



# Contextual Inquiry

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# Introduction

The Contextual Inquiry is an interview that appears in the context of use. This means that the interview takes place where the interactive system under investigation (e.g. a product, software, etc.) interacts with the interviewee. For example: In a factory, in an office, or on a farm.

The Contextual Inquiry is a semi-structured interview. Like the structured interview, you have an interview flow with questions that you have prepared, but you can also ask spontaneous questions to gain deeper knowledge, as in the non-structured interview.

## Design Phases



# Introduction

Contextual Inquiry is a qualitative method. This means that it is good if you already have some knowledge and want to deepen it or to explore a new research field.

Since the user is interviewed in his/her work environment, the answers given in the interview additionally provide contextual information (e.g. workplace), compared to an interview in a laboratory.

The Contextual Inquiry is a method that requires a lot of preparation and a long subsequent analysis and can therefore often only be carried out in small numbers.

# Instructions

## Preparation



Identify the objectives of the Contextual Inquiry: What is the goal?

Identify questions for the Contextual Inquiry (Interview Flow) and develop a User Profile (who is the interviewee/user and which questions need to be answered).

Review the questions with all stakeholders: Stakeholder are all people who have an interest in the project (e. g. manager, IT).

Inform/recruit the users you want to interview.

Assign interview roles in your team (interviewer, notetaker): A Contextual Inquiry should be conducted by no less than two people.

Prepare interview materials/documentation (e.g. protocol, camera).

Find out about the place where the interview will take place

# Instructions

## Preparation – User Profile



A User Profile consists of the following data, which is always related to the research objective. It's not bad if you don't have all the data. Creating a User Profile is an iterative process and with each Contextual Inquiry (or other usability methods) you will get new data to add. Also, feel free to add criteria, such as:

Demographic characteristics — age, gender, location, socioeconomic status.

Occupation experience — current job title, years at the company, years of experience in that position, responsibilities, previous jobs and job titles.

Company information — company size, industry.

Education — degree, major, courses taken.

Computer experience — computer skills, years of experience.

# Instructions

## Preparation – User Profile



- Specific product experience — experience with competitor's products or other domain-specific products, usage trends.
- Tasks — primary tasks, secondary tasks.
- Domain knowledge — the user's understanding of the product area.
- Technology available — computer hardware (monitor size, computing speed, etc.), software, other tools typically used.
- Attitudes and values — product preferences, fear of technology, etc.
- Criticality of errors — in general, the possible consequences of a user's error.



# Instructions

## Preparation – Interview Flow



The Interview Flow is a document in which you write down all the questions you want to ask during the Contextual Inquiry. Not only does it help you to remember all the questions, but it also gives a rough structure to the Contextual Inquiry (semi-structured interview). The Interview Flow consists of 5 phases which the questions are assigned to.

Ice Breaker — create an comfortable atmosphere for the interviewee, ask them simple questions

Introduction — transition to actual topic, broad questions to general experiences

Key — specify questions to collect data

Summary — consider everything from the interviewee's answers. Ask for most important points

Wrap-Up — conclude the conversation, give opportunity to ask questions or discuss a topic



# Instructions

## Preparation – Questions



- max. 20 words per question to prevent complex questions
- Keep the questions concrete and adapt to the interviewee's experience
- Avoid slang, jargon forwards the interviewee might not know
- Ambiguous question can decrease comprehensibility, thus avoid them
- Do not use double negatives because they might be misleading
- Formulate question in an unbiased manner
- Ask about the present and do not make interviewees guess too much, also questions about very long ago events may be distorted in the interviewee's memory
- Avoid emotionally difficult questions

# Instructions



## Preparation – Interviewer’s behaviour

- The moderation of the Contextual Inquiry is carried out according to the master-student principle.
- The role of the master is taken by the interviewee and the interviewer takes the role of the student.
- In the role of the student, the interviewer learns about the goals and tasks of the interviewee in the role of the master by asking questions. He holds himself back with his own knowledge. The interviewee has to get the feeling that the interviewer wants to learn something from him. Only then will he take on the role of the master and answer the questions in detail.

# Instructions

## Preparation – Documentation



- Especially when Contextual Inquiries are conducted by only one researcher, this is a good choice. Instead of concentration on taking notes, the researcher can concentrate on the interview.
- Joy or other emotions can be expressed through both audio and video recordings. • Videos also show the body language of the interviewee.
- In case of protocol gaps or uncertainties, the audio or video recording can help.
- It is not always possible to make video or audio records due to data protection policy in e. g. hospitals. Always ask the interviewee for permission.
- If Contextual Inquiries are solely documented with video or audio recordings, the valid data must be separated from the recordings by transcription.

# Instructions

## Preparation – Documentation



There are three different types of transcription. Depending on the type of information your research requires, choose one of them:

- Verbatim transcription: Everything will be transcribed, including utterances like "uhm" or "ah". This form is particularly used for linguistic analysis since these utterances are important.
- Edited transcription: All words are transcribed, but not utterances like "uhm" or "ah".
- Summarized transcription: The relevant content is summarized from the video or audio recordings.

# Instructions

## Preparation – Documentation



- One researcher interviews and a second researcher takes notes.
- Especially for Contextual Inquiries, it is advisable to first create an Interview Flow and then build the protocol according to these questions. That way, the notetaker knows about the topic and can distinguish between relevant and irrelevant data.
- The advantage of taking notes is that no transcription is needed afterwards.
- You can take photos to add more information to the notes (with the permission of the interviewee).
- Not everything should be written down literally, only relevant data. If a literal recording is required, an audio/video recording should be made.
- You often miss emotions and body language of the interviewee in the protocol.
- If you are on your own, it's hard to concentrate on the interview and write notes at the same time.



## Strengths:

Receive deep knowledge about the interviewee and important information about the context. Often unconscious things can be discovered.

## Weaknesses:

The method is time consuming and expensive, only worth for small sample. Comparison of results is not recommended.





# Contact

[usability-siegen.de](https://usability-siegen.de)

[fablab-siegen.de](https://fablab-siegen.de)

# Links

References that are used to create the workshop materials (at the end of the PowerPoint you also find reference slides that show more precisely which slide uses which reference).

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