INF5261 - Mid-term report

KOMPIS

mechanisms and boundaries for building social connections &
trust in the digital age.

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1 Introduction

Nearly a third of Norwegian households own a dog or a cat, most commonly in families with children (SSB, 1994). Families with dogs often live a busy life, and would like some relief of walking their pet. Many people like dogs, but for different reasons do not own one themselves, too much responsibility perhaps. They may like to go for a walk, either in their neighborhood or in the forest. Sometimes with a friend, sometimes alone. Taking a dog out for a walk might be pleasing and good company. You might also own a dog and would appreciate sharing the job of walking with another dog owner.

We want to make an app that connects dog owners that need help with walking their pet, with people in their neighborhood looking for a pet to walk.

1.1 Our Concept

A walker can browse for dogs within the neighborhood and choose which dog he wants to walk. When he selects a dog he likes, the owner gets a notification on the phone regarding the interest. The dog owner can then look up the profile information and ratings of the walker. Based on their mutual approval, dog owner and walker can initiate a chat and agree on meeting up with the dog. We have named our app Kompis, Norwegian slang for friend.

1.2 Target group

Our project has two main target groups. The primary user is a person who is interested in walking a dog for a few hours, but also dog loving persons who wants to babysit a dog for a longer period of time. Like when the owner needs a weekend off or is on vacation. The secondary user is someone who owns a dog which they need someone else to take care of either by walking it a day or at weekends and vacation. At the start of the project we did not possess any more detailed picture of the two user group, and the current scope was too large to make a worthwhile app. Therefore, one of our research goals were to investigate who in this large group would be interested in a service like ours. In our initial data collection (chapter 3.1) at Frognerparken we made discoveries on the matter and found out that younger people in their 20s and 30s were more interested in this kind of service than older person. Pensionist,

who we thought might be a a target group, showed little to no interest. Most of them liked walking their dog for the exercise and fresh air, and they also had difficulties trusting an app. It is worth noting that we only got in touch with seemingly healthy elderly and the response might have been differently if we made contact with more physically challenged elderly. The same goes for every age group.

Based on the interviews we decided to target younger dog owners aged 20-40 in our project. Within that group we specifically target families with younger children, but also singles and couples owning a dog. For the primary user of the app, the dog walkers, we have yet to investigate who our main target group is. So far we have targeted people who are not necessarily dog owners themselves, but is interested in the animal and would like to attend a dog for either a walk or longer period of time. Age-wise we found that everyone from students to middle aged person is within the scope. People in this range tends to have good knowledge and experience using apps and smartphones, something that will be reflected by the implementation of the app.

1.3   Research question

Although new technologies and economical structures emerge, basic human needs and social behaviour prevail and may evolve to adapt to our new settings. With our project we wish to answer:

- What would make dogowners feel reassured about their dogs safety while lending their pet to strangers?

- Who is the target group and what do they have in common?

- What manner of feedback is useful for our users and what motivates users to give feedback.

- How important is payment for our users?

Futhermore, using the GPS tracker, is there information a mobile app can provide which may assure the dog owner that the dog is safe? How does the walker feel about being monitored by the owner?

2   Design method choices

In our project we have opted for the using the method user centered design, but we are using genius design as well on parts of our app at the start of the project (Bromley, 2011). We have chosen this path because we at the start of the project had an idea of how we wanted our service to look and feel. Nevertheless we have some research questions we want to investigate our self to better cater the needs of the users involved in this app. Therefore we have reviewed similar services such as DogHub and Doggy, but also apps with similar functionality as ours. This includes Tinder and Uber (see chapter 4). Our goal is to create a prototype and test it with both primary and secondary users preferably in a focus group. The main goal of the focus group is testing our core mechanics, but also evaluate the content of the app.

3   Literature review

3.1   CityFlocks

The CityFlocks article (Bilandzic, Foth & de Luca, 2008) presents a case study of a mobile system prototype to lower the existing barriers of access to information about one's surroundings. The article addresses how visitors and new residents can make use of the knowledge and expertise of local residents when gathering information about a new city.

The main purpose of the article was researching, and comparing, the direct and indirect ways of communication used for social navigation within a mobile interface. They also introduces technicalities and implementations possible for such a system.

To start their iterative process, they made use of focus groups to let people talk freely and discuss topics regarding their experience and attitude to social navigation, partly done using scenario-based usability engineering approach. They developed a prototype, using geo-locations and tags as a core foundation. Locals had been encouraged to rate and comment all locations within the city, to be used in the app. Later they had user tests, were six participants with varying degree of knowledge of this city was presented the phone application along with printed material. They were then observed solving fictional problem-based scenarios.

Even though the test set of six participants in one city is too small to do

firm conclusions, the article gives good indications and points to important aspects.

The indirect approach with user submitted comments turned out to be an extremely valuable source of information. In comparison to other professional sources such as magazines or guidebooks, the information was seen as reflecting people's uncensored opinion about places in the city. A drawback was though that some places did not have enough entries to give enough information about them.

The direct voice link was perceived as being bothersome for the receiving end, and the users was uncomfortable talking to strangers. This was the general perception even though the local residents had agreed to this in advance and possibly could provide a richer form of communication with information specific to the users needs. Text messaging was seen as an appropriate channel to contact local residences, but only if the request at hand was not to urgent.

The article concludes that indirect communication with user submitted comments is a great way of implementing social navigation into a mobile setting. It also gives an approach for how to implement social navigation into mobile applications, such as our own.

4 Methods

4.1 Initial interviews

4.1.1 Goal and participant recruition

We decided to conduct interviews early in our project in order to address the research questions:

- What would make dog owners feel reassured about their dogs safety while lending their pet to strangers?

- Who is the target group and what do they have in common?

These two questions has great influence for our project going forward and we decided to investigate them as early as possible. In addition to the two research questions we were also interested in how often different user groups needed a service like ours in order to find out the market size for our idea. For the data collection we used interviews for a number of reasons. Firstly, all

we had were assumptions regarding what would make dog owners lend their pets to strangers. To get a sufficient understanding of dog owners we needed something more than questionnaires. We wanted to get under the skin of our target group regarding how to make them feel safe when strangers take care of their pet. That would be more accomplishable with interviews than questionnaires. Even though some of our questions will be quantifiable, and will be analyzed as such, we decided to conduct interviews to investigate the two main questions for the data collection.

In order to recruit participants we went to Frognerparken and contacted dog owners in their natural environment. Frognerparken has a large diversity of participants, all from families with pets to pensionist walking their dog. It is a popular park in Oslo and is usually well populated. However, there were a couple of drawbacks choosing this a our location for recruitment. Frognerparken is in a part of town which is considered habitated with more active people and that might reflect in our answers. Another drawback is that we did not manage to connect with inactive dog owners or dog owners who walk their dog infrequently because of disabilities. Anyhow, we did ten semi-constructed interviews with a wide range of possible users of our service. Of those ten two were pensionists, three were families with young children and the rest were dog owners in their 20s and 30s who had the main responsibility of the dog themselves. A decent variety of people albeit we would prefer a lager sample size.

4.1.2 The result

Firstly we found out that there is a potential marked for our app. Four out of ten answered that they needed help walking their dog regularly. All were families with young children and single young adults. Two answered they needed help almost every day and preferably at working hours. Furthermore, additional two dog owners had needs for a dog sitter over weekends and vacations. In conclusion, six out of ten had some kind of interest in our app. It is worth noting that none of them were pensionist. The two pensionists in our research used the dog as motivation for exercise and fresh air. Neither of the two would feel comfortable with using our app despite functionality like ratings, review, dog-tracking and contact information to the walker.

When it comes to what would make dog owners feel reassured about their dogs safety while lending their pet to strangers, there were a lot of different feedback. Some felt the idea was absurd and that none would ever

use such a service. To use it would be irresponsible. Others thought the idea was brilliant and could not wait for the app the be released on Google Play or App Store. Even though some were less skeptical they needed some information about the walker to be willing to lend them their dog. The interview objects were given the chance to come up with ideas to increase the trustworthiness of using such a service before we introduced our own. To our surprise more than one mentioned that having a Facebook-connection within the app, get basic information about the walker, swapping contact information, use peer-reviews rate each walker built enough trust that dog owners is willing lend their dog out. Especially the peer-review and rating functionality made dog owners feel comfortable.

We also researched what dog owners opinion were regarding the tracking functionality of the app. Obviously none repelled the idea, but not everyone embraced it either. Once again the pensionists were the most skeptical and did not want to use it. Most were in between and though it might interesting for the sake of curiosity, but could also increase the safety using the app. Interestingly one participant liked the idea, but said he would never agreed to it as a dog walker. He thought it was too invasive in he's private sphere. A problem we have anticipated as well. The tracking function, at least at the state of the initial interviews, were presented as an actual track where the dog owner could see exactly where the walker has been. This function might be voluntarily in the final design or presented in another form if we elect to keep it as a part of the app.

Other takeaways from the interviews is that three of the participants wanted a function in the app which specified whether a walker should walk the dog or be jogging with it. For some it was also a concern where the dog was walked. They wanted to specify accepted location for the walk. Mainly a park or the forest. Most dog owners was open to the idea that a walker could walk more than one dog at the time as long as it were maximum three and the walker had experience doing it. We also asked what means of communication they would prefer for the initial contact with the walkers. It turns out most wanted chatting over calling and texting.

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5 Review of existing systems

5.1 Tinder

- Matching based on location
- Contact based on mutual approval
- Chatting to get acquainted
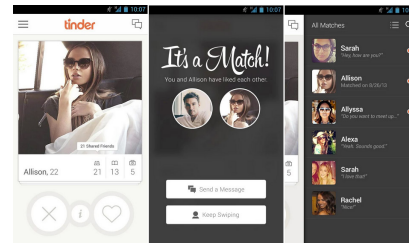- New profile using Facebook

Figure 1: Tinder UI

5.2 DogHub

- Dogowner search for Walker
- Booking via Calendar
- Individual pricing
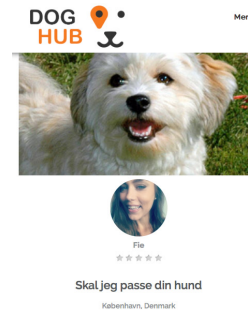- Rating (not in use)
- Manuel filtering of location of Walkers

Figure 2: DogHub UI

5.3 Doggy

- Dogowner search for Walker
- Booking via Calendar
- Integrated pay system
- No ratings
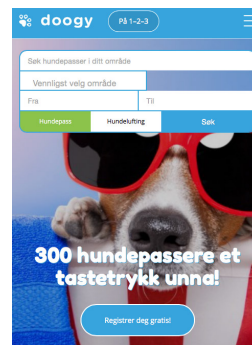- Manuel filtering of location of Walkers

Figure 3: Doggy UI

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6 The way ahead

Our next task will be to make hand drawn sketches to display the application's basic design, layout and function. This process will be based off our interviews, articles we have read and our knowledge to similar applications. Using these sketches, we will make a hi-fidelity prototype application, visualizing one or more user scenarios. We want this Wizard of Oz-application (Usabilitynet, 2006) to provide a good user experience, with clickable regions redirecting the user between a set of screens, simulating how a real app would behave. The prototype will be made by the prototyping-software InVision, as this tool provides all we need for a prototype while being fast and simple to use.

After we finish our prototype, we will present it to a focus group. There the user will be presented some predefined user scenarios, and then questioned about their experience using the prototype. We are hoping to get feedback regarding both the user interface, the featureset and the design. Findings after analyzing the outcome of the focus group will then noted and discussed as tasks to possibly further explore.

7 References

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[3] SSB. (1994). *Samfunsspeilet 1994-4.* From `https://www.ssb.no/befolkning/artikler-og-publikasjoner/_attachment/69798?_ts=137dad05378`