Cognitive Design 2017

UMEÅ UNIVERSITET
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Task

We were introduced to the subject meetings and asked how we could develop or change this concept. One solution that is being looked at is walking meetings. Our subject was to look into the concept of meetings and find problem with how they occur today, and how we could solve that problem.

First iteration

Research

We started off by trying to define a meeting - how they occur, what is used, what kinds there are etc.

Then we attended 10 meetings to get better insight about meetings. We also did 4 interviews. This gave us a lot of data. We analysed this and found these patterns.

- Meetings have a purpose, which for example can be:
  - Share information
  - Make decisions
  - Discuss
  - Plan
- All meetings have some kind of role structure. For example
  - A leader or an expert.
  - A secretary at more formal meetings.
  - Informant – that informs people on the meeting about something
- They use materials. For example.
  - A presentation screen/PowerPoint
  - Penn and paper
 - Laptop/smartphone/tablet
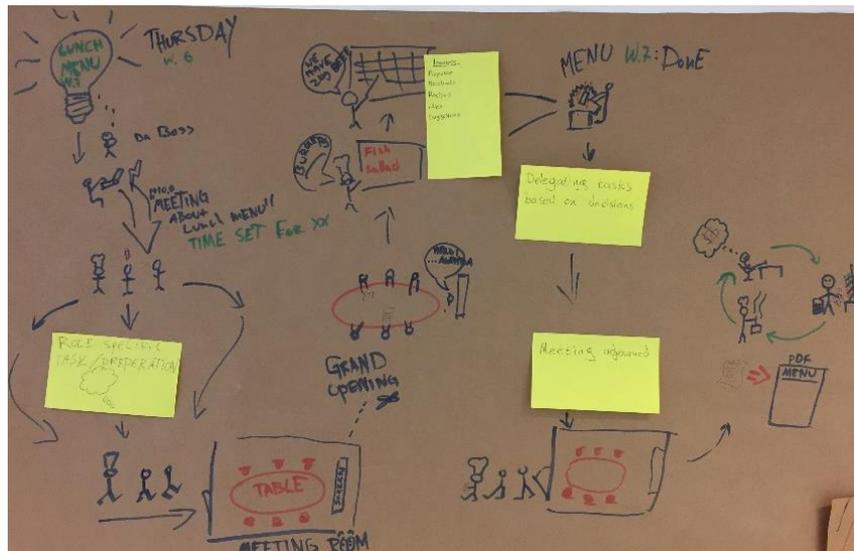
Figure 1 journey map of a typical meeting

With the interviews our major findings was that:

- People are not prepared to the meeting which makes a lot of time go to briefing these people what is going to be discussed.
- It can be hard to find all relevant files, since they are scattered between different software and places.

Other comments were:

- People also would like to add anonymous question to the meeting
- It was a problem that the default meeting-time was 1 hour

The initial idea

The knowledge gathered during the observations and interviews led to some problem areas we wanted to focus on. The use of different software for file-sharing and other software to book and plan meetings could be merged into one solution. We began to explore the idea of a product that would be a technical aid for the whole meeting process. More specifically, to help users access and share files related to meeting before, during, and after a meeting had taken place. The idea was to create a workspace for file-sharing which was created automatically when a meeting was booked. This would help participants

for a meeting to prepare since resources would be easily found in the app rather than having to look in mail-threads with attachments, cloud storage (such as Google drive), intranets.

Prototype and user studies.

We created a low-fi prototype of our app concept out of cardboard and a few papers with some steps.
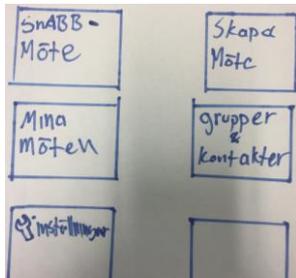
Figure 2. Home screen of low-fi prototype

Figure 3. Adam and Kristoffer creating the low-fi prototype

We tested two different scenarios in the user studies.
In the first scenario we asked the users to create a hypothetical meeting. To navigate and proceed through the steps - papers were slid out to represent the next step of the process.
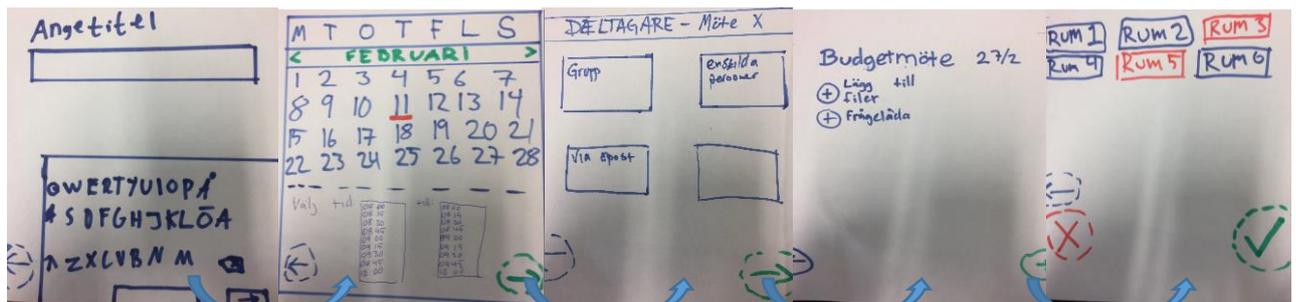

Figur 4 Steps of Scenario 1.

The second scenario: in this scenario the previously created meeting had already taken place. The user's task in this scenario was to locate a file from this meeting that had already happen.
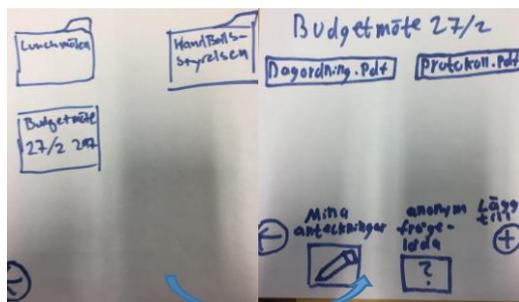

Figur 5 Steps of scenario 2

Conclusions from the user studies were that the UI and design of the app was more than satisfactory since none of the users had issues navigating and solving the two tasks in the scenarios. The users also commented that it felt 'intuitive' and 'natural'. However, we were forced to step back to analyse what we actually tested with our prototype. We concluded that there was no clear distinction between testing the user experience of navigating the UI and the actual concept. Furthermore, we lacked a specific problem we were trying to solve and we also realized that in some ways we were reinventing the wheel, by creating yet another share application which could make the issue of scattered files even worse. Our initial idea weren't really solving the lack of preparations from meeting attendees, it also just added another sharing platform.

Figur 6. Performing a user study with the prototype

Second iteration.

By stepping back in the process we specified what issue we wanted to solve and concluded that scattering of files could be solved, not by creating a new sharing platform that an organization (or company) were forced to adopt in order for it to be used. But the new concept would be a tool that would be aimed toward individuals. The new direction led to a concept of linking already existing ways of sharing information (instead of creating a new) that would give the user the illusion of having everything at the same place.
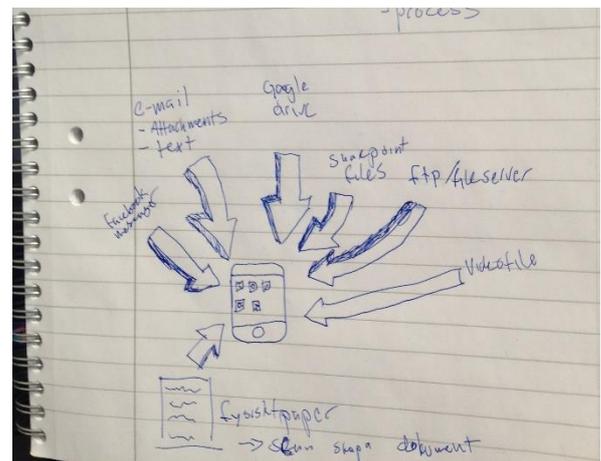
Figur 7 rough sketch of the new concept

We conducted more interviews, and also created an online questionnaire, asking about experiences of how resources were shared among people regarding meetings. The feedback was almost uniformly that more than one method of sharing information was used. Emails and different sharing solutions (Google drive, Dropbox, Aurora) were used in combination. Hence, there was not really one set way of sharing information. By confirming that people share information with different tools we asked ourselves and users if finding information stored on different platforms causes any issues and/or confusion. The feedback received that most of the people found issues with lengthy email threads and scattered files and that a solution of grouping these different locations into one "would be excellent".

Figur 8 Person post interview

How it would work

The user would connect their different accounts, e.g. Outlook, calendar, Google drive, Dropbox and different fileservers. In the app you would create a meeting, for example a meeting called "Budget meeting" dated 27/2. When the meeting is created the app would start to search your platforms by context using natural language processing. It starts with your calendar and looks at the specified date

were it finds this budget meeting and other persons that are linked to it. Then, based on the information gathered, it searches your mail, which makes it easy to find recent mails with connections to the meeting (mails from the persons found in the calendar, the word budget, the date and other tags it might know). This information gives the app more knowledge, and also some files that it could present to the user. It will then search the rest of your platforms and find files, and learn more about the meeting to be able to present more accurate files to the user. When everything is searched the found files would be presented and where they were found, and the user can add them to the workspace. You would also have the ability to manually add files to the workspace.

The workspaces would have the option of creating folders, in order to help structuring. For example gather all meetings of the football board in one folder. There would also be a function to activate / inactivate meetings. Because it might be unnecessary to update folders/meetings that took place 3 years ago.

The app would have a sync button on the home screen which would check for new resources found for all created meetings, if new resources were found this would be indicated as a small red indication in the top right corner of the meetings. When the user opens a workspace with newly found resources the resources would be suggested to be added to the workspace.

In our first prototype the shared workspace was really popular, so we kept that function, and therefore it is possible to share the workspace with others and they would get access to the files, but not your different accounts, and they can also add their files. We consulted users about this concept, and they liked it!

Realizing the concept

Since the UI of the Lo-fi prototype received such good response we kept the general design of the app but changed the focus and functionality. Photoshop was the tool of choice for developing the design of the app. The colour themes and design of icons and general visual look of the design is a rough draft which is not the final design.
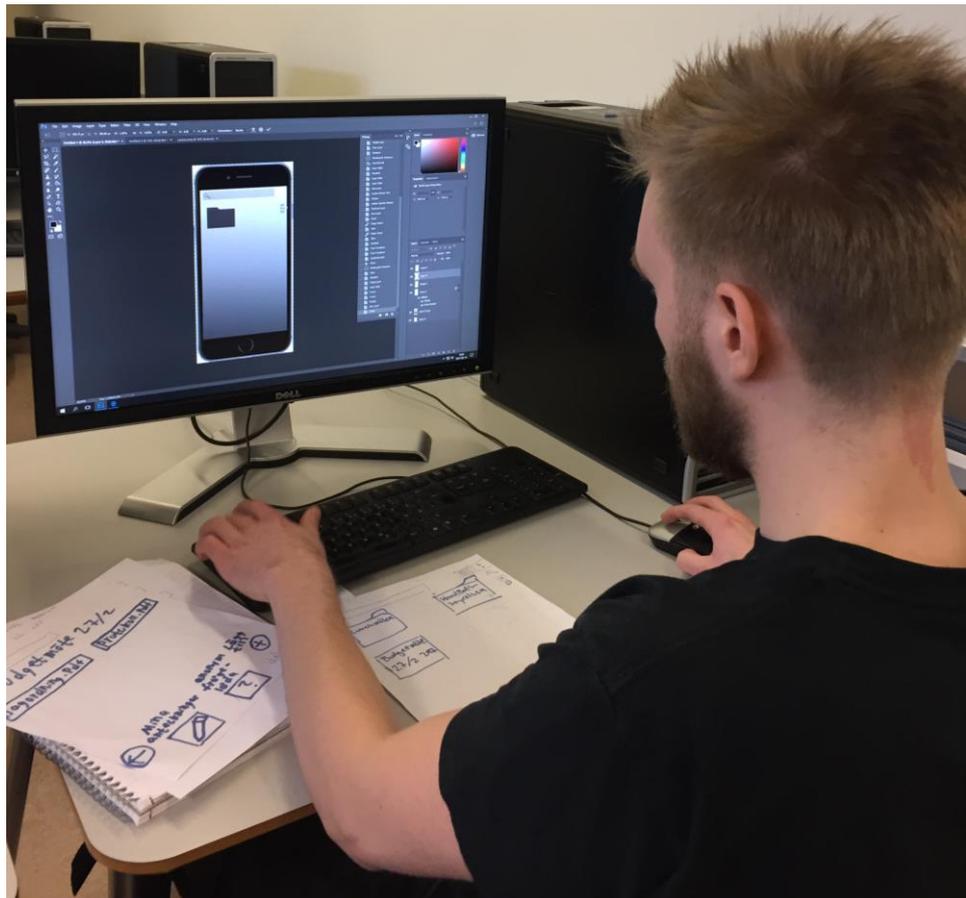
Figur 9 Prototyping.
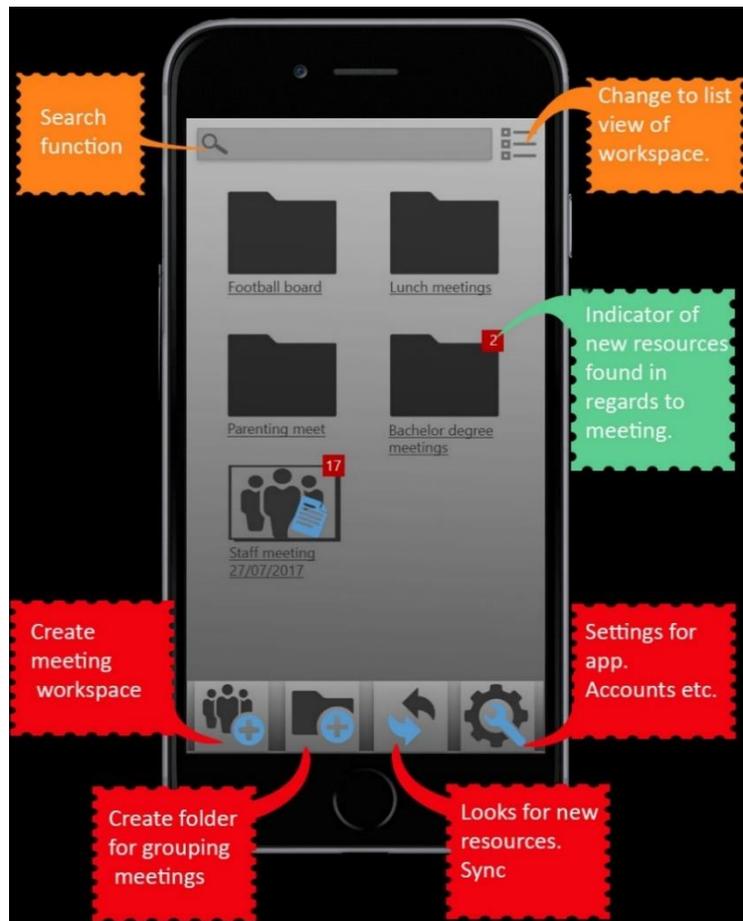
Figur 10 Home screen and explanations.

The start page list all your meetings. Folders can be used for grouping meetings and there are single meetings if grouping is not necessary. There is a search function to easy access a meeting and you can change view/layout with a simple press of a button in the top right corner.

The bottom menu (left to right): icon for creating a new meeting. Next is the icon for creating a folder. Third from the left is the sync button that uppdates all active workspaces. If there are newly found files, a notification is shown on the folder or workspace. The last icon (from the right) is settings, for managing accounts and other settings.

When entering a workspace all files are pressented and possible to open within the app. The workspace has multiple functions. The icon furthest down to the left is the main function which searches your platforms and pressent them to you, this is the heart of the app - the file fetcher. The second icon (from the left) lets you add files manually. There is also a possibility to add folders inside the workspace to get a better structure (third from the left). The last icon is the share function where the workspace can be shared if desired. The person that it is shared with can then add own files and look at the ones added from others, without accessing their accounts.
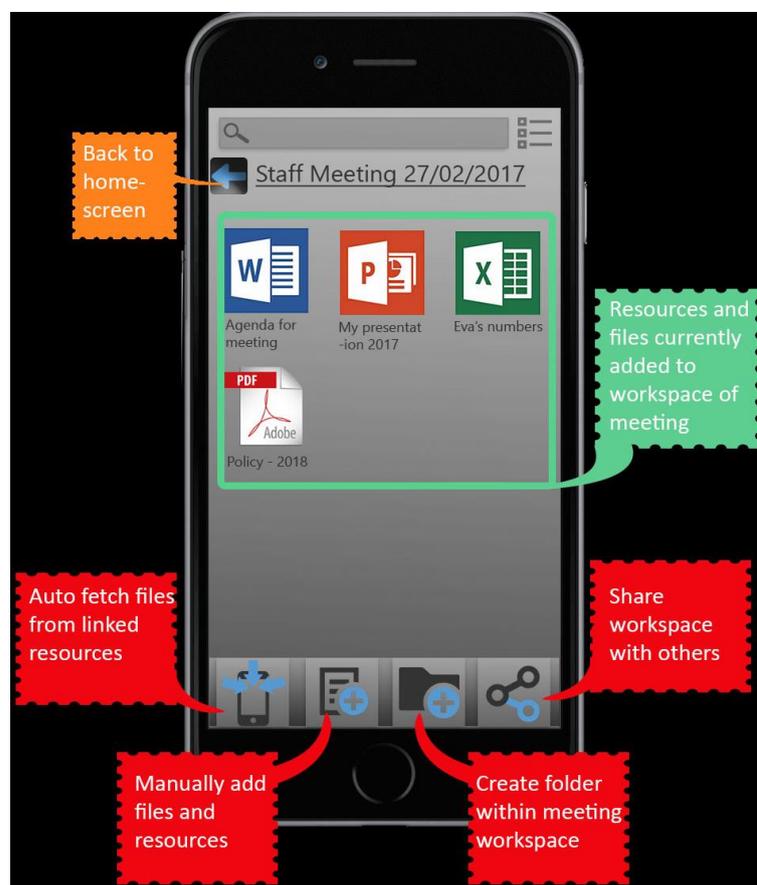
Figur 11 Workspace and explanations

Figur 12 Adding files

Fetching of files: the program has now searched the user's connected platforms and presents the matching files. New files are automatically marked and files that are already in the workspace are not marked. The user can then unmark files that do not belong there and then press the OK-icon, and the files will be added to the workspace.

Fetch! ..and walking meetings

Where is this app supposed to be used? That is up to the user. With this app you have easy access to all your information regarding meetings. Even if you are on foot, your files are not more than a second away. Fetch can help you access information easily if you need it when on the move, rather than checking through mail-threads and different platforms.

At this stage of the project, we consider the design and concept still being in its infancy. Further testing and development of the natural language processing and interaction design would need to be done in order to proceed. A few more iterations of the whole process would have to take place but at this point the project is considered to be finished from our point of view.