Title: Conduct the contextual inquiry for the selected product / system.

Objectives:

- 1. To conduct the contextual inquiry for the Interactive system.
- 2. To understand your users' needs.
- 3. To list down need of the user for selected product/system.
- 4. To observe how users interact with systems.

Theory:

What is contextual inquiry?

Contextual inquiry is reminiscent of anthropological research, and relies heavily on participant observation. For this reason, it's a highly qualitative methodology that does not require a big sample.

Its premise is to discover flaws that stem from bad design.

As people grow accustomed to usability issues and find ways of working around them, they slowly forget they even existed in the first place! This is when contextual inquiry can be especially helpful. Through direct observation, it allows researchers to look beyond theory and focus on what is actually

done in practice. That way you can identify which designs or workflow strategies are problematic, and what heuristic solutions more experienced users have implemented to work around them. These observations can provide valuable insight toward addressing many issues. For example, if a senior employee has their own unique checklist that makes their work easier, there may be an opportunity to incorporate that same checklist into the design of the existing workflow, improving the

overall experience—as well as productivity—of everyone.

When it comes to what you inquire, context is key: it's in the name! Take note of your and your user's surroundings and every tool (e.g. paper and pencils), techniques (e.g. affinity diagrams, moderated testing), or technologies (e.g. cloud storage, collaborative writing) relating to the overall workflow and objective. The goal is to better understand how everything interacts and influences the

tasks and workflow.

The four principles of contextual inquiry are:

- 1. Focus Plan for the inquiry, based on a clear understanding of your purpose.
- 2. Context Go to the customer's workplace and watch them do their own work.
- 3. Partnership Talk to customers about their work and engage them in uncovering unarticulated aspects of work.
- 4. Interpretation Develop a shared understanding with the customer about the aspects of work that matter.

Here are some simple steps to conducting contextual inquiry yourself:

- 1. Identify your key research questions: Make sure they relate to the overall task or workflow, but keep them broad, keeping in mind their underlying objectives and anticipated outcomes.
- 2. Find a participant: The ideal participant is someone especially familiar or proficient with the tool or platform being tested so you can observe any heuristic shortcuts they may have developed.
- 3. Play your role: You and the participant will adopt roles traditionally known as "master and apprentice" (think super user and newbie), with the researcher as the apprentice and the participant as the master. As the newbie, you'll be asking the super user questions relating to what they do, how they do it, and why.
- 4. Identify shortcuts or heuristics participants use: Note any instances where the participant

does something interesting, unexpected, or confusing, be it for you or them.

5. Review your notes and reflect on your observations: Try to understand the function of each of the tasks and see if any can be simplified, or even eliminated altogether.

Things to consider before trying contextual inquiry:

1. Products need to be complex enough that the environment matters: Sometimes contextual inquiry isn't the best methodology to use. For example, workflows done on single channels or simple

interfaces, as is usually the case with apps and websites, aren't ideal candidates for contextual inquiry. Digital platforms tend to be lacking in contextual information and interaction, with most interactions occurring independently of the environment.

Contextual inquiry adopts a more holistic perspective in the way it seeks to find meaning in and across a variety of different settings, and more often than not, research done on websites or apps just

don't offer enough to work with.

- 2. Products need to have a base of power users: Another important aspect of contextual inquiry is timing. Because you're observing participants using fully functioning software or systems, you need a completed product. That means contextual inquiry comes at the end of the testing cycle, after prototyping and implementation. You need a system or design that has seen extensive use and actually has super users.
- 3. Do plenty of usability testing first: You should conduct usability research—lots of it!—before you're ready for contextual inquiry. Testing early and often will not only help you identify usability and user experience issues, it will also help guide your objectives and questions once you're ready for

contextual inquiry.

When should it be used?

Contextual Inquiries can be conducted at any stage of the process, but typically tend to be performed on a fully functioning system.

How do you conduct a Contextual Inquiry?

During a Contextual Inquiry, a usability expert or team of experts typically travel to observe users in a real-world environment, such as an airport or border crossing. Although typically conducted by a usability professional, the inquiry can be conducted by anyone with a thorough knowledge of the system and the system's users.

The individual performing the inquiry is typically very passive, allowing users to act naturally as though they were not being observed. During the inquiry, the usability expert may ask questions to better understand a user's actions, but typically questions are held until the end to avoid interrupting a user's normal workflow. The person performing the inquiry may also ask for permission to tape the sessions so that they may capture the entire process and conduct an in-depth review following the inquiry.

This process should be repeated with several users under varying conditions in order to identify trends in users, in the environment, and with the technology.

Following the observations, the individual conducting the evaluation will summarize their observations, noting workarounds or shortcuts that users have created, itemizing instances where users deviated from the expected workflow, listing features that performed well, as well as features that were difficult for users to understand.

What are the benefits/limitations?

The benefit of a Contextual Inquiry is that you have an opportunity to observe users in the environment in which they will use the system. It helps to identify design issues that may

arise because of environmental factors (i.e. the noise level in an airport may be too loud for users to hear audible cues that tested just fine in a usability lab) physical conditions (i.e. instructional guides that are positioned too far in advance of a system that users forget what to do by the time they reach the device) or occurrences (unexpected interruptions of the biometric process).

It is this type of subtle, but extremely important information that Contextual Inquires help to uncover.

One of the drawbacks to this technique is that there is sometimes so much data to analyze that it becomes a very time-consuming and labor-intensive effort.

Contextual Inquiry -

- 1) What functions do you want in the system?
- 2) How many users will use the system?
- 3) Do you need to install it on hardware?
- 4) What more functionalities do you want your system should have?

Conclusion: Thus we have studied the contextual inquiry and different steps to conduct the contextual inquiry for the selected product / system.