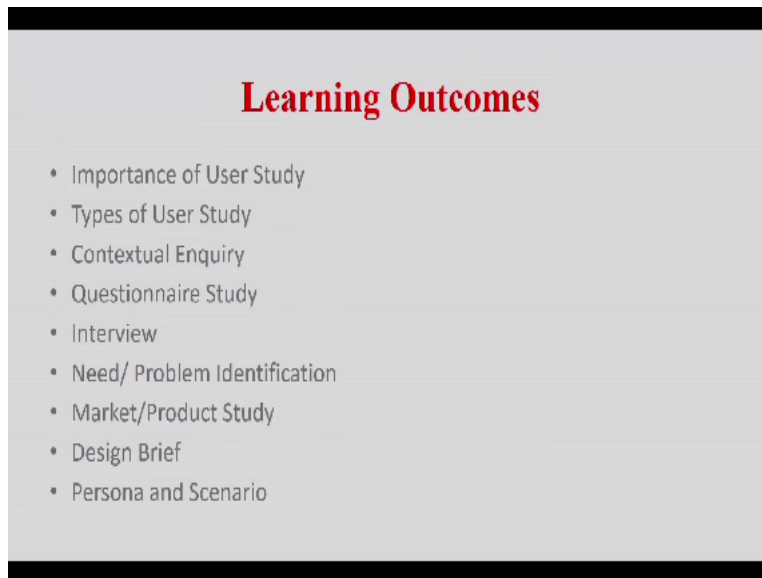**Product Design and Innovation**
Dr. Debayan Dhar
Department of Design
Indian Institute of Technology - Guwahati

Lecture – 06
Introduction to User Study & Problem/Need Identification

Welcome to the course on product design and innovation. Today, we will start the second module. This is one of the most important parts in this entire course. Because in this part, we will study about user study. I will initially walk through the contents that we would be covering in this course and finally what you would learn from the lectures that I would be taking.

(Refer Slide Time: 01:00)

So in this section, we would talk about the importance of user study. In all, should know why user study is required? Why it plays a major role in product design and innovation. With the basics on the importance of user study, we would then move on to the types of user study. Here detail discussions about various techniques and tools used by product designers across the world would be discussed.

We would go in detail in few of the techniques that are being used. After discussing the types of user study, you would learn about contextual enquiry which is a technique through which many designers and ethnographer around the world collect data from the end users and identifies the problem that their users faces. Thereafter we would talk about the questionnaire study, the

interview techniques.

Now these 3 techniques that I would be discussing in this course, the contextual enquiry, questionnaire study and the interview, are the most widely used techniques by various designers. So the protocols and methods of conducting a valid and reliable user study would be discussed during these 3 sections which I would be discussing. After we complete and user study part, we would discuss about need and problem identification.

How to identify issues that the users are facing from the data that you would be gathering from the techniques which we would be discussing that would be a substantial part in which discussion will happen. Thereafter we would move on to the next section of the course wherein we will discuss about the market and product study.

We would talk about competitors and how competitors play a major role in defining the requirements of your new product design. With these initial studies, finally the most critical step in the design phase of a product is how a designer defines the brief which often is called as a design brief. Here I would teach you how to formulate a just and ethical design brief for you or the team that would be working under you to progress and to take forward the inputs that have been gathered from user study and market study and start conceptualization.

Finally, we would talk about persona and scenario and the role these 2 important step plays for conceptualization. So let us start the first part of this course.

(Refer Slide Time: 04:18)

User Study- An introduction

How you can study user behaviour?

When and which user study method you should use?

Now before starting this lecture on user study and why it is important, the 2 most important questions that plays a major role in deciding what designers or you while working in this project would do are how you can study user behaviour and when and which user study method you should use? Friends these 2 questions are very important. When this question is raised how you can study user behaviour, it seems very casual in nature.

Why do we at all need to study user behaviour? I mean, we can see people talking around us, people roaming around us, people discussion many things around us, we can see the like, the dislike to talk about what they prefer and what not. Then why do we need some tool or method to study user behaviour and the most important question is how you can study them? So when we go in detail about the techniques and tools that are to be used, you would realize gradually that why it is important and how we can study user behaviour.

The next part of the question is equally important, why it is important because there are multiple techniques you would go through around many books on product design and innovation or user experience design or user center design, the talks about many book, many techniques that are being used by designers and ethnographers to study their users. But the primary question here is out of the many techniques that are being used, which one to select?

And when to select? This is critical part. Many students or design students fails to understand. It

seems it is based on the wish of the designer to choose one technique over the other. No, it is not in that way. It is primarily based on rationales, justifications and your intentions towards the design process, the drives when and which technique you would be choosing for studying the user behaviour.

(Refer Slide Time: 07:02)

On to the next slide. User study is the primary activity taken up by designers to observe people in order to understand their requirements. By requirements, we may need the frustrations and motivations, contexts, expectations and tasks. Now here in this slide I would like to highlight, see this part. You know, the focus is on the user. So you will have a user who is using a product or doing some activity or you will be focussing on any part of his daily schedule.

So the first important point to keep in mind that the first important thing which should be done is to focus on the user, what are his expectations. So what does he need? This is the central thing that we would be looking for during our user studies. The other important part which I would like you to focus are the frustrations, the motivations, the context, expectations and tasks. Friends keep in mind that we as designers are more concerned about what motivates our users to use a product or a service.

Similarly, we are concerned about what are the demotivations that mean the pain points or the frustrations. Because it is these frustrations upon which we as designers would be working or

solutions. So the primary activity by the designer is to understand using the user study to identify the need, the frustrations, the motivations, the context, the expectations and tasks. Incidentally what we are saying is the focus is on users, right.

(Refer Slide Time: 09:15)

The next part is it identifies what a particular information source is actually used for with the barriers and enablers to its use investigated. Now here the most, the 2 most important things where I would like you to draw attention is the barriers and the enablers. Friends when your users are working in a scenario, a situation, they would be using a service or they would be using a product.

Now while they use the product, as designers, we should be curious about what are the things that affects in the most in a way that he could not complete his activity? What is forcing him not to complete his activity, can we identify that? Similarly, we are also curious to understand what are those elements or entities which are supporting him in completing the activity in an effective or efficient way.

I mean to say example the product is designed in such a way that he has to take minimum number of operational activities to finish a task. Now so as a designer, we are interested to understand and identify these enablers and the barriers which influence our users to conduct an activity. Third point, user study provides key inputs to the design process. It defines the direction

of innovation for new product development.

Here the important part is the section, direction of innovation which we will discuss in the next slide as well. Now as you are aware that the name of the course is product design and innovation. So innovation means what? Degree of newness in the concept that you would be conceptualizing for the users. Now in which direction you would think about those concepts, we would talk about in detail about these directions in the next slide.

The next point is it defines the benchmark upon which a new product would be developed. Friends this is very important part in the design process. We must be aware of what is existing. By the word existing, I mean the frame of reference. What features, what activities, what tasks the user are acquainted with and we need to identify those important elements and create a benchmark.

When I say benchmark, I mean we can, during our conceptualization, we cannot pull down the concepts below this level. What we need to do is we need to think about concepts that uses that level for that frame of reference and, or, might be more innovative or extrapolate those features in much more unique and innovative way. We cannot go below the bench or the level which the users are familiar with.

So user study helps us in identifying their benchmark. It provides a glimpse of the competitors that dominates the market. So here I would like to tell you a story. See a successful product is a product that not only enters the market with a big boom but also sustains the competition over a period of time and remains the number one product in the market. How can it be number one for a long period of time?

It can only be the leader in the market if the designers during the design phase has taken into consideration the competitors and their role in eating away the competition. An example here I would like to give you is the example of Wikipedia and the book on, the Encyclopaedia. Friends if you know this fact that when we were kids, and many fairs there used to be a hawker or marketing people who use to sell these encyclopaedia books, big big huge volumes of books.

They used to come across our homes talking about the importance of these books. Now encyclopaedia, those books were very very famous during those periods of time. I am talking about sometime way back 20-25 years. So now the group of people whose product was the, those encyclopaedias, they failed to consider Wikipedia as their potential competitor in the way. Therefore, imagine that Wikipedia could be one of their competitor in the web.

Now so what happened? Gradually have you seen any hawker or this people, marketing people coming down for selling these products. Gradually they have just disappeared because now Wikipedia has taken over the web as the first source of information for any topic, any person, any entity that you look for. So therefore as designers, it is very important and crucial that we identify our competitors right from the initial stage and the stage is the stage of user study.

The other most important thing that the user study provides us is it identifies the mental model of the user. Now see this word mental model. Probably you are hearing this word for the first time. So let me explain what do you mean by, what do I mean by mental model? What is mental model? Mental model is something like an impression of how the product or a service would be.

For example, if I am going to buy a car for the first time in my life, I would have a mental impression of the kind of activities that I would do, the fun that I would have with my car, the way I would enjoy my life with my family members driving down the city? Now all these impressions that a user have, or these are called all anticipations, right. These anticipations that the user have before starting the actual use of the product is considered as the mental models.

Now, why is it important to understand that, or to capture mental models? It is important because, now when a product is given to the user, he or she would start using the product keeping in mind the anticipations that the user had before actually using the product. Now the crucial part is if the anticipations which he had does not match with the actual usage of the product, then he will just leave the use of the product and the product will fail in the market.

So friends it is very crucial and important that we as designers should understand and capture the

mental model of the user, his anticipations, his impressions. The way he thinks of how he is going to use the product and if we can match that level, his level of the idea of how he would be using the product, the product would be a hit, instant hit. It would match his expectations or maybe it is much ahead of what he actually accepted.

For example, if you take the example of iPhones. It looks fine, it looks fabulous, we have heard a lot over advertisements around it. But the moment you start using it, you feel it is much more than what you anticipated and that is the joy that drives you to become a loyal iPhone user, right. So these are the important steps or things because of which we conduct user study.

(Refer Slide Time: 18:52)

As I discussed in the last slide that what are the important feature or I can say reason why we conduct user study, is to identify the direction of innovation. Now what do we mean by direction of innovation? Friends to understand direction of innovation, we first need to understand the design triangle. In this slide, you can see by design triangle, I mean this triangle which is shown in the slide.

Now the product is there, this is the product, right. And any product, be it tangible or intangible, remember that it has inherently 3 quality attributes and these 3 quality attributes are aesthetics, function and human factors. Now what do you mean by aesthetics? Aesthetics in a product means its form, the nature of the form, the characteristics of the form, okay, the colour that are

being used in the product, the texture, the way it feels, the symmetry, it is also related to form and the materials that are being used.

You know, now a day's many products incorporate high-end materials for the end users to make it look more aesthetic in nature. So aesthetics is one of the quality attributes of any product, right. The second attribute is function. What do you mean by function? Function means the main features using which the tasks are completed. Who completes the task? The user. For example, if you have a coffee machine in your house, the main feature of the machine or the product is to prepare a good cup of coffee and there are other features also associated with it.

Whether you are using a coffee beans or whether using coffee powder, it should accommodate all the various, these techniques through which you as a user should like to prepare a cup of coffee. Now these are called the functional features of any product. So function is the other quality attribute of a product which is inherent in it. The third and most important attribute is human factors.

Now what do you mean by human factor? Now by human factors it means the psychological and the physiological factors. This part would be covered in detail by Dr. Swati Pal in the module 3. You would learn a lot about the psychosocial factors that influence product design, the psychological factors that plays an important role in choice of product, in choice of, in, in preference of using a product by the users and the physiological factors that influence the use of a product.

For example, if you take a chair, if the backrest is too bent, it becomes difficult for a user to sit there. So these are some of the physiological factors which would be discussed in detail in the module 3. Now these 3 attributes are the attributes that any product has as an inherent quality in it. Now why we conduct a user study? The idea is to identify in which direction a designer would persuade his or her conceptualization.

For example, as a designer if, if I want to work on a product, if I want to develop an idea of a product, in which direction should I go? Should I only think about the innovative features,

functions that I can give so that the user can use the product or the product is already available and I am redesigning product because it lacks aesthetics. It is not aesthetically beautiful. People do not prefer this product or are there any human factors or the issues, be it physiological and psychological.

So your user study provides you with the inputs towards whether as a designer you should move towards the direction of designing for functional features or towards incorporating more aesthetic features into the product or working towards human factor related issues in product design, right. So these are some of the vital and important points which you should remember as the reason for why we conduct user study.

(Refer Slide Time: 24:16)
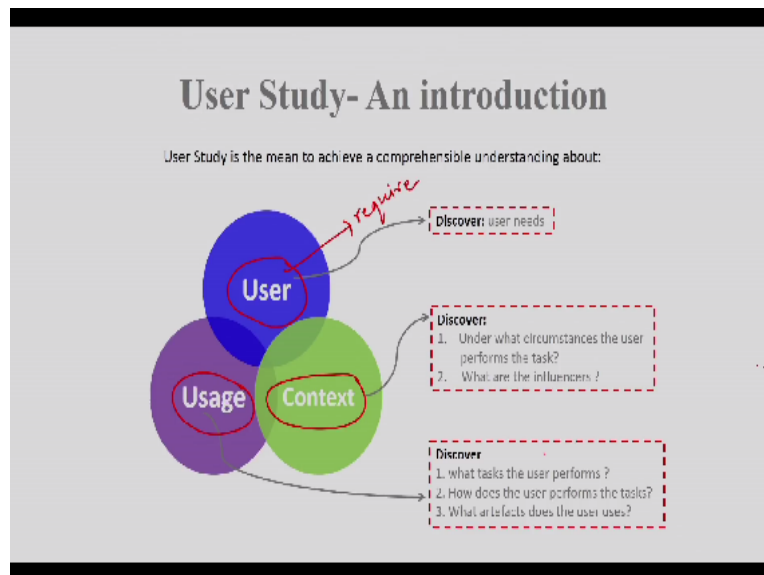
Moving on to the next slide. User study is the mean to achieve a comprehensible understanding about. Now why I am explaining this because these 3 features are really important for a designer to understand because based on these, the inquiry techniques that you would use later during user study phase, would be defined and identified. Now what are these 3 factors. These 3 factors are user usage and context.

As designers, during this user study phase, we need to identify user needs. So therefore we need to investigate more on what they really require, right. Then how they are using certain products currently or how they are doing certain activities currently? Let us focus on usage. So usage,

what task the user performs, right. So what are the various activities, tasks that the user is performing?

How does the user perform the tasks? How does he do it? You know, how many steps does it take to complete a task? As I said earlier what are the enablers in completing the task? What are the barriers that influence him? and he could not complete his task. We need to identify these things and the, the other most important is, what artefacts does the user uses? These are the primary objectives with which we enter user study.

So the first thing is user, identifying his requirements, needs. Second, his usage characteristics. Third and the last most important is understanding about the context in which he is using the product. Now how do we explore that? What we do is, we identify under what circumstances the user performs the task. By circumstances I mean environmental conditions, emotional conditions, physiological and psychological conditions, you know, conditions which are often known as situational factors in a current scenario, how he is performing the task and as I said what are the influences.

So while he is performing an activity or while he is using a product, what is influencing him? Is it the light which is influencing him? Is it someone else walking into the room, or trying to influence him by some statements or is it the product itself? The information that is presented in the product, that is influencing him. Now friends, these are the 3 important pillars of a user study.

Whenever you go for a user study, we need to have clearing defined answers for these questions that I have discussed right now. Questions or identifying his requirements as in to the user, questions on his usage, his or her usage of the product, tasks that the user performs, how he performs the task, what artefacts does he use, and the last one is the context, under which the task is being performed.

(Refer Slide Time: 27:52)
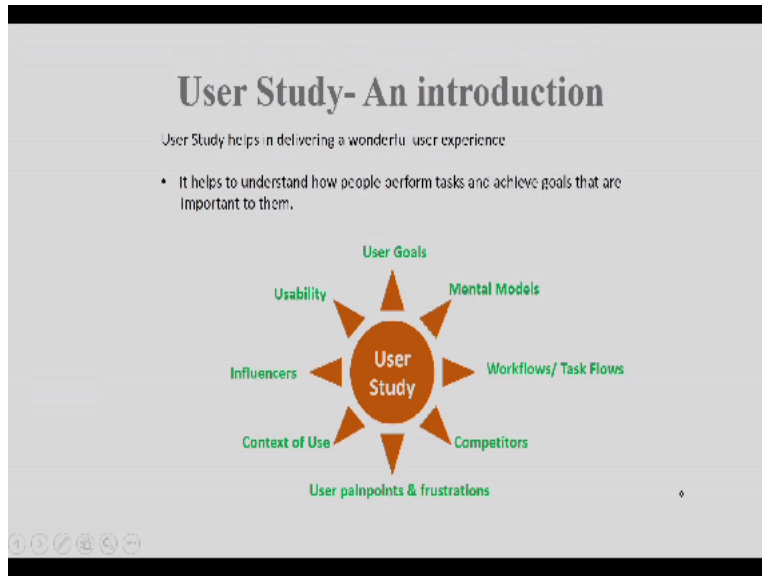
Lastly, these are some of the markers which you should always keep in mind while moving on to conducting user study. What are them? They are user goals, mental models, workflows, competitors, user painpoints and frustrations, context of use, influences and usability. Now why I am discussing all these factors? It is because, see what is the objective of designing a product? We need to realize that first.

As a designer, what is our foremost objective? Friends our foremost objective is to provide a delightful and wonderful user experience to our users. Often we refer to as customers as well. He should enjoy using our product. It should be delightful experience for him. And you remember what I have discussed in mental models, while using the product, the experience should be such that it should exceed his anticipations or her anticipations, what he or she has expected before starting to use the product.

So our objective is to deliver a wonderful user experience. Now to deliver a wonderful user experience, what we need to do? Is we need to keep in mind user 's goals, user's mental models, the workflows, the way he conducts the activity stepwise, the competitors with which your product would be competiting in the market, user's painpoints and frustrations, the context of which they influence as I discussed and the usability of the product.

How well he can achieve his task or complete his task or achieve his goal, the extent of timely

completion of that activity in the more efficient and effective way. So friends these are the important cornerstones which you should keep in mind before you envisage your journey to conduct a user study. Next we would discuss about types of user study.
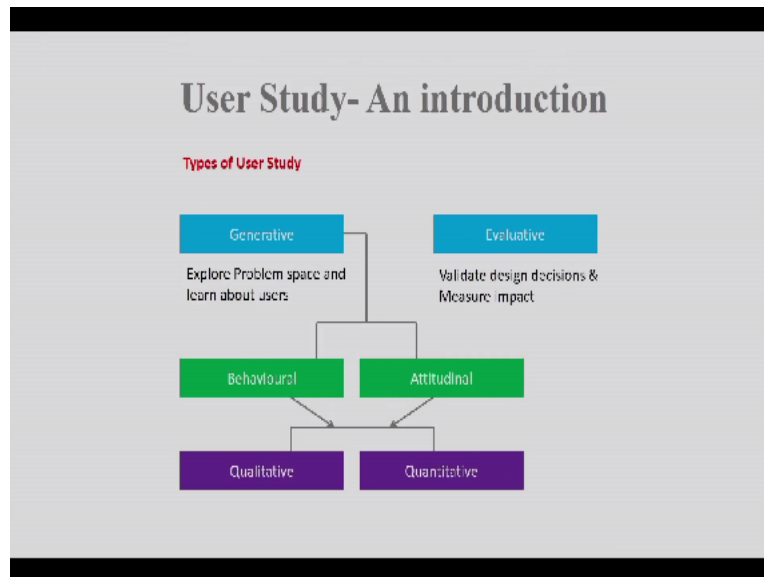
The first, the 2 most important sections while going through types of user study is generative and evaluative. Now what do you mean by generative and evaluative user study? Generative user study means that you explore the problem space and learn about users. The idea is you are trying to investigate user's expectations, user's requirements, user's need, user's motivations, frustrations and essentially it is not important that you are evaluating a product.

The idea is you are trying to come up with the design brief that will inform the designer about in which or the direction in which the conceptualization should proceed. This is often referred to as generative user study. Evaluative user study on the other hand focuses more on validating design decisions and measuring the impact of the proposed or the conceptualized product. Now the evaluative user studies often undertake after you have finished conceptualization and prototyping.

And the concept of the product is right in front of your eyes, you have realized the, the product has been realized and you take that product, go to your users and conduct an evaluative user study. Now here the objective is that you intend to validate the design decisions that you have

taken during your conceptualization phase.

Your focus is to understand whether your user likes the product, do they enjoy using it, does the experience that the product provides to your user is a delightful one? In this way, your intention is to measure what the power of your concepts, the effect of the concepts that you have generated on the users buying intention, preferences, the level of satisfactions, right. So we would discuss about evaluative user studies in the last module of this course.

Now what we would do is we would focus on the generative user study. Because our objective and goal is to come up with the design brief and to identify the problem statement. Any generative user study can be further classified into behavioural user study and attitudinal user study. These 2 can be further classified as quantitative and qualitative user study. We will discuss about these classifications more, in a more detailed way in the slides that are coming next.

(Refer Slide Time: 33:33)
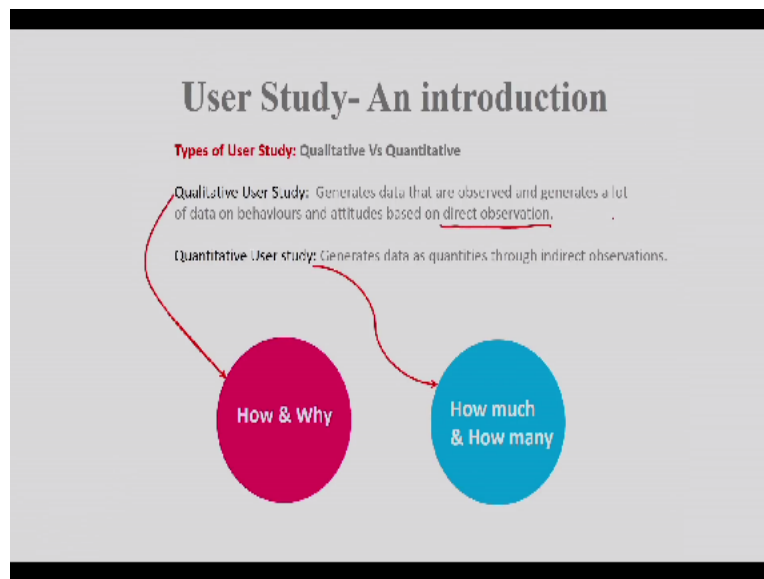
Now a qualitative user study, now many a time friends you would see the moment these 2 terms comes into, in front of us, the qualitative and quantitative, many designers say that qualitative user study means asking questions that are open-ended. While quantitative user study means asking questions that are close-ended. But I am afraid this is not the right way to understand qualitative user study, let us see.

A qualitative user study generates data that are observed and generates a lot of data on behaviours and attitudes based on direct observation. Now this is the important marker which I would like to highlight, direct observation. A direct observation means observing through designer senses like visual senses. You are observing your user while he is conducting or he is doing an activity, while he is doing, using a product, right.

This is called direct observation. Now in a quantitative user study, what the objective is, is to observe these users in an indirect way. So it generates data as quantities through indirect observations, like questionnaires. Now you were just asking about his past experience and what he prefers and what he likes but you are not interested to see what, how he has conducted an activity or how he has used a product, right.

So this difference between quantitative and qualitative essentially is the difference in between the method of enquiry that is being carried out. One is the direct observation techniques and the other one is indirect observation technique. Now in indirect observation techniques also what we do is we try to quantify, we try to measure feelings, experiences in terms of quantities and provide them as inputs for the user to select.

Therefore, it is easier for analysis by the designer. While qualitative user study, the data that is generated, it is harder to analyze and report. So as a quick learning insight, I would provide you with 2 different set of questions. The qualitative user study primarily asks questions like how and why. So if I am interested to know about how a product being used and why is he using the product.

I would go to the context of the user and observe him the way he is using the product and the requirements based on which he chose to use the product. If I am more interested to know how much and how many, then this kind of study would be classified as a quantitative user study.

(Refer Slide Time: 37:06)

User Study- An introduction

Types of User Study: Behavioural

• Behavioral survey intends to enquire about factual circumstances.

• Behavioral study often probe incidents in the respondents' past.

• It seek to understand "what people do" with the product or service in question.

Behavioural type of User Study: Contextual enquiry (Qualitative)

* It can become attitudinal based on the nature of questions being asked.

So after finishing quantitative and qualitative, let us discuss about behavioural type of user study. Now behavioural survey or study intends to enquire about factual circumstances. It often probes incidents in the respondents past. It seeks to understand what people do with the product or service in question. So what do I mean when I say factual circumstances? Factual means things which get unfurled in the context. Imagine you want to see how fishing is done.

So one way he is asking questions to people who fishes and the other way of doing it is going to the context of the area and looking at the context yourself of how it is being conducted and what you see are the facts that are being done in a real context situation, right. These kinds of studies are considered or known as behavioural studies. Now the one of the behavioural study that we will discuss is the contextual enquiry which we will follow.

It is more qualitative in nature but often based on the kind of questions that are being asked by the designer to the user. It can also move towards attitudinal, you know, a little bit of quantitative, we will discuss about how, what is attitudinal and how it becomes quantitative.

(Refer Slide Time: 38:49)

User Study- An introduction

Types of User Study: Attitudinal

- Attitudes are general evaluations that people hold regarding a particular entity, such as an object, an issue or a person.

- These attitude reflect the individual's overall summary evaluations of an object, an issue or a person. The focus is to understand or measure people's stated beliefs

- They reflect the degree of positivity or negativity an individual feels towards an object.

- Attitudes are stored in memory and they remain somewhat stable over time.

Attitudinal type of User Study: Interview (Qualitative), Questionnaire study (Quantitative)

So the next type of user study is attitudinal. Now what do you mean by attitudinal user studies? Attitudes are general evaluations that people hold regarding a particular entity such as an object, an issue, or a person. These reflect, these attitude reflect the individuals overall summary evaluations of an object, an issue, or a person. The focus is to understand or measure people's stated beliefs.

So as the name goes attitudes are the beliefs that your user has acquired over the period of time and because their mental models regarding a particular activity or a particular product. These are simply preferences, their likes and dislikes. Their experiences, their feelings. Whether they are satisfied or they are not satisfied. Whether they want something more? Whether they dislike this product? Whether there is a reason why they dislike the product, right?

.These are more like preferential questions, preferences, their feelings, their experiences that the designers want to capture. Now they reflect these attitudinal user study, reflect the degree of positivity as I say, positivity or negativity an individual feel towards an object. So it is a kind of evaluative in nature. Remember the discussion that we had during mental models, the anticipations that the user have, actually influences the way the user evaluates the experience of a product.

Because of these anticipations, the way when he starts actually using the product, he constantly

evaluates the experience of the product, right. And these experiences can be negative, can be positive. So attitudinal user studies tries to capture these evaluative responses of the users. Attitudes are stored in memory and they remain somewhat stable over time.

So the focus of attitudinal user study is to capture these experiences, these evaluative experiences or, experiences, feelings that the user have regarding a product, an activity, or a service. So interviews which are qualitative in nature and questionnaires which are quantitative in nature are the types of attitudinal user studies that are being conducted. We would discuss these 2 in the later of this module.

(Refer Slide Time: 41:37)
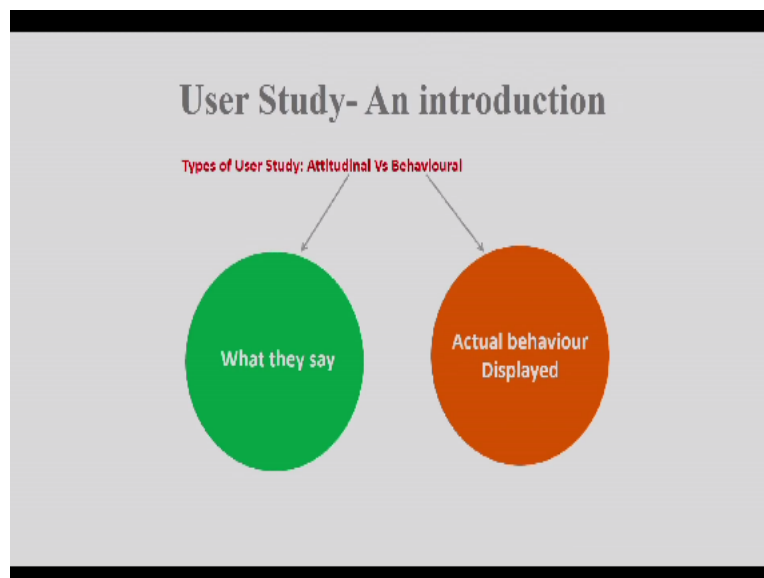
So 2 quick markers for you to distinguish between attitudinal and behaviour studies are these. So attitudinal means what your users say, their evaluative experiences and behavioural studies are what actual behaviour that are being displayed, right. These are the 2 differences, contrasting differences that these 2 types of user study focuses on. Based on your intention, based on your objective, based on your objective of enquiry, a designer can choose anyone of them or sometimes they choose both of them.

(Refer Slide Time: 42:32)
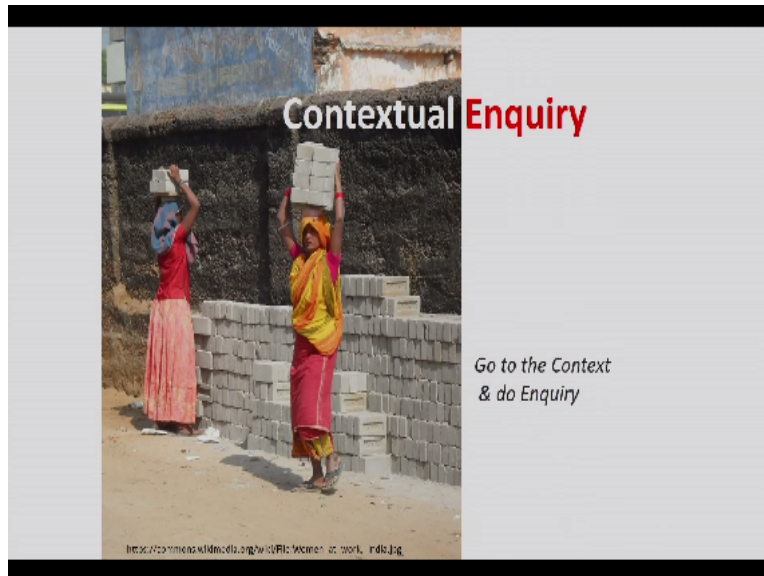
Let us move on to our first user study that is contextual enquiry. Now when you hear the term contextual enquiry, what is the first thing that comes up on your mind. Can you guess? I mean many of you might be thinking about the 2 terms context and enquiry and you are right in thinking that. These 2 terms context and enquiry, what does it tell us? It tells us that go to the context and do enquiry.

So contextual enquiry essentially is about investigating our users, activities while they use a product by going into the context in which the activity or the use is unfurling. So as designers, we are supposed to move to the context, visit the context and see for our own selves the ways in which our users or customers are using this product, using any product. Let us see how to conduct a contextual enquiry.

(Refer Slide Time: 43:35)

And before even understanding how to conduct a contextual enquiry, let us see why it is difficult to gather user data. First thing your users do not get very detailed. You know, one of the key features of users are or people around you including me, we tend to generalize things and we cannot always explain them out of context. Users may not be very accurate. Their statements are more qualitative in nature about their experiences, about their feelings, about what they felt.

And what not and about the stories that they will teach around, the experiences, they always make relative statements. But the focus is to understand the frame of reference from where these relative statements are made, inaccurate estimates of quantities. The way they will measure a feeling, an experience will be way different by the way in which a designer will measure. Therefore, the way they quantify those quantities are not accurate for the designer to be considered as inputs in the conceptualization phase.
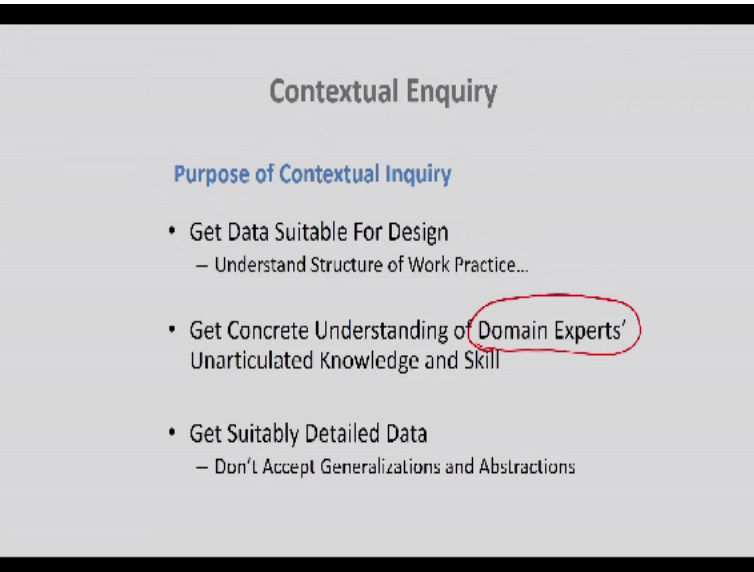
Users often have a frame of reference. Now this is very crucial. You know, many of you might be engineers, so engineers will suggest technical fixes, right. Managers if you have, if you have seen managers around their work, they will suggest regulatory fixes and workers will suggest procedural changes. Now this is because they are influenced by the kind of activities works they do the way those things have enshrined into their behaviours and that is why everything they do.

The frame of reference is the activities that they do it regularly. Even you have a frame of

reference, right. And as designers, they are often biased about the design ideas. So even initially, even before starting the user study, many designers fall in love with the ideas that they have. Now I want to do this. This is the kind of product that I am looking into. Now these are called frame of references.

If you have a frame of reference, then you are biased and as a good designer, you must come out of that frame of reference, be open to unique and any sort of ideas or situations that come across and weigh these situations in a way that make sense for you to come up with workable concepts.

(Refer Slide Time: 46:38)

So the purpose of contextual enquiry is to get data suitable for design, understand structure of work practice. How the work is completed in the context, what activities are being performed, how are these activities performed? Get concrete understanding of domain experts. Unarticulated knowledge and skill. Now I would like to draw your attention here. Who are domain experts if I, I you can see the slide, here, it is written domain experts, who are domain experts?
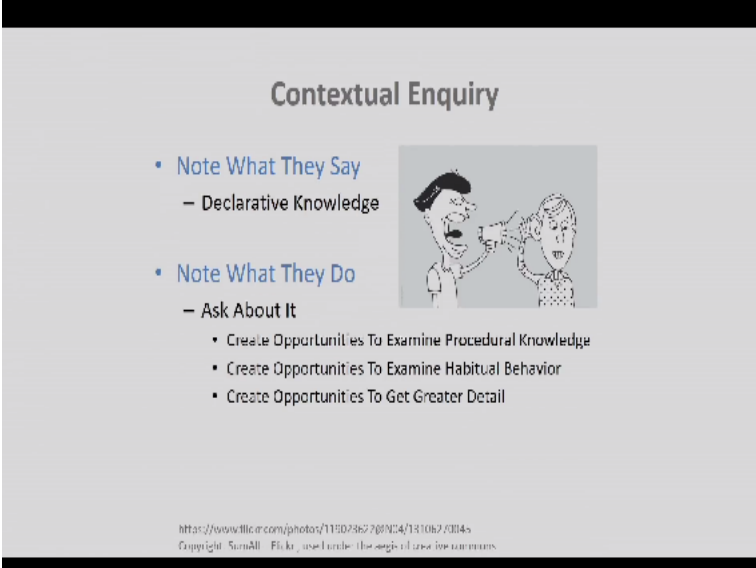
Can you answer this question? Domain experts are your users. Because they use the product. It is their choice how do they want to use it. And therefore, it is your responsibility to extract the information in a very very articulated way from them. Gets suitably detailed data. See it is very hard to conduct contextual enquiry because it takes up a lot of resources, be it financial resources and time.

So therefore, the objective of the designer should be that as must data as much possible, you must go and collect it out. Because it is not possible or feasible to visit that context again and again because of the constraints that you will have in terms of finance or in terms of time. So therefore, in your first visit only, make it a point to collect as much detailed data as much possible.

Coming back to why it is very tough to collect this data. As I have explained earlier that they generalize stuff. Your users do not get data in a detailed way. They will give you everything in a summary. Now as designers, we are most interested to have data which are much more detailed, right. And users may not be very accurate as well. And the frame of reference that we have discussed.

So before going on to contextual enquiry, keep these important informations in mind that first thing, you want to get a detailed data. Second, your users are not accurate. So you have to seek ways to get accurate data. They provide relative statements. Third, they have a frame of reference. The idea is to understand the frame of reference and to realize why the statements are being made.

(Refer Slide Time: 49:31)

So while conducting a contextual enquiry, what we do is we note what they say and we note

what they do. When I say note what they say, it means declarative knowledge. Declarative means what they declare that this is what it is, this is what I feel, this is what I experience, the factual, the kind of experiential evaluations that they are going to give you. So you, you have to keep a record of all those things that they say to you and the other most important thing is you have gone to the context to see how an activity is performed.

So therefore, you have to note what activities they are doing. So you have to make a way to examine procedural knowledge. What do you mean by procedural knowledge? Procedural knowledge means the way a certain activity is performed, getting information or knowledge about that. Procedures, first this activity, second that activity, then third activity, these are procedures. So we are more interested to know and understand these procedures.

We need to create opportunities to identify and examine habitual behaviour. What are their habits? See friends when you would be going for contextual enquiry, your users will be very much cautioned in the sense, they would try to behave in a very artificial way and they would try to behave in a way that they are organized. Our motive is to understand how they do these activities regularly? What are their habits? And as I said to get as much detailed data as possible, right.

(Refer Slide Time: 51:29)
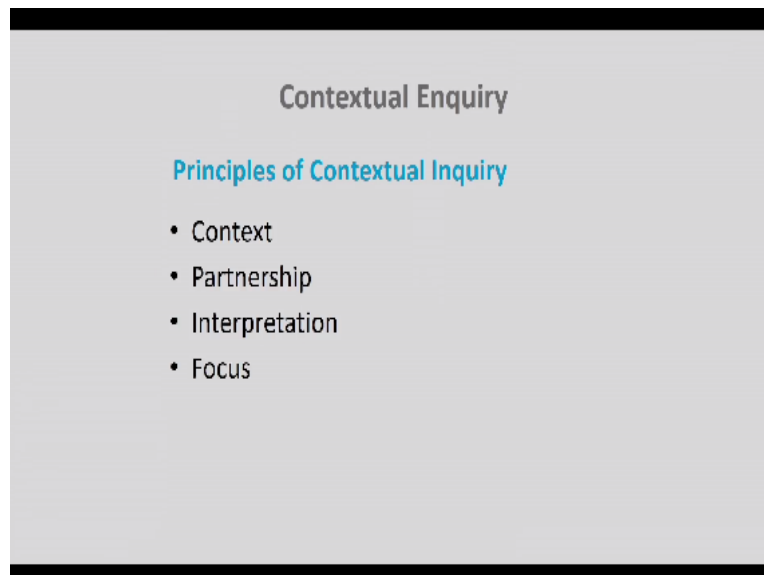
So now coming on to the principles of contextual enquiry. The principles of contextual enquiry

are context, partnership, interpretation and focus. Remember these 4 important things. We will discuss them in detail. Context, partnership, interpretation and focus, we will discuss these things in detail.