# Contextual Inquiry

**Visiting:** X University of London

**Location:** X, East London, UK

**Contact:** X

**LANDESK Attendees:** X (PO), X (Support), Zulfikar Mohammed (UXD) **Application:** Web Access (Web Desk)

**Current Build/Version:** Service Desk 7.6.0

**Purpose of visit:** Upgrade to Service Desk 7.7.1 (beta)

**Date of visit:** 17th and 18th February 2014 (2 days)

**Time:** 9am – 5pm

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## What is Contextual Inquiry

Contextual inquiry generally focuses on the tasks and processes that people are involved in and helps to uncover what people are doing, how they are doing it, and why they are doing it in that certain way.

This contextual inquiry will focus on Web Desk, an application of Web Access. The research will be conducted on Service Desk Analysts who are using Web Desk 7.6.0

## What do you get from this research?

The most important aspect of this technique is that it gives you the most realistic data regarding the users, their behaviour, and the environment within which they conduct their tasks.

As Support Analysts are conducting their own tasks, this approach presents a set of conditions that will yield more natural user behaviour than a user conducting tasks within a lab environment.

## Setting clear objectives

As with all research, it is critical that we set clear objectives with our client at the very beginning of the process. These objectives determine the most appropriate research method to use. The User Experience Designer will be conducting the inquiries as the Support Desk Analysts fulfil their work objectives.

## Preparing the research

The session's structure will be:

1. Observational:
    - Need to act as an apprentice observing the instructor (Support Desk Analysts) walks through an activity, interrupting with questions only occasionally. The activity of interest should be one that the instructor has said they perform regularly in conducting their daily tasks.

2. Interview:
    - The main focus of the interview is to understand more about why and how you use the LANDESK software in serving the end users. Treating the approach more like a usability test, where an allocated time slot with people who are willing to be interviewed. (Being flexible and adapt to different circumstances as they unfold.)

## Conducting the research

Record the sessions with the user, as you have no idea what you will learn and also no idea of the potential importance of what you are being told.

Users may tell you what they think you want to hear. It can take a while for users to relax and to get on with what they actually do.

## Taking photos

Take a photos of the observational area and if the user allows, a photo of the user. Seek permission before any photos are taken. Photos are useful because they remind you of the environment after the event and also add an accompaniment to the deliverable. Depending on the context, try to make an audio or video recording of all or some of the sessions as well.

## Reporting the findings

One of the most time-consuming aspects of contextual inquiry is sifting through your data looking for interesting behaviour and then noting repeat instances of that same or similar behaviour.

It is good to talk through the observations with someone who is likely to have a better understanding of the system or context than the User Experience Designer.

Photos help understand the environments within which our products is being used.

## Disclaimer

Please be aware that this Contextual Inquiry will only take place if the client (Queen Mary University of London) successfully upgrades Service Desk from 7.6.0 to 7.7.1. If the upgrade does not go according to plan then the client will be uneasy for the UXD to visit the Support Desk Analysts and conduct any research.

The ratiocination behind this visit was to primarily perform the upgrade. This Contextual Inquiry was an afterthought if all things go to plan.

## Plan of action

**Day 1:**

1. Meet the Head of Service Management and the Systems Administrators, involved in the upgrade of the Service Desk application.
2. Investigate which components of Service Desk are actually being used.
3. Take note of any modifications that have been made to the Service Desk application (bespoke changes). Observe the process of the upgrade and go through the new features of Service Desk 7.7.1 with the Systems Administrators. Explain the new features and how they work. The on-site visit will be to upgrade Service Desk from 7.6.0 to 7.7.1
4. Monitor the process and check to see if the upgrade has gone smoothly.
5. Identify potential users
    - Sandra Heydron (QMUL) will be selecting the potential users on the day of the visit. The users will be Service Desk Analysts who are users of the LANDESK Web Desk application.
6. Observe the users. (This depends on how the upgrade went)

**Day 2:**

1. Work through the upgrade if this was unsuccessful on day 1
2. Observe Users at their place of work
3. Interview phase
    - The interview questions can be broken down into the following sections:
        i. Warm-up: getting to know the user a little bit better and giving them some simple questions to get them feeling confident.
        ii. General Questions: learning a little bit more about the goals, attitudes and activities of the user with more open-ended questions.
        iii. Observation: focusing in on a specific activity and having the user think aloud, sharing details of why and how they perform tasks that comprise an activity.
        iv. Follow-up: asking questions to clarify missing, ambiguous or confusing information from observation.
        v. Wrap-up: asking questions about the interviewing process, anything they would like to add and if it would be all right to contact them with follow-up questions or the opportunity to give feedback on prototype designs.
4. Schedule test sessions with potential users
    - UXD will observe and interview Support Analysts
5. Administer the test
    - The test will be conducted by the UXD
    - Sessions will be recorded (voice) with additional note taking
6. Analyse the results
    - Will Analyse the results after the 2 day visit

## Agenda

## On Day of Contextual Inquiry

### Follow general best practices during the interview:

- Interview where the interaction happens
- Avoid a fixed set of questions
- Focus on goals first, tasks second
- Avoid making the user a designer
- Avoid discussions of technology
- Encourage storytelling
- Ask for a show and tell
- Avoid leading questions

### During Contextual Inquiry

- Greet the users
- Introduce them to any other observers or note takers.
- Explain contextual inquiry procedure and that you are trying to understand how they do their work in their environment
- Try to relax the Support Desk Analyst by telling them the following:
  "*The main focus of our interview today is to understand more about why and how you use LANDESK software in servicing your end-user and incident management.*

  *We consider you the expert at your work so there are no wrong answers to any of our questions. While you answer questions or guide us through tasks, please focus on the details of how you actually do your work.*

  *It may help to think about the last time you performed the task and explain it to us as if we are going to need to perform the task just as you did.*

  *Please feel free to be honest and critical even if the way your work actually gets done is not the way it should be done - we are testing the systems you use, not you, and everything you tell us is strictly confidential.*"
- Ask them if they have any questions, before you begin?
- Ask an ice breaker question about some of the demographic information you want to collect anyway. (Put user at ease if possible)
- Ask interview type questions first
- Switch to observation, focusing on having users "show" you how they do a task instead of just telling you.

### When done,

- Let them know how they can find out about the user research results (send them an email)
- Thank them for participating.
- Ask them if they know anyone else who may be interested in participating

## After Contextual Inquiry

- The UXD should debrief/review the interview
- Write "Thank You" email to user(s) for their participation
- Analyse the notes as soon as possible
- Write up notes - full sentences and as much details as possible so it can be understood by others outside of the interview
- Store notes in a safe location where user's privacy can be maintained
- Create high level summary of user notes and make available to greater team or community - make sure to conceal interviewee information

## Note-taking - Guidelines:

- Capture every word the user says!
- Take notes directly on a laptop
- Taking notes by hand (can be useful in creating diagrams)
- Make an audio recording (need to transcribe the recordings later, may take a significant amount of time).
- Abbreviations are helpful, paraphrasing is OK
- Try and record especially poignant quotes directly and mark them as quotes
- Raw notes do not need to be perfect
- Clean up notes during debrief soon after the interview
- Ask to repeat something or ask for clarification (without interrupting the user too much), in between questions are a good time
- If UXD comes up with new questions, record them in the notes

## Contextual Inquiry Guide

A Contextual Inquiry Guide can help the interviewer stay focused and on track during the contextual inquiry.  It contains general questions and areas of interest to keep in mind during the user meeting.

Some questions may be asked directly, but many others will just represent general lines of inquiry the interviewer wants to explore. Additionally, the interviewer should be open to following other paths as dictated by the work performed by the interviewee. Although the meeting begins with a short traditional interview portion, once you transition into contextual inquiry mode, think of this as a partnership formed between the interviewer and interviewee in order to create a dialog. The goal is for the interviewer to interfere with the interviewee's work as little as possible, blend into the surroundings, and ask questions when necessary to understand not only the user's opinions and experiences, but also their motivations and context.

The goal is to gain a general understanding of the kind of activities the user does to get their work done.  It's important to note the user's primary (most critical, most often, etc.) activities. Ask them to show you how they complete these activities during the transition portion of the contextual inquiry.

## Observation mode

When the UXD has enough background and general information shift from traditional interview mode to contextual inquiry mode.  Ask the user to perform some of the tasks. Let the user know you may interrupt with questions but mostly you'll be observing at this point.

## Interview Questions

### Demographics and Characteristics:

1. What is your name?
2. How long have you worked for Queen Mary University?
3. What is your current job title?
4. How long have you been in this role?
5. Do you live local? (ice breaker)
6. How do you get to work? (ice breaker)
7. How big is your user group? What demographic location do you cover?
8. How many Support Analyst do you have in the team?
9. When is the busiest time for you?

### Job related questions:

1. [**Activities**] - How would you describe your job, and what you do?
2. [**Activities**] - Tell me about a typical day (include activities around your work)?
3. [**Interactions**] - Can you tell me about your users and the service you provide?
4. [**Opportunity**] - What activities currently waste your time?
5. [**Goals**] - What makes a good day? A bad day?
6. [**Preference**] - If you could change anything about your job as a Support Analyst, what would it be?
7. [**Priorities**] - What is most important to you?
8. [**Information**] - What helps you make decisions?

### Software related - General:

1. [**Mental Model**] - What do you think about work, resources, services and systems?
2. [**Activities**] - What kinds of activities do you perform? Do they occur regularly or occasionally?
3. [**Preference**] - Which LANDESK software do you use?
4. [**Frequency**] - How long have you used the LANDESK software?
5. [**Mental Model**] - What is your overall impression of the LANDESK software you use?
6. [**Function**] - What are the most common things you do with the product?
7. [**Frequency**] - What parts of the product do you use most?
8. [**Preference**] - What are your favourite aspects of the product? What drives you crazy?
9. [**Failure**] - How do you work around problems?
10. [**Motivation**] - What are your goals? What do you enjoy doing?
11. [**Opportunities**] - What is your pain points? What do you avoid?
12. [**Interactions**] – Who or what do you consult or work with?
13. [**Expertise**] - What shortcuts do you use?
14. [**Process**] – How do you make decisions and perform tasks?
15. [**Preference**] - What goals do you have and which product helps you work towards that goal?

16. [**Interactions**] – What basic tasks does the product support in order to help you accomplish these goals?
17. [**Failure**] - What frustrations do users have in general?
18. [**Failure**] - What frustrations do they have with Self Service product?
19. [**Process**] – Have you had a good user experience using our software?
20. [**Rating**] – What score out of 10 would you give it (10 being excellent)?
21. [**Expertise**] – How would you improve the user journey, how would you describe it?
22. [**Preference**] – If you had to describe this software in a few words as possible, what would they be, and why?

## Software related - Navigation:

1. How well does the navigation work?
2. Is the menu easy to navigate around?
3. Have you always found the pages through the menu?
4. Is the menu grouped in a well-structured way?
5. How could the menu be better?
6. How would you rate the navigation and user journey using the navigation out of 10?
7. Why have you given that score?
8. Do you feel you have had a good user journey through the navigation?
9. How can we make it better?

## Software related - Design/layout:

1. What do you think of the design of the page?
2. Does anything look out of place?
3. What would you do to improve the design/layout?
4. Is the design/layout easy to use?
5. What improvements if any could be made to the design?
6. Have you seen a design/layout that has impressed you?
7. What would you do to make this design/layout perfect?
8. Do you know about responsive websites?

## Software related - Dashboard:

1. What do you think of the dashboard?
2. Does the dashboard cater for your needs?
3. Can you create your own widgets on the dashboard?
4. Is the dashboard easy to customise?
5. What improvements if any could be made to the dashboard?
6. Would defined height and width make for a better design?
7. Have you seen a dashboard that has impressed you?

## Software related - Activities:

1. Are you involved with resolving issues? If so, can you tell me what that process is like?
2. How busy do you get? How long does it typically take to resolve an issue?
3. How is the team/site organised?
4. Have you been involved in the set-up of the software?
5. Where you involved in tweaking the modelling of the software?
6. What kinds of activities do you do in your job that our software helps with?
7. What could the software do to help you do your job better?
8. As a percentage how much do you think you utilise our software?
9. Do you have a way to work around certain problems/issues you have found with our software?
10. How helpful has the documentation/support been to you as a user?
11. How would you describe the LANDESK software to someone who has never used it?
12. What do you like/not like about the LANDESK software in general?

## Observational Questions

### Areas to focus on during observation

### General:

- **Sequences**:
  - In what order is the user performing tasks?
  - Are there interruptions?
  - Are they doing more than one thing at a time?
  - Want to be able to create rich workflow models (exactly how the user completes certain tasks) from this kind of data.
- **Tools**:
  - What is the user using to perform their work?
  - What tool is it and what level of knowledge does the user have?
- **Problems**:
  - What is frustrating or unexpected for the user?
- **Mental models**:
  - How does the user think about their work?
  - What expectations do they have?
  - How knowledgeable is the user when taking calls?
- **Interactions**:
  - Do they consult different people?
  - Do they consult reference materials?
  - Do they consult processes?
  - If so, what for?

### Details:

- **Environment and facilities**:
  - Is it busy?
  - What sort of computers do users have?
  - What level of Internet access?
  - Do they use headsets or standard telephones?
  - Do they have printers, fax machines and photocopiers?
  - Do they have to share these?
  - Do they have to walk to these machines?
  - Sketch a rough map of the work area, so that you don't have to try to remember these details later.
- **Interruptions**:
  - Can users concentrate on their work, or are the frequently interrupted by other applications, people or events?
  - What is the impact of these interruptions on their workflow?
  - Do current systems (Inc. LANDESK) support these interruptions?
- **Applications**:
  - What applications, systems and websites are currently being used?
  - Exactly which screens and fields are used, and in what sequence?
  - Get screen dumps if possible.
- **Issues**:
  - What problems do users currently have?
  - Be interested not only in application or system issues, but also workplace issues (possible to address them in our design).

- **Artefacts**:
    - Do users have ‘cheat sheets’ and notes on their computers?
    - Do they have tables or charts or phone lists that they rely on?
    - Possible to include some of this information within the application. (Get copies of any artefact’s, if possible)
- **Double-handling**:
    - Are they entering account numbers in two different systems?
    - Are the users duplicating their efforts to retrieve different data?
- **Workarounds**:
    - Are users compensating for poor product design or poor work design by applying workarounds?
    - Will these have an impact on our design or can we accommodate or eliminate them?
- **Triggers**:
    - What is the event that triggers users to take a particular course of action or begin a particular task?
    - Triggers are often events like phone calls, arrival of emails for faxes, or work queues.
- **Hand-over points**:
    - When do people receive or hand over tasks?
- **Variations**:
    - Remember to ask users about whether the work you see is typical and, if not, why not?
    - Ask about what it’s like when things get particularly busy (or particularly quiet).

## Interrupting the user during observation

The UXD should interrupt the user only in the following circumstances:

- The user is doing a lot of work without speaking about it – Ask the user questions about what they are doing and remind them to give a running description of what they are doing so the UXD may be able to re-create their work.
- The user is giving very general or broad details about an important task or action. Ask the user questions about what they are doing and remind them that you are looking for details of their work so that you can re-create it. Remind them that they can recount the details of the last time they went through this activity to make it more concrete.
- It is unclear what the user is talking about. The user may use jargon that the UXD is unfamiliar with. As an apprentice, it is important to know what you are dealing with and it is all right to interrupt the user to ask a clarifying question when you do not know what they are talking about.

## Types of incidents:

- What is the majority of your incidents related to?
    - Can you show some examples?
- Have you created been involved with any knowledge library material?
    - Can you show some examples?

## Follow-up Questions

- Are there gaps in the process the user has described?
    - Now is the time to investigate and make sure all the steps involved in completing the activity are recorded.
    - UXD may end up delving back into observation mode as the user remembers something they forgot to mention and begins another description of tasks and actions.
- Are there other parts of the process that are unclear?
    - Now is the time to clarify.
- Are there instances where the user or note-taker had a question, but did not ask because it would have adversely interrupted the instructor?
    - Now is the time to ask these questions.

## Post-interview Debrief

- Arrange a debriefing session as soon as possible after the interview
- Discuss and record initial general impressions from the interview
- Go through the notes removing any personally identifiable information (names, non-work related places, etc.)
- Names/places should be substituted with anonymous titles:
- Tim Jones helped me ... should be --> [a Support Desk Analyst] helped me ...
- Go through the notes add text to make the notes understandable by those outside of the interview
- Complete fragmented sentences or thoughts
- Expand abbreviations

## User Matrices

Start thinking about the diversity of users to include in the user research.

Users (sighted, partially sighted, etc)

Desktop screens (1, 2, 3, etc)

Application use (New, veteran, novice, advanced, etc)

Team structure (simple, large, cross-site, cross-demographics, male-to-female, etc)

Group size (small, medium, large)

Technical level (beginner, intermediate, advanced)

Region (London, etc)