APPLICATION OF CONTEXTUAL INQUIRY TO GROUP SHOPPING

Evaluation Report

User Experience Design, MSc
Kingston University

CI7820 Media Specialist Practice
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Executive Summary

An iterative approach of the contextual design process was used in context with group shopping. During the project term from January to March 2015 contextual interviews were conducted, an affinity diagram built and consulted. Three participants were observed to gain an understanding about their group gift shopping approach. The used method exposed to fit in the informal environment of organising presents. The collected data delivered valuable insight, managed to be implemented in wireframes for a potential group gift dashboard called ‘GGift’.
Introduction

Contextual Design

Many researchers found that just asking people about their work is not enough in order to develop user requirements for a product. During direct interviews users tend to forget crucial steps in a process, which is what contextual inquiry techniques try to solve with observing the users’ action. (Lazar, Feng and Hochheiser, 2010)

Contextual Design, a User Centered Design process was generated by Karen Holtzblatt and Hugh Beyer in the 90s and developed over the years.

Figure 1. Contextual Design Process (InContext, 2015)

Figure 1 illustrates the wealth of methods provided during the user centered life cycle. This process promises to offer a set of benefits to researchers. Just highlighting a view of them: it helps to build an understanding of work with its detailed structures, produces results right after the first inquiry and offers reusable knowledge within the working area. Apart from that, possible risks and problems that might occur during the process, are already well articulated and available to improve its use. (Beyer and Holtzblatt, 1998)
Focusing on certain methods is a recommendation by Karen Holtzblatt (Holtzblatt, Wendell and Wood, 2005), for an iterative approach to the process. The fundamental implementation of a Rapid Contextual Design Process, illustrated in Figure 2, called ‘Lightning Fast’ can be suitable for projects with a short duration. The use of the essential methods not only makes it possible to fit in short perioded projects, but also facilitates introducing the process to beginners.

Contextual inquiry is mainly used to observe users while they perform their work within their normal environment to get a better understanding about their work practices. View studies already use the method in an informal environment. For example, in one they tried to understand the user needs of the young adult market in order to create an innovative solution to establish a whole new market. (http://incontextdesign.com/work/, 2015)

The informal environment bears a range of activities, which can be explored in more detail in order to point out possible risks and problems related to the informal context.

**Purpose of Study**

**Aims**

Due to the fact that contextual design provides a detailed understanding of workflows, the method will be applied -with its iterative approach- to observe a gift buying process in a group.

<table>
<thead>
<tr>
<th>Rapid CD Process</th>
<th>Contextual Interviews with Interpretation</th>
<th>Sequence Model with Consolidation</th>
<th>Affinity Diagrams</th>
<th>Wall Walk and Visioning</th>
<th>Storyboarding</th>
<th>Paper Mock-up Interviews with Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lightning Fast</td>
<td>4-12 users</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-4 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lightning Fast +</td>
<td>6-12 users</td>
<td></td>
<td></td>
<td></td>
<td>4-9 users</td>
<td></td>
</tr>
<tr>
<td>4-8 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focused Rapid CD</td>
<td>8-12 users</td>
<td></td>
<td></td>
<td></td>
<td>6-12 users</td>
<td></td>
</tr>
<tr>
<td>6-10 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Rapid Contextual Design Process (Holtzblatt, Wendell and Wood, 2005)
This study will not just analyse how contextual inquiry fits in the informal context, but also tries to find a solution for occurring problems during a gift organisation process in order to develop a system to support the observed shopping patterns.

To express the gained knowledge about the contextual design process, an educational website will be created. This website will show examples throughout the entire process of the case study and also present the outcomes of the study, the wireframes, to verify the benefit of the method and to provide a valuable source for other students.

Methods

Contextual Inquiry
In this case study contextual inquiry was applied with its main principles to observe group shopping patterns for organising gifts. Contextual Inquiry achieved to be established throughout the comprehensive methods used within the process. It uses focus, context, partnership and interpretation to capture the real tasks and activities of the user during the observation. (Beyer and Holtzblatt, 1998)

Participants and Tasks
The goal was to pick participants who take different roles in group gift organisations. Furthermore the groups should be as varied in size as possible. To ensure these different factors with few interviews, conversations with possible users were held in advance to the contextual interview. (Beyer and Holtzblatt, 1998).

Due to the limitation of the project, the short time frame for conducting the interviews, finding appropriate participants, was the first challenge. This was one of the reasons why four contextual interviews were planned. Referring to the ‘Lightning Fast’ approach the amount is enough to identify the key issues of a product. (Holtzblatt, Wendell and Wood, 2005).
The user tracking sheet (Figure 3) gives an overview about all the participants and helps the researcher to coordinate the interviews. (Holtzblatt, Wendell and Wood, 2005) Due to illness of one participant, just three contextual interviews were actually conducted. The activity log of the participant was still influencing the project insights.

Another obstacle related to the time limitation was briefing the participants. The project summary sheet (Appendices, p20) was sent to inform them remotely about the project. Because of the 'intermittent' form of work, participants had to be asked to fill in an activity log (Appendices, p21). Every time they performed an activity, related to the present organised by the group, they were requested to record it. Explaining the purpose of the activity log remotely was even a bigger challenge and tried to be compensated with providing example task logs. To make sure the participants filled in their task logs and understood them correctly, they were consulted again. Figure 3 exposes that not all participants were able to produce their activity logs, which gave the possibility to identify its usefulness. The use of activity logs will be elaborated in the discussion section of this report.

To review the gathered data appropriately, the interviews were planned on different days. Two interviews were held on one day, each took two hours and required an immediate interpretation of the data allocated with a minimum of two hours.

**Materials**
- **Participants**
  - Project summary sheet (Appendices, p20)
  - Activity log (Appendices, p21), the paper log, introduced by Karen Holtzblatt was modeled to an activity log to appear more informal and easy to fill in. It is used when intermittent tasks are observed to recreate activities that happened before the meeting. (Beyer and Holtzblatt, 1998)
- Consent form (Appendices, p22): used to inform them about the conditions and rights and to make sure the gathered data can be used in the project. The participants' anonymity was ensured by using user numbers to omit their names.
- Questionnaires (Appendices, p23)
- Personal devices and applications used

**Researcher**
- Interview guide (Appendices, p24); Preparing an interview guide, with the stages of the interview and the most important facts and principles, helped to focus on the inquiry itself and made it easier to concentrate on the participant.
- Note-pad and pen were used to make written notes
- Smart Voice Recorder (Smartphone Application); It was chosen because of its invisibility due to the informal context. The participant should not feel watched in their own houses. Due to technical problems audio recording was just possible during one inquiry. The recording was used as a backup, to revive some important parts of the session and compensated by a detailed note taking and writing down direct quotes from participants.

**Test Environment**
Based on one main principle of contextual inquiry, context, the environment the inquiry takes place is an important factor. The natural environment of a participant gives the researcher the chance to see the whole picture of work, which tools are used and possible workarounds are created to achieve the task.

The inquiry comprised of one participant and one researcher. As mentioned before, another key element of contextual inquiry is partnership. The master and apprentice roles during the observation were essential to access the knowledge of the work carried out. The concept of interpretation in turn ensures that the hypothesis made are correct. (Holtzblatt, Wendell and Wood, 2005)
In context with the informality of the activity this was especially unusual for participants, to act as a teacher, and needed a longer initial phase. On most occasions other people were around during the inquiry.
Procedures
The procedure introduced by Karen Holtzblatt was used to conduct the inquiry and slightly modified to make it work in the private environment. (Holtzblatt, Wendell and Wood, 2005)

1. The project summary sheet (Appendices, p20) was read out to the participants again, to point out the purpose of the project and also the differences to other interview settings.
2. The participant was asked to sign the consent form (Appendices, p22) and fill in a demographic questionnaire (Appendices, p23). Every participant was given a unique user number.
3. The audio recording was started.
4. The researcher explained the master and apprentice roles in more detail.
5. To start the inquiry, activity logs (Appendices, p21) or artefacts were used by the master to brief the apprentice about his activities and to explain what has been done in connection with the organisation process already.
6. This briefing was a good activity to get used to the roles. During conducting his activities, the researcher was next to the participant, like an apprentice to the master.
7. The researcher asked questions to make sure he understood correctly. As mentioned before, hypothesis made during the inquiry need to be confirmed to make a correct interpretation.
8. The steps taken during the inquiry were written down by the researcher on his note book.
9. Artefacts were discovered in more detail when appropriate.
10. The wrap-up at the end was an essential part of the session. Summing up the organisation process helped to see if the interpretation drawn out of the observation was coherent with the participants’ view.
11. The short additional questionnaire (Appendices, p23) at the end was used to get a focused feeling of good and bad experiences to group gift organisations.
12. Notes taken during the session were immediately reworked. Affinity notes (Appendices, p25) were created and main insights extracted. Furthermore user profiles and groups were created, based on the participants data.

Data Consultation
To conduct the data, an affinity diagram and subsequent ‘wall walk’ was used for building an overview and exploring it in detail. Also the insights extracted from the observations were assembled in one list.
Figure 4 provides an overall view on the built affinity diagram. The diagram is a hierarchical mapping of all affinity notes created during the observations. It is built bottom up and read in reversed order from the green labels to the blue labels. Each of the labels is written in a strong language, from the customers perspective, using direct and immediate language. It is revealing the key elements of the process and the scope of customer problems. (Beyer and Holtzblatt, 1998)
Figure 5. Key elements of the organisation approach

The ‘wall walk’ disclosed the most frequent reason, individual assumptions, that result in misunderstandings. Group members with different requirements for a gift and misinterpreted communications are the most common reasons why group gifts fail. These key elements, shown in Figure 5 of the diagram, were decided to be the most valuable focus to create a support system for group gift shopping.

Main insights
Summarising the insights of all inquiries, a list of main insights (Appendices, p35) has been produced. It is a different way of representing key element data, compared to the affinity diagram. In Figure 6 the most valuable insights are listed, which were implemented during development. The produced user profiles and groups were represented in the main insights and therefore not needed for the implementation process.
<table>
<thead>
<tr>
<th>Frequency</th>
<th>Insight</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>Distinguish between big groups and small groups.</td>
</tr>
<tr>
<td>III</td>
<td>Big groups need more features to coordinate the organisation.</td>
</tr>
<tr>
<td>III</td>
<td>Small groups need structured discussions</td>
</tr>
<tr>
<td>III</td>
<td>Group member can also add/suggest other/an item to the gift idea.</td>
</tr>
<tr>
<td>III</td>
<td>Groups requirements for gift must be clear (eg money and time spend on the gift)</td>
</tr>
<tr>
<td>II</td>
<td>Purpose of comment must be clear to avoid misunderstandings, the urgent need of direct conversations will be not necessary anymore</td>
</tr>
<tr>
<td>II</td>
<td>Quick agreements/votes eg. 'I'm in'/Count on me'</td>
</tr>
<tr>
<td>II</td>
<td>System has to be accessible mobile as well as on desktop, most of the tasks happen on the go, but organising tasks also happen on a bigger screen.</td>
</tr>
<tr>
<td>I</td>
<td>Additional suggestions can be made</td>
</tr>
<tr>
<td>I</td>
<td>Alternative/different suggestions can be offered</td>
</tr>
</tbody>
</table>

Figure 6. List of main insights implemented in the wireframe

Further recommendations to the group organisation dashboard, already kept in mind during the development, but still need to be illustrated through further development can be seen in Figure 7.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Insight</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>Define how the present will be paid. Cash/bank account/in advance/afterwards.</td>
</tr>
<tr>
<td>III</td>
<td>Plan ‘meet-up's’ eg. hand over money, sign birthday cards;</td>
</tr>
<tr>
<td>III</td>
<td>The responsible person needs to confirm that the gift is bought.</td>
</tr>
<tr>
<td>II</td>
<td>Integrate a voting tool to the organisation system, especially for big groups</td>
</tr>
<tr>
<td>II</td>
<td>Add a calculator to the system. Sums up each product of the gift and divides it through everyone (who agreed/is in the group?) automatically.</td>
</tr>
<tr>
<td>II</td>
<td>Define activities and divide them to the group.</td>
</tr>
</tbody>
</table>

Figure 7. Insights which are recommended to implement
Results

Contextual Inquiry
An accurate planning enabled to detect possible obstacles soon enough and made it more likely to conduct inquiries successfully. Some of the main obstacles related to the informal setting will be discussed below.

Apprenticeship
Introducing the apprenticeship model to the participants -in context to the informal activity of organising a gift- appeared strange to them. First, acting as a master in simple activities was often smiled at and users needed a longer introduction phase to get used to their roles. The researcher need to stay focused and ask questions especially related to his group organisation approaches to make the participant intuitively feel in a master position.

Activity log
It was more challenging to create the exact trail without the activity logs, because it was more likely for participants to talk in abstractions and to skip important steps in the process. Nevertheless, artifacts like messages have been successfully used to compensate this behaviour. The effort for the participant can might be reduced by omitting task logs from the proceeding.

Artefacts
Due to the private information shared inside the groups -mostly family members and friends- it was not always appropriate and influenced by the relationship between the researcher and participant to share artefacts, such as instant messages. The level of access to the artefacts was also controlled by the private content shared. This is why artefacts were just talked through and could not always be directly explored by the researcher. This is especially critical, because it has been observed that, through accessing actual artefacts, problems could be determined the participant was not even aware of himself.

Website
To inform people (mostly students who want to educate themselves about contextual design) a website was created. It gives an overview of the Contextual Design Process as well as presents its usefulness to the particular case study.
A basic html and css template was used and adopted. The structure of the website was chosen to support its content. The left navigation, seen in Figure 8, is important to give the audience an indicator of the different phases of the process.

![Screenshot of the Homepage](image)

**Figure 8. Screenshot of the Homepage**

The project is represented in the other section of the website and provides information about the iterative approach to Contextual Design. Furthermore, the wireframes were presented to provide evidence to the successful use of the method.

To share the experience made during the inquiries, apart from the interpretation sessions or the affinity diagram, the list with the main insights was used to build the bridge from data to design. The wireframes and insights need to be seized with just one glance. Due to the limit of space, next to the wireframes it was a challenge to prepare the comprehensive list of important insights. The accordion enables to show useful insights to the reader directly beside the wireframes.

As shown in Figure 9, the key elements -related to the insights- are highlighted and provide further information about the gathered data. Direct quotes from the user or observed problems become visible by hovering over the elements.
Figure 9. Screenshot of the development section

http://mt091036.students.fhstp.ac.at/k1452688/

To provide a reference and narrative to the website it was linked -via the name of the researcher, in the top left corner- to the portfolio page. The section of the website pictured in Figure 10 gives an overview of the coursework, summarizing the key facts of the project.

Figure 10. Screenshot of the researchers portfolio
Wireframes

After conducting the affinity diagram it appeared to be logical to focus on the pain points of the organisation process. Therefore, the most important part was the event organisation page itself. Sketches were used to point out first ideas of a supporting system and were finalised in wireframes (Appendices, p37). These capture the responsive web application, because it was one of the major insight, to provide a system that suits multiple screens, it was important to show the adjustability first. During development the diagram and main insights were visible to keep the focus always in mind. Figure 8 shows a draft of the web application at the size of a smartphone screen. Due to the limitation of space the mobile version was created first and helped to focus on the key elements of the page.

Derived from the insights, a clear structure was the main aim for the web application. Through internalising principles of design, like the law of proximity and similarity, it was striven to group the information. The center of each group gift is formed by the header with the event title and additional information related to it, followed by the key facts of the group itself and important requirements. The core are the gift ideas themselves, they are structured again with a title and different text boxes and sorted by the popularity within the group.

Figure 11. Wireframe during development phase
Discussion

Contextual Inquiry
Due to the limitation of the project, but also because of the informal setting the method was used in, different obstacles were experienced, but could be detected and compensated.

The iterative approach of the project was an appropriate way to introduce the user centered design process. According to Karen Holtzblatt (Holtzblatt and Beyer, n.d.) the key to display the effective use of the data is the data consultation process itself. This is why the use of further methods, for example collecting work models during the inquiry, is recommended. Including these methods, the bridge from data to design will be even more tangible within the team, especially for external parties.

Wireframes
The wireframes are limited to present one page, one potential group organisation, because the most important factor is to guarantee the success of a group gift. To get feedback from the target audience, a possible next step could be to present the idea of the dashboard and the actual wireframes to a focus group.

To vision and implement the idea of the actual dashboard in more detail would be a great chance for further investigations. Developing an interactive prototype might be a good way to test the features of the board.
Conclusion

Due to the extensive planning and researching phase the method appeared to be a time intensive method. This impression disappeared after conducting the first inquiry. The detailed planning, the focus of the project, made it more likely to conduct the contextual interviews successfully, which means to gather relevant information.

Furthermore, the context and partnership principles allowed to see how a new system would fit in the current process of gift giving in a group. Workarounds -users were not even aware of themselves- and artefacts could be studied directly with the user.

Going through the experience with the user and creating a shared understanding accelerate the process of analysis and development. This is likely to be the most valuable part for a developer team.

Summarised it can be said that contextual inquiry turned out to be suitable for the use in an informal environment. The case study provided useful insights which could be captured in wireframes.
References


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Figure 11. Wireframe during development phase, page 15
I will set up two-hour interviews with participants who organise group presents in their normal environment. Because I want to learn about their organisation approach, I will talk to them about their activities while they are actually organising a present with others.

Interviews combine a review of past events and an observation of ongoing activities related to the role the interviewee is taking in the group organisation. The completed activity logs will be used as assistance for constructing the already finished activities.

The shadowing takes place in the normal environment of the participants. All their natural activities, tools, devices, and objects are available to stimulate memory. No one should clean up his house for the visit.

While the participant is organising, I ask questions about what they are doing and why. The person I observe will get the organisation done, but will also be educating me about his or her activity while he or she does it.

Every interview is entirely confidential. Interviews will be audio recorded. These recordings and pictures are entirely confidential.
Activity log

Activity log: Shopping presents in a group

<table>
<thead>
<tr>
<th>Date:</th>
<th>Type of occasion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start time:</td>
<td>Date of the occasion:</td>
</tr>
<tr>
<td>End time:</td>
<td>Size of the group:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>Purpose of the activity</th>
<th>Used tools/systems</th>
<th>Persons involved</th>
<th>Additional notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are you doing?</td>
<td>Why are you doing it?</td>
<td>What are you using?</td>
<td>Who else is involved?</td>
<td>Is there more to say?</td>
</tr>
</tbody>
</table>
Consent form

Participant Identification Number:

CONSENT FORM

Organising presents in a group

Name of Researcher: Katharina Haider

Please initial box

1. I confirm that I have understood the information given for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

3. I understand that any information given by me may be used in future reports, articles or presentations by the research team.

4. I understand that my name will not appear in any reports, articles or presentations.

5. I agree to take part in the above study.

6. I give my permission to record the whole session and to take pictures of artifacts I made

__________________________________  __________________________   __________________
Name of Participant                  Date                           Signature

__________________________________  __________________________   __________________
Researcher                           Date                           Signature
Questionnaires

Demographic Questions

Gender:

Age:

Profession:

Mobile device:

Additional Questions

What do you experience as positive when giving gifts in a group?

What do you experience as negative?
Interview guide

1st stage:
**Introduce** yourself and the Project:
I'm interested in the way you are organising presents in a group.
I need to record this interview and make pictures from artifacts to be able to
reconstruct what happened for later analysis. I need your permission for that. Please
**sign** this **form** (hand over consent form) and please fill out this questionnaire (hand
over questionnaire)
Since I'm interested in the whole process from getting the idea, initialising the
planning, conducting/buying, wrapping...I told you to keep the activity log last week,
every time you conducted an activity. I hope you have them here, they will help us
recreate actions you did before.

2nd stage:
**The transition:** EXPLAIN the roles.
I am here to learn from you how to organise a present in a group. I'll watch you while
you are doing your task and interrupt when I have questions. You can tell me to hold
off if its a bad time to interrupt.

The contextual interview:
ASK questions about **artifacts** and elect retrospective accounts. Look over their
shoulders. Let them talk about what they are doing! Walk through each activity log,
which were produced → to get an understanding what you did.
Keep in mind: The principles of
c **context** → go where the activity happens,
**partnership** → talk about the what happens during the activities,
**interpretation** → find the meaning behind activities and
**focus** guide your interaction → what is relevant to you;
Intent people are trying to achieve – how people achieving them with current tools?
Look for artefacts -papers, emails, contacts and problems and places where these fail!
How people find out about an group gift?
How people decide to buy a present in a group?
Which tools/system is used
Who is involved? How do they agree?
Where do they discuss?
Do they meet? / Do they everything remotely?
Focus will be expanded through inquiry into the activity

3rd stage:
**Wrap up:**
At the end of the interview, skim back over notes! Summarize what I've learned →
what is important to her organisation style? Recheck if you understand proper!
**Affinity notes**

U1 01 She organises presents with her brother for their parents.

U1 02 She looked at her personal analogue diary and saw that the international women day is coming. Immediately she decided to get her mother a present, because her family lives in Romania she needs to contact her brother to get a present.

U1 03 She called him (with her smartphone) 5 days in advance to the event, so he has time to buy something.

U1 04 She called him, because she knows him very well and trusts his taste. The present was also nothing that has to be described in more detail.

U1 05 If it would be a more extensive gift, she would have written him an email and added a link to the product.

U1 05 Her brother agreed immediately to the idea and suggested to buy also some flowers.

U1 06 DI The other group member can also add an item to the gift idea.

U1 07 Her brother called her today (Sunday, the day of the international women day) to inform her that he has got the present for the mother and that he will also give some flowers to their father.

U1 08 DI The responsible person needs to confirm that the gift is bought.

U1 09 She agreed and thanked him for his effort.

U1 10 DI More passive group members can express their appreciation to the organiser/initiator.
U1 11 Her brother doesn't expect to get money from her, because it was a little present, she doesn't even know how much it was.

U1 12 She was preparing her breakfast when her father called to say 'thank you' for the gift he got.

U1 13 At the afternoon she checked on her mother. She called her to congratulate her and to see how she was doing.

U1 14 She takes part at group organisations for birthday presents.

U1 15 She knew about the present because of a friend, who is closer to the presentee.

U1 16 She was asked to participate to the gift face-to face, because she works together with the friend who organised the gift. She also got added to a group chat via Facebook.

U1 17 The group chat on Facebook (5 people), her friend initialized it, contained the idea of the gift 'buying a bag for the presentee' and the reason for the bag 'because she know she wants the bag'. The friend also asked if they would like to participate.

U1 18 She wrote back and agreed to the idea.

U1 19 DI Integrate a possibility to show that you take part at the organisation, which role you take

U1 20 They (3 of the 5 friends, who are working together) were searching for online shops with the cheapest price and the best colours, using their desktop computer. It’s easy to compare with the browser → keep an overview of the tabs.

U1 21 DI Desktop and mobile User Interface
The friend who organised the present chose the best web shop and suggested it to the other via messenger.

because there were different colours to get, the friend asked which colour everyone preferred. She wrote her preferred colour back. The colour mentioned the most wins.

DI Integrate a voting function in a group chat.

There was no price limit from the beginning, she just implicit expectations that it would not be really expensive (nothing over 100 pound), because they know each other.

The friend calculated the price of the bag for them. She doesn't know how, but she trusts her. It was 6 pounds for each person.

DI Calculator for each product of the gift. Sum up and divide through everyone (who agreed/is in the chat?) automatically

She agreed to the price via the fb chat on her smartphone

DI Function to make agreements 'I'm in'/'Count on me'

She gave her the money when she saw her the first time, in cash at work; (this was before the present was bought)

DI Define how the organiser is getting the money (cash/bank account/in advance/afterwards)

She signed the birthday card before the birthday, at work.

Everything was finished at the day of the birthday. She was happy that she hasn't had to do much for the present and everything was organised by someone else.
U1 34 “If somebody is making the suggestions everybody is happy and just agrees”

U1 35 Facebook messages can get confusing, people are talking about different stuff.

U1 36 She leaves the Facebook chat if they talk about different stuff, after they already agreed what to buy as a gift.

U2 01 She gets invitations via SMS (but it’s always dependent on the occasion).

U2 02 This time she gets invited with her partner, she always buys a present with him.

U2 03 She starts thinking at her own. She thinks on different kind of presents (different sizes and money) and then also thinks of people who could like her present idea as well. A person with more or less the same relationship/background to the presentee, so it's not just about money to give the present with the other person.

U2 04 DI persons who have more or less the same relationship to presentee are asked for a group present.

U2 05 When she thinks of an idea and talks to a chosen friend about it, she always wants to get input from the person as well. It's not just saying yes or no, she is developing her idea talking to the other person. So the gift has a personal value for everyone. This is happening in small groups of three people.

U2 06 DI small groups need to express their ideas and discuss more
U2 07 A big group (over 10 people) is not as easy manageable and its not possible to know the presentee the same way. It's just about giving big presents who cost more than one person can afford,

U2 08 She got contacted via Facebook from a girl she doesn't know. It was a friend of the presentee, who was also invited at her birthday party.

U2 08 The unknown organiser suggested a concrete product for a present and left no opportunity to suggestions. Every decision was anticipated. She wants to influence the decision further.

U2 09 DI For active present givers a YES/NO option isn't enough. Concrete examples also need to make other suggestions. 'instead of 'XY objective' of 200euros at xy online store': Fisheye or wide field of view

U2 10 The money and the card were also organised at the last minute at the party. Everyone had to sign there and give the money.

U2 11 DI last minute preparations leaves a bad image of the organisation of the gift. Presentee should not hear from this.

U2 12 If there is a party and all of the guests are organising a huge birthday present together and she doesn't like the idea, she just ignores the chat. She would never leave the message, because she doesn't like the 'johanna left the group'

U2 13 DI 'ignoring the message' means not being interested in the gift at all
U2 14 big groups not only make it difficult to have the same relationship/background to the presentee, the money which wants to be spend on the gift is also different.

U2 15 DI big groups need to make clear everyone is thinking of the same amount of money.

U2 16 Organising group presents within a small group (max three to four) turns into a long finding process. There is a lively discussion via SMS or instant messenger (hangouts). Because everyone is interested in the presentee the same way.

U2 17 Suggestions are shared. They are not always searched actively but also happen passively (no time limitation) everything is communicated via sms.

U2 18 there is no direct answer. Just new or added ideas to the original idea.

U2 19 There is a counterproposal

U2 20 Ideas are going to be read over and cause misinterpretation: No interest in a group present at all. Additional possible time pressure will make the group present fail.

U2 21 Q counterproposal/additional idea means total refusal of the 'original' idea? Was just over read? Was just added?

U2 22 Direct communication is searched when decisions need to be made. (call, skype) The status 'online/offline' is shown and supports the planning enormously.
U2 23 DI If concrete answers are needed the direct conversation is preferred to avoid misunderstandings.

U2 24 The different tasks will be divided and additional meetings will be arranged. Wrapping up the present and signing the cards before the event.

U2 25 Direct conversation is also searched by checking on tasks others are doing.

U2 26 DI Status of people 'availability to speak' is important to direct conversation.

U2 27 DI gifts are not just bought by one 'organiser' it will be divided under the present givers.

U2 28 Money will be spent by people different, and need to be calculated separated.

U2 29 DI money spend can vary and need to be calculated proportional so everyone is getting the same amount of money back. They pay cash.

U2 30 DI Target audience: different expectations on gifts and attitude; close friends, acquaintances and working colleagues.

U2 31 Its difficult to find a common ground on the amount of money and time spend on the gift. Contribution to gift will vary by everyone.

U3 01 She met her brother in Vienna, when he was in the city because of business for a view day. They decided to organise a big gift for their father's decadal birthday.
They decided to think of an idea separately and then reach out with each other again, when he comes in two weeks to Vienna again.

They set themselves some basic requirements. It should be a present for him, rather than for both of their parents.

They had an idea already. To buy a trip for both parents, but because it would be too expensive they had to think of something else.

They always did something for both of them, so this year they want to make something different.

DI basic requirements for a gift to give guidelines for searching of ideas.

had no time to think of a gift idea, she also knows that her brother is creative and understand him better than her.

When they met again, Tobi reported to have a good idea one night when he couldn't sleep. He did his research on his tablet and showed her the results with his smartphone.

DI research on big screen, results and coordination on small devices.

He showed her the flight page were trips with the old Junkers can be bought.

They also agreed to not just let their father take the flight, but also spend the day of the flight with him. They want to bring him to the airplane and when he is back have some lunch together.
They agreed on both ideas, but because there is still time left for this occasion they decided to wait to book and buy the present.

weeks later she thought about the birthday of her father and got a bit worried that they haven't bought the present yet.

She went for her tablet and searched for the website her brother showed her again. She googled the gift idea 'Junkers flight Munich' and found the page again.

She clicked through the available dates and can see that there are already view dates left.

But she cannot find out an appropriate date, because she don't know if it would suit them all.

She found an option to buy a voucher, and thought it would solve their problem.

She is going for her phone and writing her brother via WhatsApp about the voucher idea and also suggested to buy it.

Now she is waiting for his opinion, but she knows he has not much time, she is not expecting a quick answer.

Tobi responded and agreed to the voucher. He also suggested buying it.

She was already preparing dinner. She wrote him a quick message back. She agreed that he should buy the voucher.
U3 21 DI quick agrees / buys decisions.

U3 22 She will give him the money when they meet at the birthday party. They will decide who will buy the card on the go.

U3 23 Always buy presents for parents together.

U3 24 DI Create a dashboard for fixed groups and occasions -father, birthday
**Main insights**

<p>| III | Distinguish between big groups and small groups. |
| III | Big groups need more features to coordinate the organisation. |
| III | Small groups need structured discussions |
| III | Group member can also add/suggest other/an item to the gift idea. |
| I  | Additional suggestions can be made |
| I  | Alternative/different suggestions can be offered |
| III | Groups requirements for gift must be clear (eg money and time spend on the gift) |
| II | Purpose of comment must be clear to avoid misunderstandings, direct conversations will be unnecessary |
| I  | Integrate a possibility to show who really wants to take part at the group present. |
| I  | Distinguish between little and big presents. Big presents need more explanation -&gt; a link or picture. |
| I  | Commit oneself roles for group organisation |
| II | Define activities and divide them to the group. |
| II | Meetings need to be coordinated |
| II | Integrate a voting tool to the organisation system. |
| II | Quick agreements/votes 'I'm in'/'Count on me' |
| I  | Polite way to reject to join the group present |
| III | The responsible person needs to confirm that the gift is bought. |</p>
<table>
<thead>
<tr>
<th></th>
<th><strong>II</strong> Add a calculator to the system. Sums up each product of the gift and divides it through everyone (who agreed/is in the group?) automatically</th>
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<tr>
<td></td>
<td><strong>I</strong> Different buyers -calculate what a person bought, everyone is getting the same amount of money back</td>
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<td><strong>III</strong> Define how the present will be paid. Cash/bank account/in advance/afterwards.</td>
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<td><strong>III</strong> Plan ‘meet-up’s’ to hand over money, sign birthday cards;</td>
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<td><strong>I</strong> More passive group members can express their appreciation to the organiser/initiator.</td>
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<td><strong>III</strong> System has to be accessible mobile as well as on desktop, most of the tasks happen on the go, but organising tasks also happen on a bigger screen.</td>
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<td><strong>I</strong> Integrate gamification modules to the organisation (organiser gets points for her effort, participating members too, passive ones/people who are talking off topic get punished/will lose points?)</td>
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Wireframes

Smartphone 320px+

Tablet 715px+
Web 1024px+