB advocates is one of the strongest cornerstones of their organization. This means that our participants perceive that being potentially active in FDB would be very time consuming and not necessarily worth the trouble. One participant expresses that he does not know enough about the organization to be a contributing and active member.

Motivation

So, what is motivating about FDB Free Aid - What should motivate existing or even potential members of FDB to use their hard-earned points for charity? In the article, Fogg (2009) identifies that some of the highest motivators are found in some of the most fundamental concepts of humanity. This is concepts such as feeling pleasure, pain, hope, fear and social acceptance. The concept of helping others, giving aid, is very closely related to these motivational factors.

Even though altruism seems as a selfless act, experiments have shown that people do get pleasure from helping others, and even greater if the choice to help is of their own (brainhealthandpuzzles.com, 2011). By giving the members a possibility to help others and the choice of using their points for aid could likely be more motivating than spending their points on trivial material goods. Interestingly enough, several studies have shown that in 2005, 68% of the danish population was donating money to charity - and the tendency is increasing (Henriksen, 2008).

An even more pervasive aspect of the FDB Free Aid concept is the social cohesion existing between FDB, their members and the member's social ties with their existing communities. The whole underlying structure of the concept relies on peoples effort to share their aid-projects with their communities - this can be done through the concept itself, and social networking sites such as facebook, twitter etc. The aim is to utilize baser human instincts, the fact that us humans are gregarious animals, and always will be.

Ability

We think it would be ideal if we attempt to meet the members' daily routines by adapting to their established habits - making our concept work in a way that would mean no additional cost, and the time required should be kept to a minimum. Furthermore automating the service would be a compliment to the members shopping routines. Regarding the implementation of the service, one participant clearly expressed that he would like to be able to scan items and pay with his smartphone when he went shopping in the grocery store. Another participant also mentioned that she uses a recipe application on her phone for finding inspiration when shopping. The remaining participants did not mention the use of smartphones, but pointed out that a way of interacting with the store could preferably be through a display in the store, or at home on the computer. This indicates that people's abilities varies in relation to the various platforms. It is also essential to emphasize that in may 2011 only 33pct of the danish homes own a smartphone (Dansk Statistik). Consequently, if we were to make our service apply to the mobile platform it is imperative to recognize that people are not yet quiet accustomed to having smartphones. This means that the service would have to take into account an almost constant stream of new smartphone users that need to be guided and hopefully have an easy time using this service.

Triggers

As described earlier sparks are triggers used for people who have a medium to high ability, but with little motivation. Therefore it is necessary to make them feel motivated outside the core concept motivators. In our concept we will attempt to motivate this segment of users by promoting the social community feeling online. As a result, the Sparks are being deployed in the social space of social networking sites such as Facebook. We want to reach the activation threshold through social acceptance and self-promotion that is available in online communities. This can be manifested with groups, fan pages, notifications, media content, comments and "likes". It is important to recognize that users who are in the spark category, will be more inclined to perform a task if it is easy, so therefore keeping it simple and easy is crucial if we are to succeed with this type of member.



Fogg, B.J. (2011) http://behaviormodel.org/

Facilitators on the other-hand can help users that lacks the ability, but have the motivation. By creating guides and descriptions on "how to get started", making it accessible and easy to do, we can reach out to those segments. A good example on use of strong Facilitators is Amazon's One-Click buying design, making it possible to

purchase products by simply selecting them and clicking "buy" - in this way, Amazon have turned something rather complicated into one simple task causing a significant raise in sales (Silverstein Ed, 2011). Another example of making tasks easier is to create step-by-step guides, providing the user with the concrete and essential knowledge required. In our concept we will deploy Facilitators by combining those two examples: (1) creating a one-click member sign-in system that automatically fetches the personal information associated with the member, and (2) by structuring the application with step-by-step tasks, walking the user through all of the steps required to selecting and activating a aid-project. In continuation hereof, activating the aid-project is also performed with one single click.

Lastly, A signal is basically what one might call a reminder - if a user has both the required motivation and ability to use the concept, but has not been informed about its existence, or that it is a service available to him he needs a signal that can promote this. In our concept signals are initially delivered to all members through a notification e-mail introducing the concept, and will eventually reach potential members through SNS's as the online-community within the concept develops. Also it would be a good idea to exploit FDB's already existing channels in the store itself, be it through leaflets, posters and even the magazine Samvirke.

Stakeholder Analysis

"All of a sudden a big shot walks in and tells you that everything is about to change. There will soon be a new system up, and it's up to you to tell the technicians what they should construct" (Bas de baar, 2006, pp. 77)

This scenario is probably something many professionals in the IT industry have experienced before and it puts an enormous pressure on successfully preventing a disastrous project outcome. This is exactly what a stakeholder analysis is, a fail-safe method, and also why it is highly advisable to do. With this method it is possible for the project manager to take into account who the stakeholders are, what their expectations and interests might be, but also what kind of role they have and their influential power/impact on the project (Kuniavsky, 2003, chapter 5).

The result we hope to get out of this analysis is hopefully a greater insight into what the stakeholders might want to get out of the project and especially what makes them enthusiastic and dedicated. In order to keep all potential parties in our project satisfied we will try to determine what degree and type of attention is needed for them respectively. Therefore a visualization of our assessment and prioritation of the stakeholders will be made in the form of a model. This will also help us get a realistic idea of how resources should be spent as not all stakeholders can realistically be given equal attention, since some will have higher priority than others. It is important however to distinguish between the internal and external stakeholders since they will be needed to be treated differently (Gade, M. 2011). One weakness with this method is that most of our argumentation is based on a

holistic evaluation, and not a steady ongoing collaboration with all of the stakeholders. This is simply because we are not far enough in the development process for it to be relevant to include all of the potential stakeholders.

Stakeholder identification - who are the stakeholders?

The first step in creating a stakeholder analysis is to identify which persons or parties that have or eventually may have an influence on the project. Stakeholders can be anyone from end users to a team of developers or a set of close family members and friends - they can all have great impact on the process of the project (Kuniavsky, 2003 chapter 5). In relation to our project there are several stakeholders that we must account for in order to manage our process with as few obstacles as possible. In the following section we will briefly cover the key stakeholders of the development process.

FDB is the most obvious stakeholder since they are the client and therefore
have an important influence on our concept development process. More
specifically it is important that we include all departments within the
organisation, since our concept will bring a fundamental change both
externally as well as internally.

Interests: active members, more dedicated projects regarding ethical trading & health

COOP is a co-operative society owned and managed by FDB. The society includes several supermarkets namely, Kvickly, Super Brugsen, Dagli' Brugsen, Irma, Fakta.¹ These stores will play a central role when it comes to implementing the concept - the shopping in itself is the main drive that our concept relies on.

Interests: loyal customers, wider selection of ethical trading products,

 The Aid Agencies will function as partners to assist FDB in managing the local projects in Africa that the members can choose to support. They are essential in providing the framework for handling funds, providing FDB with media content, and setting up the projects.

Interests: More aid to projects, a wider part of the population giving aid

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¹ http://coop.dk/om+coop/vores+butikker+og+nettorvet.aspx

 The Press handles the reception of our concept through external mediation and communication to the public. In order to communicate and establish FDB's core values in correlation with our concept, we need to provide the appropriate content to the media companies.

Interests: articles, press material, a good story

Members are basically shareholders of FDB and therefore also shareholders
of our concept, which they in turn will hopefully use. Considering that our
concept is user-driven the members of FDB will play an essential in
developing a concept that appeals to their user needs and re-engage them
in the FDB core values.

Interests: Self-promotion, social acceptance, altruism,

IT-developers handles the implementation of the software needed to realise
the concept and are therefore also key players to consider. In order facilitate
the desired user experience, it is important that the developers are
sufficiently informed about FDB and their core values as well as the target
group.

Interests: Getting paid

Stakeholder influence & and their role in the Concept - how should they be involved?

As mentioned before it is imperative to determine the different stakeholders' role and their level of influence so it can be decided when and how they should be involved in the development process. As illustrated in the model below, we can see how the stakeholders are placed and with that knowledge decide how to manage them.

The model consist of an x-axis that defines the amount of interest in the project a stakeholder might have, an y-axis defines the level of power/influence over the project outcome. The grid is divided into four areas that have been classified into Monitor, Keep informed, Keep satisfied and Manage closely which results in a good overview on how to prioritize the stakeholders. If we look at the model it can be observed in the lower left corner that the IT developers and Coop have been placed there. The IT Development team are going to be employed for developing the actual application and website and do not as such have that much influence on the decision making process. The question and challenge is whether they can realise the concept into a working prototype in time so that it can be tested, based on our specifications

and later on redefined it's specifications. It is therefore imperative that they are monitored and given clear plans and goals, but also let the communication go the other way around so that we engage them into the project. Their level of interest is not that high since they are an external stakeholder employed to develop the application, which means it cannot be expected that their interest is other than being paid. But if we treat them as an important part of the development team and hear out their opinions, thoughts and ideas (to a certain degree), the likelyhood of their interest level might rise. Even though COOP is not an external stakeholder, the stores in the co-operative society is owned by FDB and does not have an important role regarding the management of the concept. Their role is to facilitate stores that comprises the products and items, PR & campaign material and staff to accommodate the FDB members with information about the Free Aid Concept.

When looking at the area to the right, you see our placement of the users/members. This is due to their hopefully high interest in the concept, but relatively low power. The ethnographically studies showed that the members do not care much about earning points for material goods, which consequently has led to indifferent and inactive members. Instead, Members of FDB wish to have more meaningful ways to use their earned points. Interestingly, when asked about their interest in having more power over the stores, including the selection of goods, special offers etc., the general consensus was clearly that they do not care about power, or rather that it would require to much engagement and time of them. However, the members do have high external power, in the sense of their willingness to use the concept - if none of the members will use it, then the concept will fail and thus be terminated.



Stake Holder Model - https://blog.itu.dk/KF25-F2011/files/2011/02/itu-pm-tools.pdf

The external press and media have been placed in the upper left corner. This is due to their fairly high power over the reception and mediation of the concept. Media publicity is without question a very powerful tool that can make or brake a business, thus we need to make sure that the communication to the media companies are at the forefront to avoid any backfires. On the other hand, their interest towards the concept is limited and are therefore not in need of any close relation management.

Lastly, in the top right corner we have placed FDB and the involved partners - mainly aid agencies operating in Africa. Their interest is mainly to get more economic support and publicity. It is also evident that the partners can have huge impact on the execution of the concept if they refuse to collaborate, as FDB, even though they

have ongoing projects in Africa, will be unable to manage the increased amount of activity due to their limited resources. In order for the collaboration to work with our concept, a steady stream of communication and exchange of services will be needed, such as an estimation of what kind of projects FDB can contribute to. Moreover it is important that the involved partners supply FDB with media content and reports on the development of projects that are contributed to. FDB is the highest-priority stakeholder of the concept development, since they are the client and therefore have the final say and decision making. Moreover our concept will fundamentally change how the point system is understood and used by their members, and will require an internal shift in the organisation, more simply put this will bring a lot of change to the company, and lastly, lets not ignore the amount of external labour that will undoubtedly come as a result.

9 building blocks

As Ostervalder and Pigeur argues (Ostervalder and Pigeur, 2010. pp. 15), it is crucial that everybody has the same understanding of what a business model actually is. For this purpose they have developed a model that gives an overview of the four key areas in business: customers, offer, infrastructure and financial viability.

Their model is originally created to reveal how a company intends to earn money, and even though our concept is not a business in the traditional sense, where we are dependent of an actual profit as such, it still makes a lot of sense for us to go through the nine steps in order for us to gain insights and a deeper understanding of our concept.

The nine building blocks are:

Customer Segments (CS)

The primary segment will be the 1,7 million members of FDB, as the concept is created as an alternative to the standard point system that is already incorporated in CoopPlus. We identify them as the "Primary" segment, as we will not rule out the possibility of an increase of members once the concept has been introduced. This is based on the feature in the concept that allows members to join forces and collaborate on aiding a project. In the current concept, this requires that all participants are members of FDB.

Value Proposition (VP)

There are different kinds of value that has to be taken into account, when looking at this concept. If we look at it in a macro perspective one could argue that, this is for the greater good for the world, but when looking at it in the micro perspective there are a range of other values that are profiting from the concept.

For the singled out member of FDB, there is the feeling of making a difference, and thereby soothing the individual conscience. Within the concept, there is an option for the users to "share" the project and progress on various social network sites (SNS) like facebook and twitter, and thereby boosting the individual ethos. The

concept will also benefit the community feeling, by allowing the users to team up and together help solving the tasks at hand, taking on larger projects. Last but not least the concept offers a huge convenience factor. By being able to help others in need for free, our concept will work as an incentive to use the FDB membership card. For FDB there will be added value in the branding of them selves as a more responsible organization.

Channels (CH)

Ostervalder and Pigeur (ibid) originally designed this part as being a way to look at how the Customers are serviced, from the awareness phase until the after sale support.

We have changed the perspective a little bit in order for us to evaluate our phases with the smartphone application.

1. Awareness

The Customers should be made aware of the new initiative, both from FDB as well as from the aid agencies (Red Cross, Børnefonden etc.) via the mass media, in-store advertisement and from dedicated websites.

2. Evaluation

For the Customers to be able to evaluate if they want to be a part of the program, it is absolutely imperative that the point system is easy to understand and that the concept offers rapid, clear and frequent feedback once the Customers start to use it.

3. Purchase

The purchase for us would be equivalent to a Customer deciding to download the app and for them to start using it. This should be offered by a link to the dedicated website e.g. 2D codes or plain URL's on the posters and easy to access sites like the Appstore and Android Market.

4. Delivery

In Ostervalder and Pigeur's (ibid) version of the building blocks this paragraph is intended to deal with the delivery of value to the Customers. However the concept calls for the co-creation of content through networking. By "Liking" and sharing projects, the users will have added value, but the twist is that the more the users use the potential of the concept, the more value is delivered to them. (ref. chapter Networking 101)

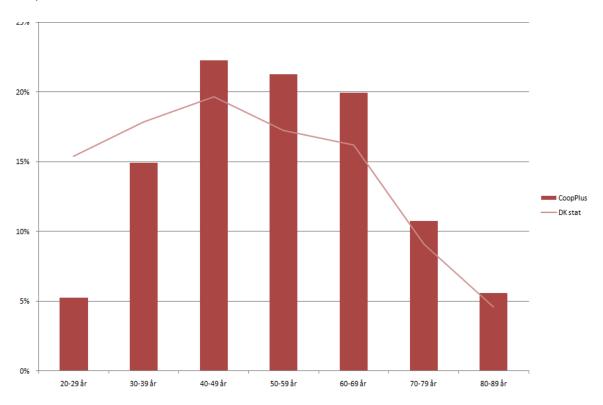
5. After sales

This will be equivalent to a project being completed and our collaborators posting a video / photographs of the aid being delivered. This will be available in the app as well as the website. We could possibly incorporate personal letters / e-mails to the donors.

Customer Relationships (CR)

When looking at the age distribution of FDB's members it reveals that approximately 80 % of the typical members are over 40 years old. (FDB K2, 2011). With this in mind it could be a great advantage, in the startup phase to offer personal assistance, like mail support or a call center where personnel are able to help with the setup, as well as the selection of projects to support. This would be a comfort to the older segment of the users when signing on to the project.

Apart from this the Customer relations should be more of a self-service relation as well as a community feeling where users wanting to collaborate can offer simple help for newcomers.



Revenue Streams (R\$)

As this concept deals with aid, it is hard to define the revenue streams, other than the obvious, where there is a natural cash flow from the users to FDB and again from FDB to the aid agencies.

If we again look at the concept in a macro perspective we could argue that by implementing this concept, FDB might gain an advantage due to their branding as a responsible organization and with that, they might experience an added interest in becoming a member, which might result in an increase in the turnover - this however is purely based on speculation, and is something to consider for further investigation.

Compared to the current model for the use of member points, there will be no additional costs involved with this concept (apart from the development, and administrative costs). The money is there, but instead of letting the members "buy" a set of matching luggage, the money are now allocated to aid programs in Africa.

Key Resources (KR)

This is meant as what assets are required from FDB / collaborators to make the concept work. Ostervalder and Pigeur (ibid) divides this up in four subcategories

1. Physical

The concept can not run in the real world without servers. As mentioned in the CH block, it is important that the system offers frequent and rapid feedback, which means that the servers have to be fast as well as the infrastructure of the system needs to be streamlined.

2. Intellectual

The knowledge and content from the aid agencies are possibly one of the most important factors for this concept to succeed. Without the right projects and the content streams directly from the projects, we will lose the personalization of the concept. One of the main drivers are the subconscious notion, that you are able to put a face on the ones that you are helping, and with that increase the involvement. In this spirit there will also be the users who choose to pick a project that is especially dear to their hearts. If a user for instance drinks a certain brand of coffee from the Kenyan fields, he or she might choose to aid this project.

3. Human

Like the intellectual point, it can not be done without the aid and assistance of the employees of the aid agencies.

Human factors that also needs to be taken into consideration will be the development, testing and user testing. It is crucial that the user interface of the appas well as the dedicated website - works smoothly and is extremely user friendly, keeping in mind who the customer segment are.

4. Financial

The development and deployment of the concept is a costly affair. However when looking at the bigger picture and the reimbursement FDB will get in form of branding, as well as active members, it would be sensible to investigate how much it would cost to develop it. Once developed and deployed we anticipate no extra costs compared to the way the point system works today.

Key Activities (KA)

This investigates the things FDB must do to make the concept work. Originally Ostervalder and Pigeur (ibid) only put in three points to be taken into consideration; production, problem solving and platform/network, but we have chosen to add a fourth; pre-production, since this is a concept and not a product, and as such we need a solid foundation of knowledge about our users before going into production.

1. Pre-Production

This phase involves gathering of empirical data, doing surveys, focus groups and possibly workshops (you might recognize this phase as where we are now). Also in this part it would be crucial to get a co-operation agreement from the aid agencies,

stating what responsibilities lies with whom and why.

2. Production

The development of the actual system, including design and user testing.

3. Problem solving

Another key activity that needs to be dealt with is the issue of quality control. For FDB to rely on aid agencies there have to be documentation, that accounts for the projects supported actually have been accomplished. Whether this should be maintained by FDB or upheld by the reputations of the aid agencies, is subject to discussion, but never the less an important issue that have to be sorted out.

4. Platform/Network

In order for us to attract a younger segment (as well as maintaining the older) we have decided to go on two platforms with the concept.

The first being the application for the smartphone where it will be possible to signup, chose projects, get the frequent feedback and updates, as well as sharing the message on SNS's

The other will be the website where the users will be able to gather more information on the specific projects as well as getting the more extensive updates like annual reports from the Aid Agencies.

Key Partnerships (KP)

When thinking about the key partnerships, it would be beneficial to think in a broad sense, as this concept concerns aid to the needing. The ideal situation would involve all aid agencies in Denmark, but we have to take into consideration that they are competitors, with all the complications that it brings. We must tread cautiously when approaching them and make sure to do our homework in advance, in a manner that let's us approach the most relevant first. Also it is important to steer clear of conflicts of interest, when it comes to contracts with the aid agencies.

Cost Structure (C\$)

We will not go to much into this block. We will however mention that for this concept to make sense we see this as a cost-driven concept in that sense that there should be a constant focus on minimizing the costs. We are well aware that there are some fixed, and some variable costs that must be covered in order for the wheels to turn; servers, maintenance, administration etc. but it is imperative to keep an eye on the overhead, as it could easily backfire if gluttony appeared.

When looking through all of the above blocks and seeing it as a whole, we deem the project viable for FDB to go further with the research and development of this concept. Once the concept has been implemented we foresee that there will only be a few organizational changes from the way the bonus program runs today. In stead of handling the ordering and shipping of physical products, there will be an administrative task in allocating the donations to the right organizations as well as there will be one more system back-end for the technical staff to maintain, but other than that our plan is to have the aid organizations to supply the content directly into

the system (app and website). The only place FDB should anticipate an additional expenditure, will be in the research and development phase as well as in the launch of the concept (awareness).

Product Development

In order to explore the concept and gather some data or knowledge about our users that does not derive directly from within the work group, we have decided to create a prototype that should work in context, and in general be similar to the final product.

To ensure that we designed with empathy towards our target group, we had to include the data from our empirical study. As previously described, we developed a mental-model serving that purpose. Through a sketching process, we wished to end up with a prototype that could serve as a tool for further user-studies giving us deeper insight for the concept development.

Sketching, as Buxton suggests, is to be used as a suggestive and evocative method whereas prototypes derive as a refining or answering process (ibid 2007, p. 140). This is why we think that this is an essential step towards designing our concept. Also by making a design process a physical method - hereby meaning that we expand our thinking material from brainpower, pen and paper and include "thinking using physical objects" - we know from research done by Goldschmidt (Goldschmidt, 2003), Young (Young, 2008 pp. 291) and Rasmussen (Jantzen & Rasmussen, 2007) that it enhances the experience and supply us with a set of communication tools that we can use within the work group and between us and the user.

Sketching

Sketching is a medium we have used to better understand the implications in the context that we are designing for. We have used sketching techniques inspired by Bill Buxton, and in the following we will discuss and reason from the backtalk (Goldsmith, 2003) and results from these.

As stated earlier, we wanted to create a small scale version of the actual concept so that we could take our ideas into the supermarkets and use it as a springboard towards a talk on using mobile applications as a donation platform. In our group we discussed whether or not people could integrate the idea of contributing to the third world (or simply aid-projects in general) from the smart phone platform, but given our technical background we needed more data in order to know if the users could actually use these platforms. Our personal experience and the data collected indicated that the target group was not currently familiar with donations via phones except SMS / call donations for national events like Danmarks Indsamling² etc.. With this in mind we wanted to sketch around the issues regarding donation, the social

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² http://www.danmarksindsamling.dk/giv-et-bidrag

aspects of our concept and the schematics of the application.

Through some rough sketches we tried to wire-frame the prototype; how should it look, feel, be used or interacted with and when. We quickly found out that the platform "smartphone" always needs to be updated, which means when the customer have checked out at the supermarket, the application immediately needs to get the information regarding the new points for at project. We figured this due to the fact that one might feel that "FDB free aid" is a game or at least some sort of progress system. Therefore the members would anticipate that action equals reaction. We needed to make our concept equivalent, in feedback and behavior, to other smartphone applications for maintaining what Norman refers to as the "conceptual model" (Norman, 2002, pp. 14). Especially because this concept is breaking new ground with the idea of donation via an application and therefore need to be extra careful not to lose the users. Instead try to keep our concept within the persuasive area mentioned in the previous chapter regarding Fogg's Behavior Model.

During this design phase we knew that sketching, thorough data collection, testing etc. was a core building block for the final concept and according to Stamm this phase allowes us to adjust the concept, so that we do not end up within the most common failure issues (Stamm, 2008, pp. 371). With inspiration from Paul Dourish who argues the importance of development in context (Dourish, 2004) and Microsoft innovation expert, Bill Buxton, we tried to emphasize the significance of us "turning over every rock", a playful approach, scenarios etc..

This led to us creating user scenarios where we used a combination of enactment and drawn situations on the whiteboard (appendix 6). This became our springboard for discussions and decision-making. The sketching process started before the data gathering but while collecting data we simultaneously sketched - as Winograd suggests, (Rogers et al. 2007 pp. 543) - and elaborated to each other on the pros and cons for every adjustment in the concept. Schön also states "I cannot make a move that has only the consequences that I intend. Any move has side effects. [...] This unpredictability is a central attribute of design" (D. Schön et al., 1996) which indicates that we need to focus not only on the issues a given move resolves, but also on what it generates.

While sketching on the look and feel of the smartphone application (whilst having the stakeholders in mind), we figured that our concept must work within the core issues that FDB deals with. But at the same time address the user with something that adds value for the individual. When narrowing it down into words we came up with the question "Would you help others if no time or money investment was required?". The obvious answer for an empathic person would be yes - but behind that "yes" lies a win/win situation which we found quite interesting. The user gets a cost free opportunity to help others without doing anything more then their daily routines. But at the same time receive the notion that they have done something good. At a lecture at the IT University in 2010 our professor in Cross Media, Henriette Moos, stated that the average Danish person uses 1 hour/day on the

Internet. This means that each concept we want to implement will have to compete against big websites like Youtube, Facebook and the rest of the popular services out there. Therefore, our concept that basically derives from just relocating the bonus each member get, needs to appeal to the user in such a strong way, that they feel attached to their project in the third world. We tried to create this sort of personal attachment to the concept by adding the social aspect, supporting group projects and other sharing and personalization so that the users can feel they support the specific thing they find interesting.

The only way we could gather more data regarding the attachment between the users and the concept was to build a prototype that partly uses "the Wizard of Oz" technique (Buxton, 2007 pp. 263) combined with an actual mobile application. This also give us an opportunity to reach and handle some of the implications in the context without going full scale.

Prototyping

We wanted to use the prototype as the didactic or answering method. Hereby taking some of the pointers from our sketching phase and testing it in context. The prototype simply consists of a "mobile browser friendly website" made in the PHP and HTML programming languages. To make it act like an application we included the jQuery JavaScript library³ to create similar effects of the smartphone e.g. slide, fade, scroll etc.. To ensure the fast update speeds and overcome the slow 3G network within the test area (Copenhagen) we coded the entire project within one index file and used load methods, so that when the main page was loaded, the entire application was actually basically downloaded on the phone so that no network speed issues could have any major effect while testing. We did this due to our sketching, regarding the conceptual model of smartphones according to Norman (ref. sketching chapter), and to ensure that we could conduct the testing within an environment similar to a normal application. Of course the actions performed on the prototype was not linked to any real projects, and all the data reset it self when reloading the page - as stated, a simple "Wizard of Oz" (Buxton, 2007 pp. 263).

We created two prototypes; respectively version 1 (V1) and version 2 (V2). The first version was for us to understand medium, and as a tool for our further sketching process. Furthermore to have something concrete to elaborate on when designing the conceptual model. The second version was for user testing, which required a better finish, user friendly sitemap, navigation etc., something the user could feel, use and react upon.

In the appendix the source code for both versions can be found, and the online test links can be found here:

Version 1:

Link: http://lewa.dk/fdb/

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³ www.jquery.com

Source Code: http://lewa.dk/fdb/show_code.php

Version 2:

Link: http://lewa.dk/fdbV2/

Source Code: http://lewa.dk/fdbV2/show_code.php

V2 of the prototype ended up using the jQuery library so well. This resulted in a few of the test users and one of our professors thinking it was a "real" live application. This of course had a negative impact on the data we wanted to collect since the persuasiveness resulted in people reacting to the prototype as if was an final product and not the springboard for discussion we planned. When people reacted to the prototype, which in fact is just a regular "Wizard of Oz", they felt some lack in the accountability (Dourish, 2004, pp. 55-99) herein leading towards frustration that of course was not our intention. The testers was overall very pleased and found the idea good, but started commenting on the functionality and graphics instead on the issues we wanted to address e.g. donation on smartphones, community feeling etc.. On the other hand, this also indicated the transparency between the concept and user, due to the fact that they immediately adapted to the application and did not need to overcome any notable entry barriers regarding the concept as we feared.

Micro usability test

There comes a time, during the development of an IT solution, when an early prototype of the product is ready to be tested. And testing is essential to do iteratively and early in the process. But why exactly is it important to test your product before shipping it out? Is it not pretty straight forward to make the product directly from the system specifications and then it should work as intended?

Creating a perfect IT solution in the first go is a nice thought, but one that belongs in a Utopian world. Since it is impossible to predict how people, unlike yourself, will understand and use the product. Therefore Kuniavsky suggests (Kuniavsky, 2003) the following argument for doing a usability test:

"The usability test will tell you whether your audience can use what you have made. It helps identify problems people have with your site and reveals difficult interfaces and confusing languages" (Kuniavsky, 2003)

However, conducting a proper usability test requires a lot of time and well coordinated planning. So we found an alternative yet similar method that gives "good bang for the buck" as Kuniavsky puts it. In its essence family and friends are recruited, so that way, time is saved on the recruiting aspect while it also gives more flexibility as well as getting the tests completed faster. We managed to get hold of four testers who were very different regarding age and occupation. Only half of the participants were members of FDB, all of the participants had smartphones, but only one of them was a long time user - i.e. for over 2 years.

In order to successfully introduce them to the test, we started out by asking them some simple questions about how they perceived the act of giving aid to others and how they understood the name FDB free Aid (the name of our solution). This was to put them in the correct mindset and create an awareness about the theme and setting the test would be set in, namely giving aid. We then explained them how the FDB member system worked and what benefits you have as a member, moreover how you collect FDB points(since some of our testers were not members of FDB). This way, they knew roughly what it was like to be a member of FDB. We then asked them to carry out some tasks which addressed the core functionalities.

Scenarios have the following advantage according to Madsen & Nielsen (Madsen & Nielsen, 2010):

"Scenarios are easy to relate to and remember as they draw on our human ability to individually and jointly make sense of, arrange and convey information in a narrative form." - p. 428

For our usability test to be carried out, in a structured fashion, we created a framework(see a, which also acted as a guide when performing the test:

1. Initial questions

- What is your opinion towards giving aid to 3rd world countries?
- How do you understand the name FDB Aid?

2. Scenario

- Imagine you are a member of FDB and you have over some time collected points, but have never really gotten around to using them.
- Now you are in the shopping store and you have seen an advertisement that explains how you can donate your FDB points to 3rd world countries via an application for your smartphone.

3. Tasks

- Login and find a project you want to support with the "lyn projekt" search function and sign up for it.
- Find another project you want to support with the "søg projeckt" function and sign up for it.
 - Gain an overview of the projects you have signed up for on "min profil".

4. Explorative questions

- How do you understand the "del" button?
- What impression does the progress bar give you?

Results from usability test

In the following section we will present the more noticeable quotations from our testers regarding their interaction with our prototype. They represent some positive and negative feedback and are all in cohesion with the tasks they were given. These test results would make it possible to properly reflect on the strong and weak points of our prototype which would also have an influence on our conceptual and business model.

Nikolai (18 - not member)

- When signing up for a project

"Am I signed up for this project? I don't think so...no. These were just the 5 most critical ones I could see and it doesn't say anything about me being signed up now, so I guess that I'm not."

- When exploring the "min profil" page

"I can see that I have chosen a project and my membership number, mail, phone number... so that's pretty good i guess, that it gives me an overview of which projects I'm a part of. "

When asked about the "del projekter" button

"Well with 'del projekter' i would think 'hey see what I'm supporting, will you guys support this?' which could be a notification on Facebook or the website.

Peter (58 - not member)

- When signing up for a project

"What I'm missing here if I'm supposed to support with something, is a button of some sort then tells me something about 'what will you support with?'

- When asked about the different search functions, especially Lyn projekt

"Hmm it doesn't really tell me anything... but maybe that's because I haven't noticed the text which describes it, you could make that a little bit bigger but maybe that's because I'm a little old. It's just that I'm thinking "søg projekt", is more clear since it's the most natural"

- When asked about the progress bar

"Well I think it gives me a lot since you can compare it with the national gathering day for "røde kors" or "dansk flygtningehjælp" and you get told that in relation with a catastrophe in the east, that there is now been collected 26 million kr and my contribution with 100 kr has meant something."

Jennie (25 - member)

- When asked about the project selection

"What makes the 'fast-projects' faster? I would like to have a sorting option of e.g. projects that are nearly done, most popular, newest etc."

- When asked about the use of app

"I think it'll be fun to check the progress

Ejvind (61 - member)

- When asked about the use of points

"As far as I can understand, if I activate a project, all of my points will be used for that alone. I would like the option to manage how many percent of my points I will use for different uses."

- When asked about the differences btw. the platforms

"I clearly see the web-page as the full experience

when I come out of the store. I think I could easily use 15 minutes looking at friends' projects etc."

with more media content and admin functions. The app, on the other hand, is a great for getting a fast overview over the progress, and getting started."

Conceptual model

In the following we are referring to a conceptual model as defined by Terry Winograd, who argues the importance of understanding how the user perceives the metaphors, interaction and interface types used in a concept (Rogers et al., 2007). Additionally we will try to give our take on how this concept should use the mentioned pointers, and why.

Metaphors

Our prototyping process was above all an access point for us to gather data within the context. Therefore, we did not at first glance want to spend too much time and effort with the graphical work etc.. Nevertheless it gave us an insight in which issues we should address, and the following is a discussion on which metaphors could be implemented to fit our segment as a partial mapping. According to Winograd (ibid, 2007) this is a three step process:

- 1) Understand what the system should do
- 2) Develop partial conceptual model and try them (the metaphors) out
- 3) Take into account what the users argue could be good metaphors and include them

Note that our target group is all the members within FDB. This is a huge segment spread with a variety of ages, income, education, residential status etc. (see chapter about target group and user segment) and therefore we need to understand the common cultural patterns and their perception. This is a hard and maybe even impossible thing to do for us, and this is why we (with the data collected) only can surmise on the outcome of this concept. The first stage is described in the concept description earlier. The second stage is what we tried to do in the prototype. Basically we developed an application and used the jQuery effects to support the metaphors our users already know from other applications and herein created a well known environment for our concept. An example of this can be found in the carousel effect when choosing project area and/or location, see prototype V1.

Step three deals with taking the users thoughts and ideas into account regarding the metaphors. This step primarily address our concept after further testing, but with the usability test in the previous chapter we saw a clear indication that the current test version (V2), needed more mapping and metaphors in order to make the navigation and site map clear. We need to get a better understanding of our target

group, and include them in the design process. This will result in us having the possibility to design metaphors more suitable ones.

Interaction and interface type

In our conceptual model we wish to use two types of interaction as defined by Winograd - the instructing and exploring.

The *instructing type* because it is quick and efficient and this is an absolute necessity for our concept to function. As Winograd argues "..it is particularly fitting where there is a need to frequently repeat actions" (ibid., pp. 65) as well as repetitive actions like saving and deleting. In our concept the user frequently have the option of selecting new projects (on completion of another project), join groups and surfing their point collections received from grocery shopping etc.. Furthermore in order to share on different SNS's and administrate different tasks, the user have to interact with the system in a sufficient and user friendly way. The smartphone platform supports touch, sliding, flip and turn, zooming and push messaging which should be included in the final product to ensure information to be fed and pushed in a manner that be consistent with the users preferences.

An exploring interaction type also have to play an essential role in our conceptual model. This type is primarily described as virtual/physical environments the user can interact with. But within our concept, we wish to use it in a sense of natural user interface. Natural user interfaces (NUI) derives from the thought of controlling computers with human and natural movements, gestures etc. to make the interaction between the user and application more or less indigenous.

"The word natural is used because most computer interfaces use artificial control devices whose operation has to be learned. A NUI relies on a user being able to carry out relatively natural motions, movements or gestures that they quickly discover control the computer application or manipulate the digital content." ⁴

The NUI approach to the application also help us to select and define which metaphors to use. This also reveals and emphasize how entwined all of the processes and pointers in our conceptual model are. In addition to the exploring interaction type, we can use it as a guideline for understanding how to facilitate the user a way of *going on an adventure* in our concept. Meaning, when selecting a new project on the application, the user is enabled to select different categories e.g. within the core values of FDB (ethical trade, education, environment, health). They can then see the filtered projects, in the selected category, on an interactive map that allow for zooming and other application-like navigation. Herein they get the possibility to choose geographical area (see scenario under selecting project). Note that the interaction methods supported by the common smartphone already use and include the NUI approach.

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⁴ http://nuigroup.com/go/light/about/

Regarding the interface types we are bound to the smartphone and its GUI. This GUI or platform allow for good sharing opportunities via proximity technologies like bluetooth and infrared, via geographical technologies like GPS or via other applications and SNS software like facebook, twitter etc.. If we look at the application from LinkedIn.com⁵, they use proximity technology to invite to groups. This could in fact be implemented to our concept and perhaps even lower the barriers regarding invitations of new members to communities and/or groups on the run. This feature also opens up for an easy recruitment of new FDB members, which we will not explicate further due to this reports page limits and the main objective of activation of current members. In the following we will try to narrow down the functionality of the concept, so that we can be more precise and structured when constructing our business model in the 9 building blocks.

Product functions and information relations

As mocked up in our wire-frame (see appendix 5) we get an overview of the different functions / pages in relation to each other. Keeping in mind the feedback from the users and the pitch day with the FDB project managers, we knew the idea of a community or group feeling was one of our concept core values. This information told us that we needed to implement this ability, to uphold the community/group feeling in terms of sharing, thoroughly in the product.

Login should be remembered, and the user is automatically logged in when opening the application after the first time. Like stated earlier, login should be one-click like Amazon's buy function (see chapter "triggers").

Selecting project have two possibilities "search project" (the user can search through some filters) and "fast project" (finds the top 5-10 projects who especially needs help and gives the user a quick opportunity to select a new project with 2 clicks). If selecting the "search project" the user is followed through an easy and simple filter to narrow the possible selections down to an appropriate and relevant few. This filter should work as following:

Scenario

Click "search project" (button) - select category (icons) - select continent (map) - select area / country (map) - select a dot (on map) representing a project - project description - select project or return.

Profile page is the settings and information regarding the users preferences and point / aid gathered. The user is also allowed to change which sort of push messaging and notifications he/she will receive e.g. on completion of a project, when receiving new points, group activities etc.. This page should also show if you are currently supporting a project, and link to the project page of this project.

⁵ http://learn.linkedin.com/mobile/

Project page is the page when browsing through the "search project" or "fast project", and clicking on a project. The project page describes the project, hence the name. This page includes a project description, progress bar, how much you and others separately have supported, link to read more about this project (referring to more detailed project page on FDB's website with the organisation behind the project, how they use the funding supported, pictures of the project and extensive information). In the current prototype we have made a function that calculates the estimated time on project completion.

Groups and sharing process have not been defined exactly yet due to our empirical data only being from single users at a time. We think this should be included in a way so that communities like the IT University, companies, organisations, families, friends etc. easily can group up and together support a selected project. If the group is big enough they can "close" the project for other members. Ideas on extending this could include inspiration from the project www.ingenco2.dk made by the Danish Ministry of Technology and Science, where companies who support a cause can get a sticker on their website claiming activities within sustainable development and aid. Other aspects of sharing should include social media sharing inspired from http://wordpress.org/extend/plugins/social-media-page/ that simply (1 click) adds the ability to share the projects on the different social media platforms with an added caption e.g. "Hi guys, look at what I am supporting - join the cause! The next time you are out shopping you support a coffee farmer in Kenya build a storage for his harvest" or "Me and my friends are supporting a project where we are giving away 200 AIDS vaccines to children in Zambia, join - it's free". As Winograd argues in his article on conceptual models, we need to find the happy means to prevent a cognitive overload (Rogers et al., 2007, pp. 550), and since we in the previous chapters found our users very good within social skills in both on/offline contexts we figure that our application should not in terms of communication increase the number of social platforms with yet another, but instead rely and be implemented in the existing ones. Sharing could also be done in a physical manner as stated in the chapter "Interaction and interface type" with "in person" via bluetooth.

Mobile application and FDB website should cover the entire concept, but each medium have to do what it is best at - therefore all the simple and onthe-move-tasks should be included in the application but the extensive data are to be found on the website. We have stated this earlier but now emphasize the importance that the mobile application should be a simple and effective system that focus on the user only using 1-2 minutes and the website adding extensive text, descriptions, options regarding membership and points etc.

Networking - 101

Understanding our users, as mentioned above, is one of the key issues in this concept. Designing platforms for users has shifted a lot from back in the days, where online forums were the one of the only ways to "network".

Our concept derives from the idea of people uniting, forming a network wherein they donate money to aid together.

But how do we actually get these networks started? And how do we categorize our users. Imagine Youtube without content – they would not have very many visitors. But imagine Youtube without any visitors – they would not have very much content. This goes for our concept as well as for every other concept touching on the idea of network and sense of community. When in the following referring to *content* it includes "like", sharing on social media platforms and other kinds of sharing / referrals. Our users will be adding content in the form of network, "Likes", comments and spreading this on the other SNS's. This content will be en par with content added on every other networking sites, and will become imperative for this concept to evolve into a proper community.

When talking about groups of users, we often tend to look at online and offline users. Since our concept is a digital concept, including a smartphone app and a complementary web page, one would think we should design and aim for the online group of users. But is this really the case? And can one divide the big pile of users into "just" two groups?

To clarify, dividing users into offline and online just is not enough. To better know how our communities and networks will behave, we need to narrow down our users, and narrow down the design towards those specific users.

So, to try and localize these scales of network:

- · Networks of real friends.
- Networks of online friends with mutual interests etc. (games, baking, cooking etc.)
- Region based networks networks within local regions.

By understanding our network target, we can also estimate how many users we need for this network to thrive. The network and community we are trying to start with this concept will not be healthy and will not be working from the start. Through marketing and PR, FDB should be able to get some of their members to join in on this.

In quantum physics, there is a term called *Critical Mass* (Britannica, 2011), this is when an electron vibrates with 51% of its body, the remaining 49% instantly gets sucked into the 51%, causing an unstoppable momentum. This term can also be used

in sociological aspects, especially looking at how communities thrive. At some point, these networks or communities reaches a *Critical Mass* (Wikipedia, 2011) where the momentum within the community or network will cause a continuous growth and keep it self-sustaining.

But to reach what the *Critical Mass*, these members need to branch out and start the network, start the spreading of word of mouth, start the sense of community and networking around donating to aid in Africa.

FDB's members are actually ranged within all three network groups listed above. If we look at the real life friends, who know each other from school, work etc. These friends will be able to start a community to support a chosen project. This is definitely the hardest target network to get started. But definitely the most useful network when you get people on board. Since one member will be able to tell his/her friends about a project and just start inviting. This could create a lot of small communities within the members of FDB, gathering in networks. In the following paragraph, i will try and describe some of these types of network, and how they can help facilitating the spreading of networks throughout FDB.

Your Network of Trusted Professionals

You are at the center of your network. Your connections can introduce you to 431,800+ professionals — here's how your network breaks down:	
Your Connections Your trusted friends and colleagues	54
Two degrees away Friends of friends; each connected to one of your connections	4,900+
Three degrees away Reach these users through a friend and one of their friends	426,800+

Source: http://www.linkedin.com/network?trk=hb_tab_net (profile: Laust Axelsen, date 18.05.11)

In the above picture one can see how network spreading can ultimately function. The above picture shows Laust Axelsen's profile on LinkedIn, a more business oriented SNS. He has 54 connections at the moment. Through those 54 contacts, Laust would be able to get 4900+ contacts. This is where one could begin to talk about *Critical Mass*, since these 4900+ contacts, would feed themselves, and thereby keep Laust's profile constantly growing. This "perfect" scenario could just as well happen with FDB Free Aid, as it could on LinkedIn.

Network of "real" friends - It could for instance be a group of fellow students at ITU, going together to support the spread of internet in the third world. These kinds of groups amongst "real friends" would stand very strong, united. But also give an extremely good opportunity to expand. Friends friends, inviting and possibly being able to support bigger and bigger projects. At this point the concept will be able to

reach *Critical Mass*, a tipping point where a social group becomes self sustaining, keeping the momentum and cause further growth within the society, community or network. This could ultimately result in FDB members inviting new members to join, and/or result in a lot more active members. Thereby facilitating a much healthier environment both for FDB to work in, but also for the members and their communities.

Networks of online friends – these networks need some place of "headquarter", where they can assemble. This could be a group of FDB members who have an affinity for Gambia in Africa, people wanting to furtherance different key interests in the third world, etc. a group of people, who does not necessarily know each other, but share an interest. These types of networks have a harder time expanding, since only people who share interests would join such a network.

Region based networks – could be a small suburban town, with only one supermarket, and a very low population, going together in a "Town Network" to support some chosen project. Everyone in the neighbourhood, going together, donating to aid. This type of network will give FDB the possibility to reach out, expand their information channels to the smaller communities out in the country. Thereby becoming a more present association. Even in the smaller societies.

By learning how to aggregate all these small communities into one big one, that is how this concept could be able to turn into a movement. Reaching that *Critical Mass* and creating an entire network of FDB members, contributing and donating together. FDB becoming the facilitator, and letting the communities add the content, both in their own pace and in their own interest. If one would look at earlier examples of reaching this *Critical Mass*, an obvious choice would be looking at Facebook. Starting with small communities in colleges and such. But at some point they reached a tipping point, where the smaller communities would create a *Snowball-effect*⁶, steadily increasing the number of members, inevitably ending up as what we today know as Facebook.

Discussion

"As the builders say, the larger stones do not lie well without the lesser." – (Plato, Laws, 360 B.C.E)

Throughout our process of developing this concept, we have been high and low, in east and west. It has been an iteration of brainstorming, sketching, prototyping, testing and then back to brainstorming again. All these big and small steps sum up the experiences we have gained during our process. Without the small discussions, frustrations and ideas we would not have been able to end up with what we think is a very good concept.

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⁶ http://en.wikipedia.org/wiki/Snowball effect

We have tried to approach this concept with open minds, and not letting our habits and usual ways get in the way.

"Habits are accustomed ways of doing things, and the problem with habits is that we tend to be unaware what our habits are, and how much they drive our behaviour." (Stamm, 2008 pp. 307)

This however is extremely difficult to uphold at all times. One will have a tendency to draw on the ways that worked the last time. And we have primarily used methods we have used before, since these are the ways we know of. Of course we are also of the opinion that these methods would give the best results. But given the fact that our time frame was rather limited, we would have wanted to have done a focus group around our application. This was an approach that would definitely have boosted our data outcome. But the needed time for gathering users for testing, and the margin of error in people not showing up, etc. just could not fit into our time schedule.

"As a result, humans tend to rely on patterns of behaviour that were successful in the past. These patterns are only reviewed if problems are encountered – or someone questions them." (Stamm, 2008 pp. 307.)

We have definitely been using our knowledge and skills we have grown accustomed to use in these situations, because of the ease. As stated above this is the common tendency amongst designers and concept developers. Luckily for us in this concept, these ways have worked our well for us. But this tendency easily "clings" on, so one must take this into consideration in future product development phases. Not to become to content with the normal ways and procedures. But to think out of the box, and question the methods and choices. This way you minimize the act of failure in a design process. Betinna Von Stamm describes a framework in her book "Managing Innovation, Design and Creativity" called The Complexity Framework (Stamm, 2008 pp. 308) which has eight elements, a group of designers should think through and discuss before engaging in a design process.

- Time frame
- Technology
- Skills
- Financial resources
- Participants
- Processes
- Cultural aspects
- Customer and markets

These eight elements, when discussed and evaluated upon, gives a very good start on a design process. It has nothing with methods or practices to do, just the boundaries and possibilities of a project. A healthy way to start a project, and a way to start out of the box. This led us to acknowledging our different skills, and the possibilities we had from the start.

One of the group members is very crafty within web programming. So our entire prototyping phase has been very digital, and has seemed very "finished" and polished. Even though the actual application was a quick prototype. This led to us having a prototype with very high *Resolution* and *Fidelity* (Houde & Hill, 1997). Our prototype appeared very "finished", and therefore also kind of locked in its design, very early in the design phase. This "mistake" was although disarmed since we went back to the "oldschool" drawing board and made a version 2 of the application. This choice was made because we were afraid to get to attached and settled on our initial prototype. We actually thought it was very well done, but later found out that a lot of things were either missing, or needed tweaking. But as Houde & Hill try to explain, even a brick can be used as a prototype, it just depends which context it is used in. A brick can be used as a prototype for represent the weight of a design. So one needs to look at the context the prototype is presented in.

This of course affected how our test users perceived the application. This has however boosted our own design process. Because of the set of skills within the group, we have had the opportunity to sketch and prototype with an actual working version of the application. Giving us an actual *Look & Feel* (Houde & Hill, 1997) experience. Having an application with actual working buttons, pictures and colours, instead of looking at a mockup picture, drawing sketch etc. This gives us, as designers, and the users a way of translating and relating to other products with the same look & feel. Giving the users a much easier time to test, if they have the affordance (Norman, 2002) from earlier experiences. This way of sketching is not the conventional way, but given our opportunity to create an app as a sketch, whilst discussing features etc., was a very effective and giving way for us.

As stated above, all these small steps in our process has helped the larger stones in our concept development lie well. Also

The Membership Card

In order for the concept to have the biggest impact in the aid agencies it is crucial that all points earned are reallocated to the projects supported.

During our empiric data collecting we have been talking to some of the FDB members during the informal interviews in the stores, as well as during the user testing of the prototypes. We have obviously gone into the subject of the bonus points and the card as a method when it comes to the gathering of points. The statements that we received, has mostly been that the point system has been made to hard to figure out, resulting in a lack of interest in collecting the points. Another point we have observed has been that, of the members we approached nobody was carrying their membership card.

Numbers shows that the FDB members earned approximately 947 million points in 2010, equivalent to 66,3 million DDK. Of this amount only 105 million points (11%), equivalent to 7,4 million DDK was used in the Coopplus shop. (FDB, 2010) On top of this our research indicates that there is a bulk of points that are never collected by

members.

Should we complete and implement this concept, this would be a problem we would have to look into and resolve.

A possible solution could be in the way the points are collected by the members, whether it be associating the members credit cards to their FDB account or introduce an option for the members to afterwards register points with a code from the receipt (naturally ensuring that there are no chance of double registration). Another obvious option would be to look into the emerging technology with the "contactless smart cards" that are currently being tested by NETS (Kolby, 2011)

Another notable question is how the several supermarkets will react upon this concept. Even though the Coop stores are within the same organisation, they still compete. They are competitors, and might not think well about a concept that deliberately thrives on shopping. So a conflict of interest must be avoided, since some of the supermarkets within the FDB umbrella do not at the moment reward shopping with points.

Although the current point system being used, indicates that FDB or Coop must have had this discussion at some point. In our opinion, our concept does not change how the current system works, the only thing changed is the redistribution of points, and if the current model is accepted it should not cause any conflict of interest. Of course a further investigation should be conducted. If this concept be implemented and ending up a great success, then one could argue that an interest of conflict could occur, due to the fact that members might change shopping habits. This instead of being careless regarding the points, the member could prefer to shop in stores where they can earn points for their selected aid project. But on the other hand, that is the whole idea of the point system - a bonus, but in our concept a bonus to give away.

Conclusion

We set out to explore and facilitate an inclination for the members of FDB to donate their CoopPlus points to aid projects in Africa. According to FDB they have a large membership base but are lacking the desired activity from their members.

In our ethnographic studies, we found that none of the participants used their FDB points actively. By using theories derived from Persuasive Design, we determined that (1) some of the motivating factors in our concept include: the satisfaction of helping others and the potential social aspects manifested in a community feeling and the self-promotion therein, (2) our target group have different preferences with using digital devices in the grocery store, (3) Means of attracting users towards the website and the application will be implemented, and will help achieve participation from all member segments

Furthermore in our research we found indicators, that this concept will help

strengthen FDB as a responsible organization, which might again have a positive effect on the revenue, since it may help to draw more members to the community, as well as activating the inactive.

We have discovered within our product development how to address the segment via a smartphone application and use the existing technologies on this platform. The core arguments is that of the mobility, the accessibility and the continuous updates and push messaging. This technological approach also helps going from the individual gain to what people can build together as a community and follow the evolution of a project. This also reflects the founding idea of FDB as a association.

Our assessment of the concept as a whole is that, it is viable for FDB to go further with the research and development of this concept. It is our belief that the changes our concept provides to the FDB organisation could, with a low cost and a simple reallocation of funds, resolve a big part of their issues with inactive members.

Appendix list

Appendix 1: Topic Guide

Appendix 2: Videos from interview Appendix 3: usability test guide Appendix 4: Video from Tests Appendix 5: Wireframe Model

Appendix 6: Mindmap and scenarios

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Topic Guide for Explorative Interview

We have chosen to use semi open structured interview to allow for unexpected and interesting topics to be pursued, while making sure the conversation is relevant to our goals.

Goals

With this interview we want to understand the users' way of looking at the world, when it comes to shopping at the local grocery store. More specifically we are interested in learning what attitudes they might have, values, abilities and motivations so that we can gain as much relevant empirical data as possible.

Topics to be covered

With inspiration from Kuniavsky we have chosen to try and place the different questions in a specific so that we follow the Hour glass shape that is mentioned. To this we start out by asking a rather broad question so that we get the respondent into the right frame of mind and thereby achieve relevant answers. Then we dive into some more specific aspects, where after we end with going out broad again and look at the larger perspective. We will hopefully gain this with the following topics and follow it closely when in the actual interview situation:

- The respondent's relationship to FDB, if they are a member.
- Their shopping habits, regarding planning.
- Their interaction in the store.
- Their thoughts on the FDB point system.

Selecting respondents

When down in the store we will try and get a wide variety of respondents who differ age wise and gender, and who are hopefully members of FDB. It would be ideal if we could get hold of 4-5 respondents considering the time of day we will be visiting the store (13:00 pm to 15:00pm), we aim to interview people for a maximum of 5-10 minutes so that we do not disturb them for too long.

Interviews - See attached DVD

Usability test guide

1. Initial questions

- What is your opinion towards giving aid to 3rd world countries?
- How do you understand the name FDB Aid?

2. Scenario

- Imagine you are a member of FDB and you have over some time collected points, but have never really gotten around to using them.
- Now you are in the shopping store and you have seen an advertisement that explains how you can donate your FDB points to 3rd world countries via an application for your smartphone.

3. Tasks

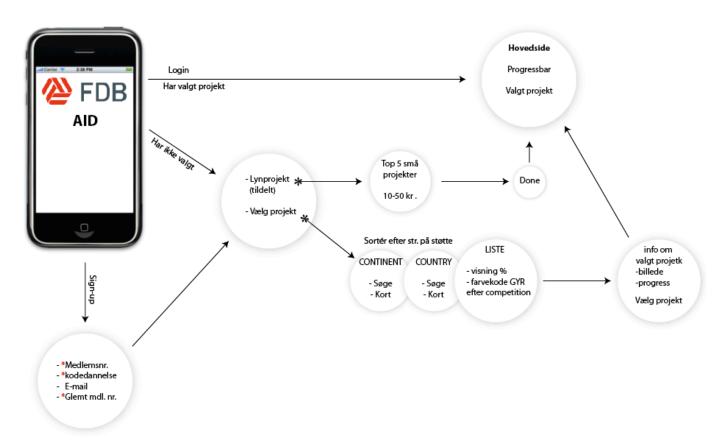
- Login and find a project you want to support with the "lyn projekt" search function and sign up for it.
- Find another project you want to support with the "søg projeckt" function and sign up for it.
 - Gain an overview of the projects you have signed up for on "min profil".

4. Explorative questions

- How do you understand the "del" button?
- What impression does the progress bar give you?

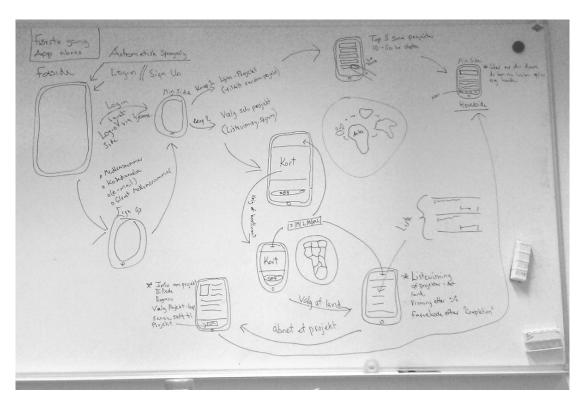
Usability test - See attached DVD

Wireframe



Copy located on DVD aswell.

Mindmap and scenarios



Copy located on DVD aswell.