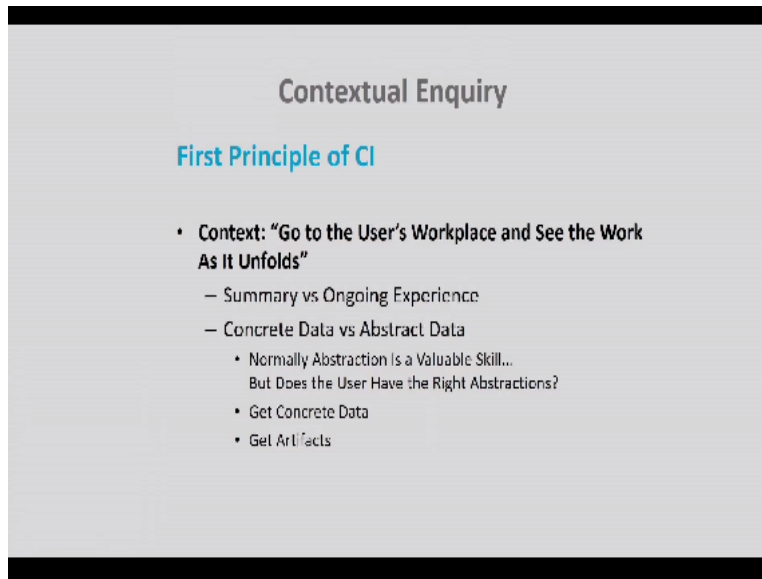


Product Design and Innovation
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Lecture – 07
Contextual Enquiry

This is the first principle which is context of contextual enquiry. What does it say?

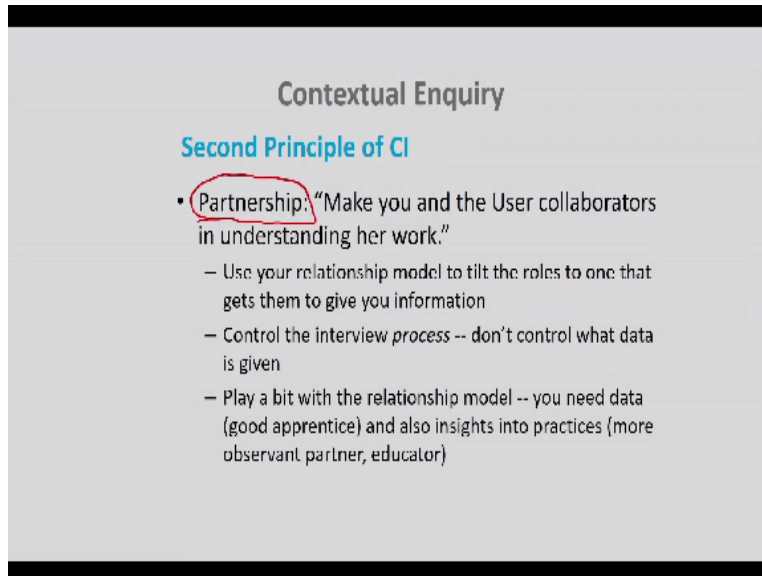
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It says go to the user's workplace and see the work as it unfolds. Now when you see something which is being unfolded right in front of you, what you get is a detailed level of data, detailed level of information. So we are more interested to capture the ongoing experience then the summary of these experiences. Now concrete versus abstract data. We are more interested to get concrete data.

Normally abstraction is available skill but does the user have the right abstractions. We are not interested to get these abstractions. We are there to gather detailed and concrete data.

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The second principle of contextual enquiry, partnership. Make you and the user collaborators in understanding her work. What does it mean? See as a designer you must keep in mind the way you behave with your users, has a great implication on the kind of data that you would get, right. So while going for contextual enquiry, the foremost step that you should do is, you should behave as if you are a collaborator in that context with the user.

So second principle of contextual enquiry coming on to the second principle, now the second principle states about partnership, you can say here in this slide. So what do you mean by partnership? Partnership means working as collaborators, working in tandem with a group. So here you should make you and the user collaborators in understanding her work. So what does it mean?

You need to make yourself as well as the user whom you are observing as collaborators while the user is completing the task. Keep this in mind my friends there are various ways enquiries can be made. And the least possible way you would like to make an enquiry is to behave as a boss. Because the way, the moment you want to behave as a boss, your body language, your tone, your gestures would communicate in a way which would inhibit the user to provide details about the working culture or the experience that the user has with the product.

So therefore, in a way to make sure that we get detailed information, we get not abstract, not

general but more insightful information, you have to behave as you are a collaborator. We will discuss this more in detail. So use your relationship model to tilt the roles to the one that gets them to give you information. So this is the pinnacle of doing any contextual enquiry. You have to get some information and these informations are very crucial in providing you with the direction for innovation.

So therefore, the onus is on you to get those informations. How do you get them? One way is to behave as collaborators. To make friendly gestures, to behave as a friend rather than intimidating the user or doing, going around as a boss around the user while he or she performs the activities. Control the interview process, do not control what data is given. Now the second most important point here is to understand that you are the owner of this session.

Session means this contextual enquiry session. You have to own that session. You have to keep a tab of the kind of activities, of the kind of dialogues, of the kind of discussions that you may be having with the user. Never ever allow the user to take control of the session. That would probably derail the entire session. But having said this, you also need to keep in mind that you should not influence the qualitative or the type of data that is being provided by the user.

So the point is to control the session, you steer the session a way that your objective and goal is fulfilled keeping in mind that you do not influence the time the type of data or information that is being provided by the user. Play a bit with the relationship model. You need data. Good apprentice and also insights into the practices, more observer-partner educator. So here are more details about how generally ethnographers or designers conduct contextual enquiry.

The role of apprentice, if you understand how an apprentice behave, the idea is you are there to know more from him as if you are a student, as if you have hardly any idea of how the task is to be completed. So the master is your user. This is the actual role that we feel or ethnographers worldwide have suggested works the best. When you behave as an apprentice, as a student and the user behaves as a master. In this situation, there is a greater likelihood that good quality of data and information would be passed down to you, right.

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Contextual Enquiry

Third Principle of CI

- **Interpretation:** "giving meaning to observations"
 - Change 'data' into 'information'
 - Examine it from many different frames
 - Look for structure, work patterns, etc.
 - From facts, make hypothesizes about implications, test them out -- and look at implications for design
 - But don't bias them -- and listen carefully!

detailed insights

So moving on from second principle to third principle. Now what does third principle of contextual enquiry highlights? It highlights interpretation of data, okay. So what do you mean by interpretation? Interpretation means coming up with detailed insights, detailed insights about the data that are being generated. Giving meaning to observations. See friends when you are doing a contextual enquiry, a lot of information would be passed down to you.

Be it in terms of behavioural informations as well as it would also be in terms of attitudinal informations. Now these are informations until and unless you convert them into a meaningful way to draw insights. What does it mean for your design brief or whatever data is being given to you by the user, how it influences the problem statement that you would be conceiving or in a way, how does it help in supporting you during your conceptualization process?

Now these statements are very important. Many a time we designers tend to overlook these statements; these understandings of how contextual enquiry is done? How it is being carried out during the process of activities that are being observed and how do we come up with meaningful insights. Change data into information. Now when we talk about how do you identify problem statements, how do you define a need, we would talk about how do you convert the data that you have received into meaningful insights and informations.

Examine it from many different frames. Now I do often give an example in my class that if

somebody makes a statement like this that the sun rises from the east, right. Now this is a universal truth and a sentence that no one can nullify it. Now like this statement, it is also true or it can also be said that the sun does not rise from west, south, or north. Now what does have happened?

One way is thinking from the east that the sun is rising from the east. The other way is thinking from the perspective that it does not rise from any of the other 3 directions. Now this is what perspective means. Eventually when you are getting data, and when you are reporting the data, you will be also be working on converting those data into meaningful insights and one of the best way of doing that is to change your perspective.

When a statement is made, think about how differently it can be interpreted. Like the examples that I have given. Look for structure. Look for work patterns. You know as designers, we are always interested to understand if something is getting repeated over a period of time. Can we see something that is being deliberately or not deliberately, being getting repeated over multiple users?

Say for example, I am observing the buying intention of a product, say a brand of salt. And I have observed that out of 50 users that I have observed, 30 of them go to the shop and directly name the brand without even giving a thought about the other brands that are available in the shop. Now this is a striking behaviour. This is a striking pattern. Why? Out of 50, 30 of them are displaying this kind of behaviours.

So therefore, this type of behaviour is very important to be captured and to be interpreted for coming up with the problem statement or design brief and to direct the conceptualization process. From facts, make hypothesis about implications, test them out and look at implications for design. So design is an activity, as an activity has been explored enormous time over generations.

Many designers prefer to come up with concepts and test them out with their end users. This is a very very crucial activity to perform because without going to the end product, what the designer

is doing is without investing that much time to do conceptualization and detail drawings, coming up with engineering specifications and then prototyping, at the initial phase itself, the designer is getting inputs from the users in a way that, that tells the designer whether the user would prefer this kind of concepts or not.

Now these saves a lot of time for the designers as well as ensures that the end product that is being generalised, that is being detailed out or conceptualized has minimum amount of flaws. This is also called iterative design process. So you have to constantly think about questions in your mind. Why this is like this? Why he is doing this, using this product in this particular way? Why is he not or the user not using the product in different ways?

Why is he pressing here? Why he is opening the product from this side? What does he think about while he is using the product? Now all the statements would allow you to generate meaningful insights and then these can also mistake as hypothesis or you can think about statements okay if I do this, then what will happen? Now these kinds of inquisitive enquiries have always been explored in design by designers.

But here our contextual principle, the third principle of contextual enquiry which is interpretation provides us with a caution and the caution is do not bias them. You have to listen carefully. See every, friends every word that you make, every gesture that you make, will always influence them.

So therefore, you have to take utmost care in a way, remember what I, we have discussed about the apprentice, the student and teacher role in a way. So that is the role that we are referring too. So to refer to that role in a way that they do not influence your appearance, your presence there does not influence the kind of data, the kind of information users want to give you.

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Contextual Enquiry

Fourth Principle of CI

- **Focus**: "keep the conversation on useful topics without wresting control entirely away from your customer/expert"
 - Remain objective, on track
 - Like steering a conversation -- gently!
 - Think of it as:
 - Getting more detail
 - Covering all relevant aspects of the domain
 - Capitalize on surprises! Admit ignorance!

Now moving on to the final and fourth principle of contextual enquiry. The final principle or the fourth principle of contextual enquiry states about focus. Keep the conversation on useful topics without wresting control entirely away from your customer, a user, or expert. Well, what does it mean? It means that as a designer, you have the role to steer the entire process of enquiring. You have to make sure that the kind of questions and the answers that your user provides, it does not go in a direction which is deviating from the goal or the objective of your contextual enquiry.

This is very important friends. Otherwise, generally because contextual enquiry is a very very highly resourceful activity, you would lose a lot of time and resources in collecting data that are not meaningful. Remain objective and on track, okay. Like steering a conversation. I mean you can think about when you, you and your friends have a conversation and you want to discuss about a certain topic.

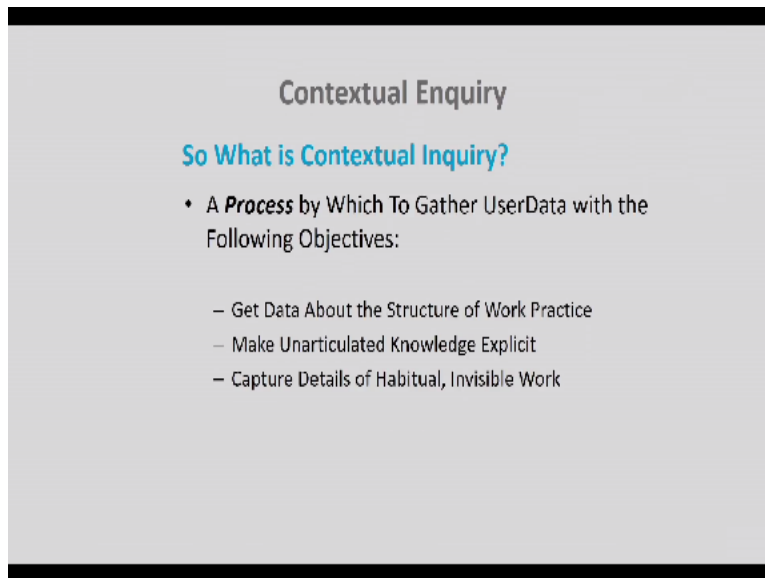
So like the conversation you have with your friends every time when the conversation tends to deviate from the objective, you try and catch hold of that discussion and pull up that towards central objective, that is how you have to behave. The idea is why we are doing all these things? The idea is we should get more detailed information, accurate information, information that is reliable in nature and the last and another crucial point is capitalize on surprises.

You might encounter something which is very very unique and you have never seen, you can

never imagine and so a product being used in such a different way by your user. So then try to mask your ignorance. The idea is show that oh, it is a surprise for me. You were ignorant and this, such a nice way of, you know, looking at the kind of products or the activities that the user is performing.

But remember do not pass on any attitudinal words like as I say it wrongly like nice, good, prefer, better, like this, right.

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The slide is titled "Contextual Enquiry" in a bold, dark font. Below the title is a sub-heading "So What is Contextual Inquiry?" in a blue font. The main content is a bulleted list starting with a diamond symbol, followed by a list of three objectives, each preceded by a hyphen.

Contextual Enquiry

So What is Contextual Inquiry?

- A **Process** by Which To Gather UserData with the Following Objectives:
 - Get Data About the Structure of Work Practice
 - Make Unarticulated Knowledge Explicit
 - Capture Details of Habitual, Invisible Work

So this is all about the introduction of contextual enquiry. Now the most basic question, so we are going in the reverse way. First learning about the principles and then we would justify and see what it is all about. So my friends at least from the principles, you have understood what a contextual enquiry is all about? It is a process to gather user data with the objectives like getting structured data about the practice.

By practice means, the tasks, the processes, the services, the way the user uses a product, the sequential tips, steps in which an activity is performed, we need to get those structured data. We need to also make unarticulated knowledge explicit. Now here you have to refer to the principle of contextual enquiry where we discussed about interpretation. Remember what we discussed. We discussed that these datas that you would be getting are highly inexplicit in nature or unarticulated in nature.

They are random in nature. You have to put an order to this data in order to bring an insight on how do you use this data for coming up with the design brief. Capture details of habitual invisible work. Friends even if your user is breaking the task while, I mean while you are observing the user, even if he is breaking the task and he is going out for a glass of water or a cup of tea, ensure that it is reported in your data logs.

These all are very crucial and important pieces of information that would require during your conceptualization. And keep it in mind that every time we do a contextual enquiry, our intention is to get and record the habitual work, the work that is being reflected as habits by our end-users. So ideally when you conduct a contextual enquiry, each of these interview sessions and observing the task lasts for around 2-3 hours.

It can be more also. This is just a rough idea of how the entire contextual enquiry session would go about. Around 10-20 sessions you can do over a period of time. Now it is because 1 interview session or 1 contextual enquiry session would provide you data in such a massive format that it is very hard to conduct a contextual enquiry for more than 20 or 30 users. So therefore, at least you should try that the ideal number of getting datas from different users is around 20-30, you know, around 10-20 or 15-20, anyway but not less than 10.

The idea is it should not be less than 10. So that, that amount of users you need to cover for conducting contextual enquiry. Keep in mind my friends that when I say 10 users, it might seem very easy for you but if you are, if you really start conducting a contextual enquiry session for 1 person, you would realize the extent to which amount of resources are invested specifically time and then the amount of data that you get which you need to interpret for the results to be utilized later in your design process.

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Contextual Enquiry

- Remember That You Are the Interviewer
 - Think About an Appropriate Relationship Model...
 - Scientist/Subject
 - Interviewer/Interviewee
 - Expert/Novice
 - Guest/Host
 - Master/Apprentice!
 - They Demonstrate, You Investigate, They Explain...
 - There Will Be Times You Need to Deviate A Bit...
 - And Play The Part!

Now the first point, so before I present you some of the case studies that my students have carried out as part of their course work in contextual enquiry. I would like to summarize some of the few important points for contextual enquiry. The first important point is remember that you are the interviewer. Think about an appropriate relationship model. Think about the discussions that we had while we were discussing about the roles of how a designer and the user would be while conducting a contextual enquiry.

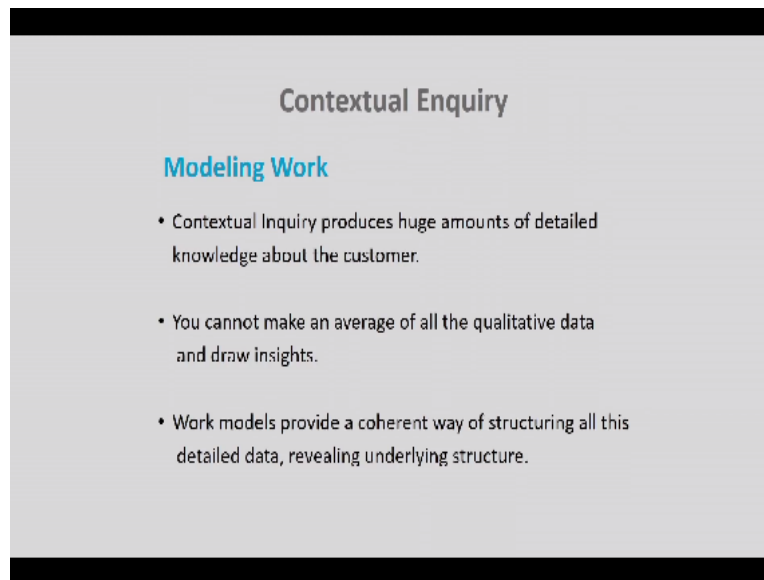
Now is the role can be explained in terms of a scientist on the subject or an interviewer or interviewee or an expert or novice or a guest and a host or a master and apprentice. Can you remember what we discussed earlier? Among all these roles, which one would you like to select? Yes, you are correct, the role that you would like to select or you would be selecting is the role of a master and apprentice.

Now who is the master? Your user is the master and you would behave as an apprentice. The user is the faculty, is the teacher and you would be behaving as a student. They demonstrate, you investigate. They explain, you record. There will be times you need to deviate a bit but then always keep in mind that the focus and control of the session should be at your end.

As a designer when I used to conduct contextual enquiry for some projects in the past, there would be some situations when it would be out of your control, like there are some major fault in

the electricity, there is a major fault in the environment, there is a major breakdown in some of the situations, there is a major emergency situation. These things might happen. So do not panic. You have to again restart the session at a suitable and comfortable day in consultation with your user and carry it out, right. So this was in short about contextual enquiry.

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Now what we will do is we should see some case studies and to see those case studies, my friends we need to understand how this modeling of the data that has been generated out of contextual enquiry sessions are carried out. Now why modeling is required? Friends you would be conducting a session of contextual enquiry for about 2-3 hours. You might use your mobile phone with permission from your user to record the session entirely or a camera also.

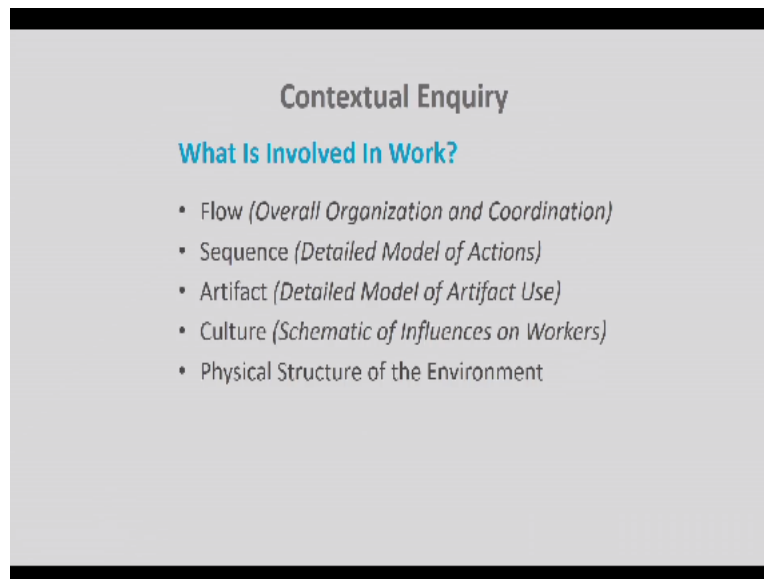
Now all these data have to be transformed into some way through which later on say probably when you start your conceptualization process or when, when you start creating your design brief and problem statement, you can extract meaningful insights. Now how to do that? There are few models through which we do that. My students, I teach my students in the class to use those models extensively so that they can capture the data and convert them into a insightful model through which these meaningful observations and insights can be drawn.

So as I said contextual enquiry produces huge amounts of detailed knowledge about the customer. The data that is generated is huge, it is enormous. You cannot make an average of all

the qualitative data and draw insights. Now since the data is qualitative in nature, it is not possible to make an average of all the data and then just present it through a, some tables. No, it is not possible, right. So the way out is work models.

They provide a coherent way of structuring all this detailed data revealing the underlying structures that are common across all the users.

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So what is involved in this work models? So there are 5 models generally we prepare for contextual enquiry. The first one is called a flow model. The second one is called a sequence model. The third one is called an artifact model. The fourth one is called a culture model. And the fifth and the last one is called the physical model. Now these 5 models are created for a particular session.

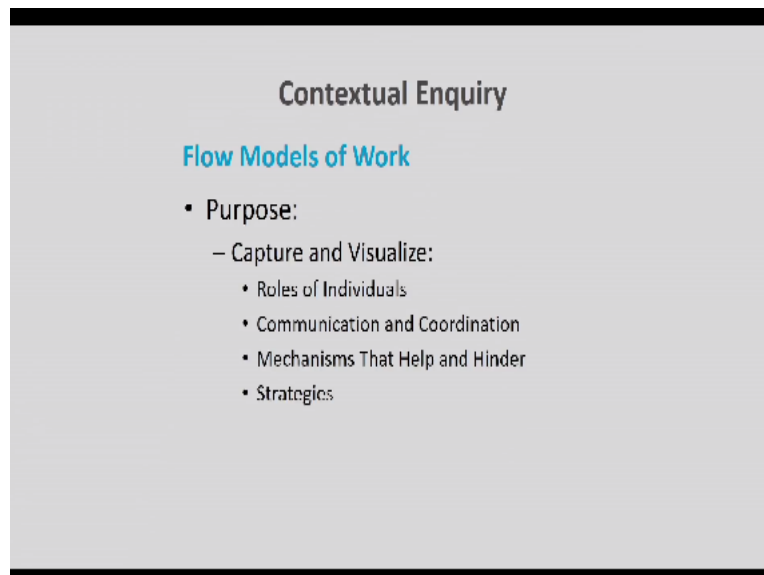
So example say we have to conduct a contextual enquiry session for, with a user in his own place for about 2-3 hours. Once you complete that, you come back to your space or your office or your room and you create those, these 5 models out of the data that you have collected. Or if you in a group, generally contextual enquiry many a time is conducted as group activities because it is very difficult for a single person to manage the entire session and prepare these models.

So while one person is busy in interviewing the user and observing the daily activities of the task

that he is performing, the other person can quickly generate these models. So these are the 5 models that are being generated. We will discuss that one by one. So the first one, the flow model, it highlights the overall organization and the coordination of that session, of that activity that you were observing.

The sequence model represents the detailed model of actions. The artifact model represents the detailed model of artifact use. The culture model represents the schematic influences or the influences that user have he is doing his work or an activity. And the physical model represents the physical structure, okay, the physical structure of the space inside which the contextual enquiry has been performed. So let us start with the flow models of work.

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Now as discussed earlier in my last discussion, the purpose of flow models is to capture and visualize the roles of individuals. Remember friends when you are doing a contextual enquiry, there will be one individual, there may be one individual or there may be more than one individual. You have to identify the roles of each one of them.

Second important thing here is you have to define the communication and the coordination between them. Third the mechanisms that support and hinder and the strategies that are being displayed, that are being taken by these individuals or entities who are working in a session, tandemly to complete task.

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Contextual Enquiry

Flow Models of Work

- Indicates Key Components of Overall Flow:
 - Individuals (Bubbles with Responsibilities)
 - Groups of Individuals With Common Actions
 - Places Central to Work (Large Box w/ Responsibilities)
 - Responsibilities
 - Flow (Arrows Between Individuals)
 - Artifacts (Small Boxed Label on a Flow)
 - Communication Topic or Action (Label on a Flow)
 - **Breakdowns in Communication (Lightning Bolt!)**

Now the flow models or work generally indicates key components of the overall flow. Now these are some of the syntaxes that are being used to model the flow diagram. We would, once we see the case study, it would be more clear. Individuals are shown as bubbles with responsibilities. Groups of individuals are highlighted with common actions. Places central to work, larger box with responsibilities are used as highlighters.

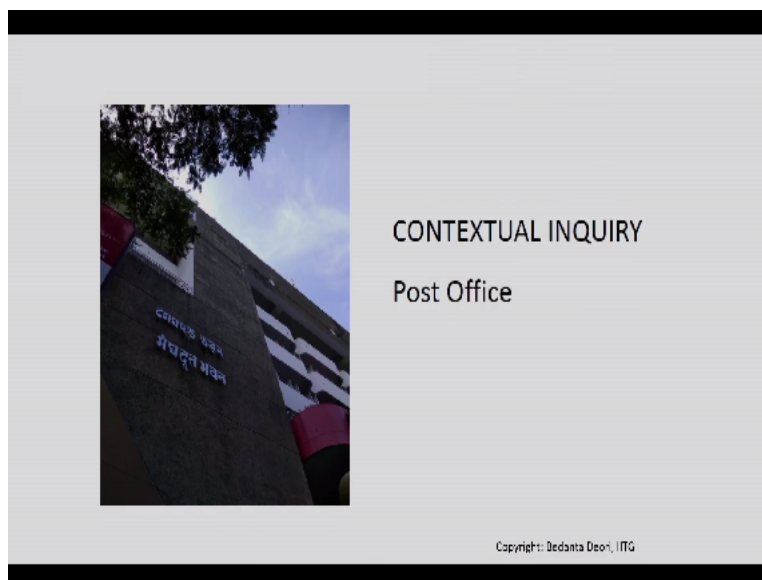
Then there responsibilities are highlighted. The flow of information or interaction is being highlighted with arrows between individuals or can be also between products. Artifacts, small boxed label on a flow. Communication topic or action, the communication channels that are being displayed between the individuals and the actions between them, these are labelled on a flow.

Of the most important here and the critical part here is to highlight a breakdown in communication or any interaction. Friends, keep in mind that this part is the most crucial part of contextual enquiry. Identifying breakdowns in communications, it is done using a thunderbolt icon. Now why I would say so? Many a time while conducting contextual enquiry, you would observe that the task which was supposed to be performed by your user could not be completed and the reasons can be many.

But the idea is as an investigator or an interviewer, you should not influence your users to complete the task. Rather you should investigate the reasons based on which the task could not be completed. Many a time you would also observe that because of limited idea about product use, the user is trying hard to use the product. There may be also situations that because of some activities which cannot be thought of or say probably as an example I can say suddenly a phone call comes or emergency situations happens, the user has to stop that activity.

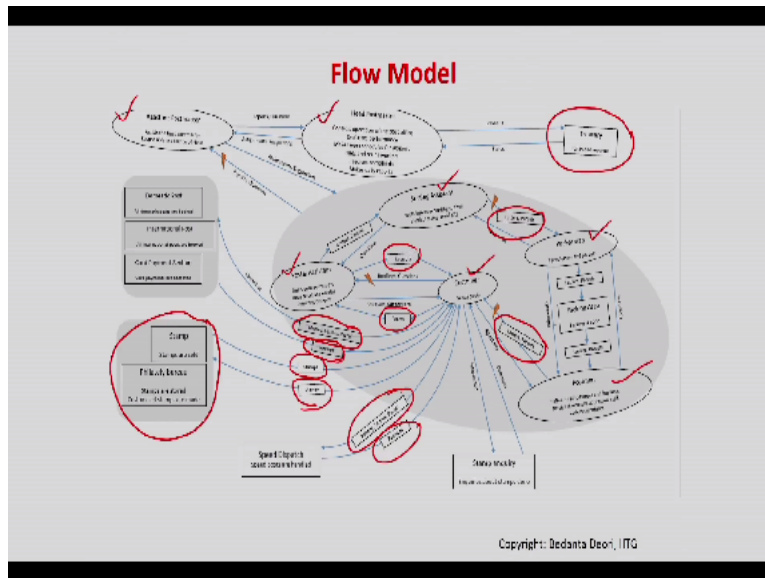
Now all these can be classified as breakdowns. And these breakdowns are very crucial in contextual enquiry to be highlighted. As a designer, we, our objective is to identify these breakdowns and to see whether we can devise a strategy to make sure that these breakdowns are taken care of by our design solutions. So these breakdowns in this flow model are highlighted by lightning bolt icons. Let us now see one of the projects or case studies of contextual enquiry.

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As we progress forward, we will discuss this at more detail. This is one of the case studies that my students have done in their classes. His objective was to study and understand the activities of the post office here in our city. So he has done a contextual enquiry on the numerous activities that he has observed and he has detailed out the all the work models that we have discussed earlier. Let us start with the flow model.

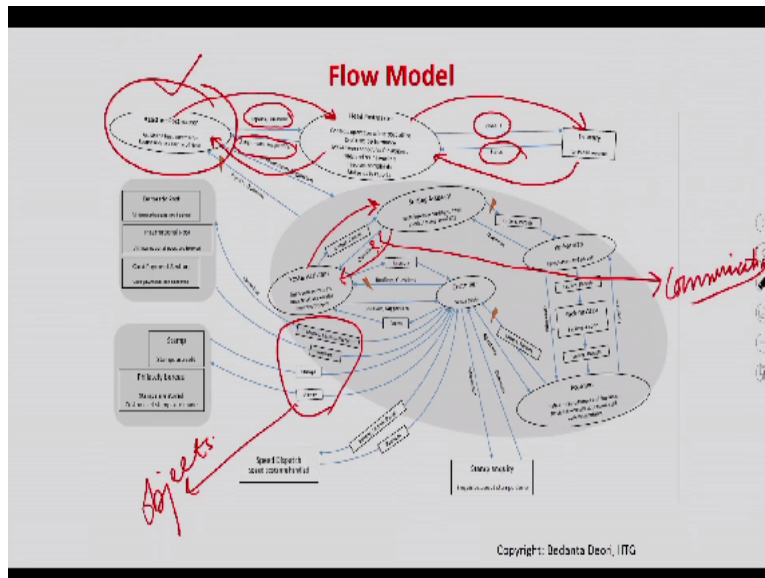
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Now this flow model is very interesting. If you can see, these are all the people involved while he was observing the activity. The assistant postmaster, the head postmaster, the packer man, the postman, right, the postal assistant, the sorting assistant, the customer, right, can you see the way he has highlighted the individuals who were involved there and he has also highlighted the objects that are being used, treasury, the stamp and (()) (34:14), right.

Check out the objects money, the stamps, the receipts, the money letters and the parcel, the fans, again the receipts, right, letters and parcels, letter and parcels, right, money letters and parcel, the receipts. So he has highlighted the individuals who are interacting. The products that have been communicating between these individuals as a form of service.

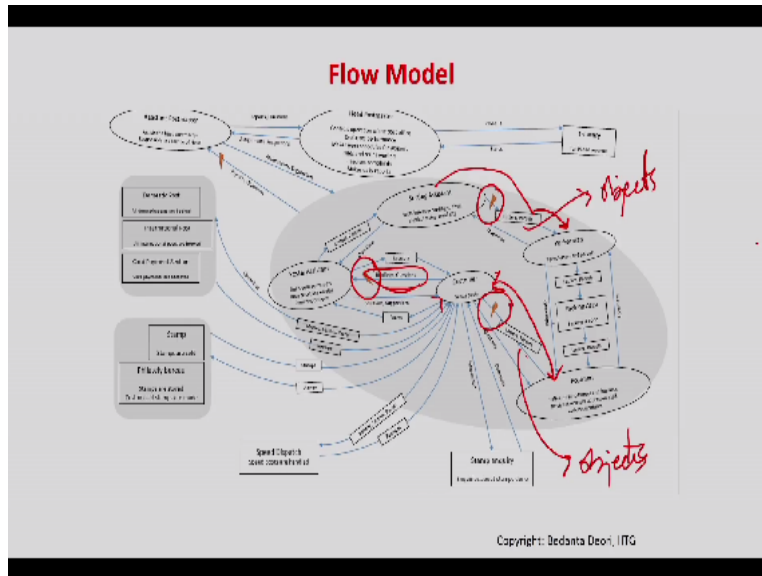
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And now you can also see the communication between them. If you see the assistant postmaster interacts with highest postmaster regarding some reports and questions and the head postmaster reverts back with some assignments and suggestions. The head postmaster interacts with the treasury for reunion and the treasury returns back with funds to the head postmaster. If you see the interactions for example the postal assistant sends letters and parcels to the sorting assistant.

And in return the sorting assistant has questions which he directs to the postal assistants. Now this is the way through which a flow model is highlighted. So friends what you have seen here is the important part are the, the individuals, in the individuals, these entities, the objects which are being used, the communications. If you see these are the communications. These are the dominant elements that are represented in a flow model.

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The other important thing to observe here which are these breakdowns which the interviewer has observed. Now where are the breakdowns? The breakdowns are between the sorting assistants and the packer man. While they are communicating with the use of objects like letters and parcels he has observed. So the interviewer has observed these breakdowns. Another breakdown which he has observed was between the customer and the postal, postal assistant.

Now when did this breakdown happened? The breakdown happened while questions were asked regarding bookings. The other breakdown that was observed was between customer and the postman. And it was during their communication with objects like letters and parcels, right. So these are the crucial important pieces of information that are reported in a flow model.

As friends I have said in my last discussion, in the last slide that we have discussed, developed breakdowns are most crucial important pieces of information. Wherever there is an issue of the task not getting completed, issues being raised but not sorted out, there is a pause and then the activity is not getting complete, it can be termed as a breakdown. And can be highlighted contextual enquiry flow model, right.

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Contextual Enquiry

Sequence Models of Work

- Examines The Actions of Workers, and How/When They Occur
- By Examining Their Structure, Can Identify:
 - Their Strategy
 - Their Intent
 - Important Dynamics of the Task
- Related to 'Procedures'

Now let us move on to the next model. And the next model is the sequence models of work. Now what is a sequence model of work? Sequence model of work examines the actions of workers and how and when they occur. So ideally what it does, the way in which an activity is performed or you can say the flow, the flow of these activities, you know, workflow, first this, second that, third this, so the ways in which, which comes first, which comes second, which comes third, these flow is termed as the sequence models of work.

By examining their structure, a designer or an interviewer can identify their strategy, their intent, the important dynamics of the task and the related procedures. Friend here in the second work model, it is important to keep in mind that any activity that is performed can be modelled into a sequence flow. Now when you model or when we see an activity to perform, there would be 2 crucial pieces of information that are generally or can be observed.

First is there would be an intent. Now what do you mean by intent? For example, what is the intent of this course? This intent, the intent of this course is to teach you the basics of product design and innovation. Likewise, while you go and observe an activity with your users in their context, the users have an intent of the activity that they are performing. So in intent simply means the goals.

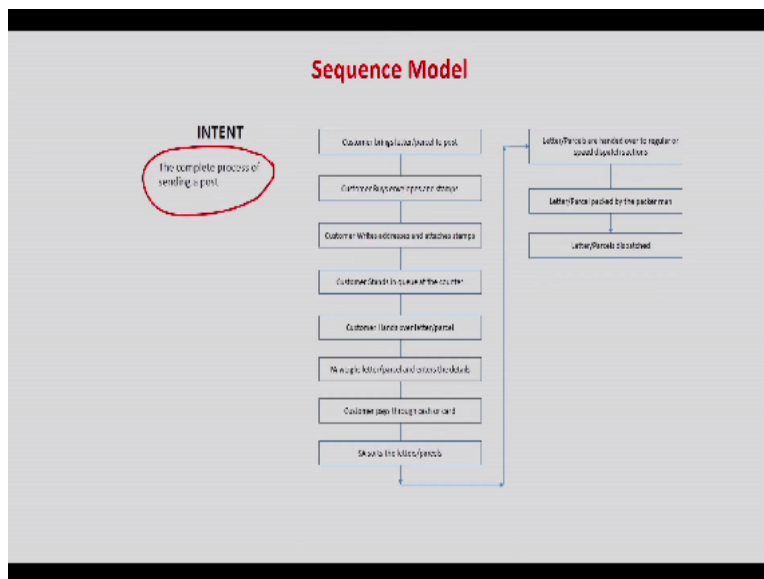
What is the goal based on because of which the user is performing that activity? you have to

identify that goal first and that would be called as an intent. The second most important thing is why a goal can be a bigger objective, it can be broken down into smaller activities, like in this course. Three faculties are coming together to teach you one course and each one of us have smaller objectives, right.

Likewise, while a user can have a bigger objective for completing a task to complete the entire task, it can be broken down or, into smaller activities with intents of those smaller activities and trigger. Now what is a trigger? Trigger is the first step or the first activity that the user does to start the sequence model or the sequence flow to start the activity.

These 2 things are very important and crucial pieces of information, friends you would like to record. So the first thing is that you need to report and identify the intent. The second part is the goal. So the first part is the intent, sorry and the second part is the trigger. These 2 are the most crucial pieces of information you have to record while you design the sequence model. Let us see how a sequence model is being created.

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Friends see here this is the sequence model of an activity that I have shown the flow model in my last slide of the post office. Here this is a sequence model of a customer bringing this parcels and letters and till the dispatch happens. Now if you see the intent is highlighted here. So what is the intent? So the intent is to complete the process of sending a post. So the customer has visited this

post office in order to make sure that he can deliver or send a parcel or a post.

That is the overall intent of these..., right. Now here, this part where the customer enters the post office becomes the, what? Trigger. Right? So the intent is he has visited the post office to send some parcel and/or post or sending a post and the first stage of this activity starts with the user entering the post office. So how the sequence model starts here? Let us see. The customer, the first activity, customer brings letter, parcel to post, first which is the trigger.

Customer buys envelopes and stamps. Customer writes addresses and attaches stamps. Customer stands in queue at the counter. Customer hands over letter or the parcel. The postal assistant then weighs this letter, parcel and enters the details. Customer pays through cash or the card. The sorting assistant sorts the letters and the parcels. The letters and parcels are then handed over to regular or the speed dispatch sections.

The letter and parcels packed by the packer man and then they are dispatched. Now after looking at the sequence model, there might be some questions which might get raised. Like why are the statements, why are the statements like this or this, why if it is an activity that we are observing, why it is a statement that tells specifically what the customer has done. Now keep in mind, this is an aggregated sequence model that I am presenting in front of you of around 5-6 contextual enquiry being carried out and the same approach have been observed.

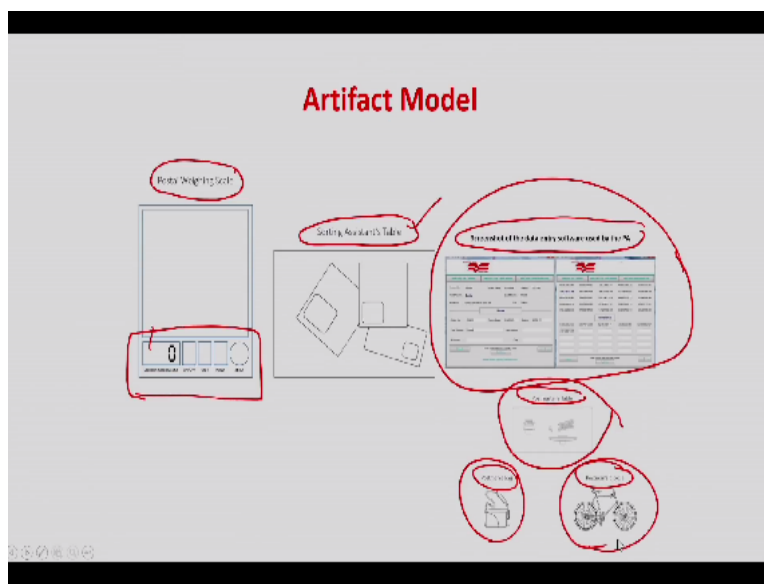
So to make sure that we collect and present all the information at a particular sequence model, this model has been generated. While you continue, for example in your, while you are bringing a contextual enquiry, while you would be making a sequence model, you might use those languages. This is the reason why if you can highlight here, in this section where it says that the customer pays through cash or card, there are 2 options, cash or card.

Because it is an aggregated model, there are few customers which have been observed to be paying through cash and few customers who have been observed to be paying by card. While you are doing it for a single person in the your contextual enquiry, you would write that the customer pays through cash, right. No need to come with an aggregate model. So this is a

sequence model.

So friends, what do you understand from these 2 work models? The first work model identifies the individuals between which communications happen. It defines the communications. It defines the entities and the objects that are being used and also highlighted the breakdowns that have happens. The second model takes up each of those communications as an activity and enlist the flow in which those activities are performed. Here also if you observe a breakdown, you can highlight using a lightning bolt icon.

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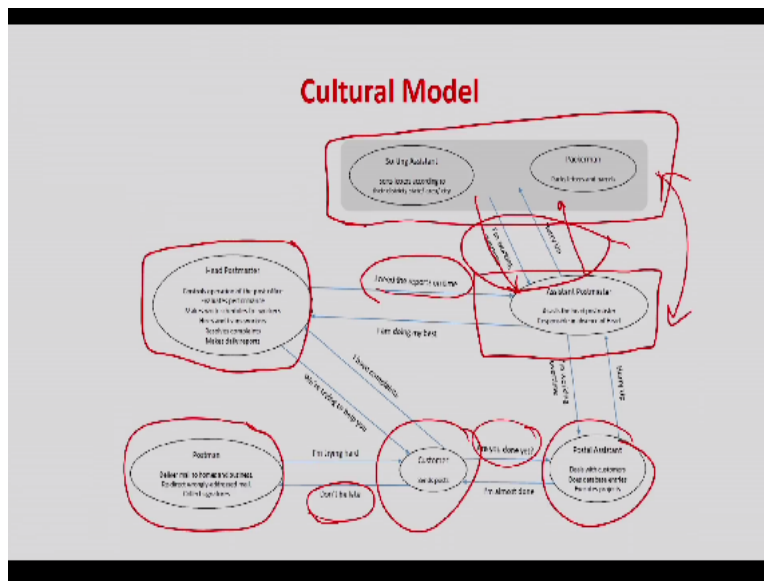


Moving on to the third model which is the artifact model. The artifact model highlights the products or the objects that are being used by the individual entities that you have observed in the contextual enquiry. If you can see here in the slide, the objects that are being used by the postman or the post office individuals and the customers and other individuals who were being observed are the weighing scale, the sorting assistant table, the software that was being used by the postal assistant, the postmaster's table, the postman's bag and the bicycle.

Now friends keep in mind that you have to detail out the objects that are being used by these individual elements. If you can see here in the postal weigh scale, the way in which it is designed, the units that are present, the buttons that are present, even the screen that are being present have been highlighted.

These are all very crucial information for a designer to be recorded. Similarly, the assistant's table, sorting table, the way it is arranged, the screenshot, the screenshot of the software is also highlighted, the postmaster's table, the post man's bag as well as the bicycle. So friends it is not only important to keep or name the objects or the artifacts that are being used, it is very much important to make sure that these objects are detailed out in your artifact model.

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The next model, we would move in to, is the cultural model. In the next model, which is the cultural model, this model is one of the crucial models in, among all the 5 work models that we have been discussing. Now why is this so important? It is very important because it highlights the influences that are responsible for the individuals being observed to take a particular decision over the other.

Now what do I mean by this let me explain this to you. Till that you were observing a particular activity and there are 2 individuals who are discussing a particular situation and they are communicating between them. Suddenly one message comes to a, to one of the individual's mobile number, mobile phone and he opens the mobile and says that and he checks that message. Now the content of the message if it is very important and something related to emergency will always influence the extent to which this conversation between these 2 individual entities will happen.

So therefore, in this communication, the influencer is the message that came or that it was delivered while the communication was taking place. This is what is being highlighted in a cultural model. So cultural model highlights the influences. That influences key decisions of those individual elements or the individuals that are working towards achieving a particular task. The same thing can be said for a product.

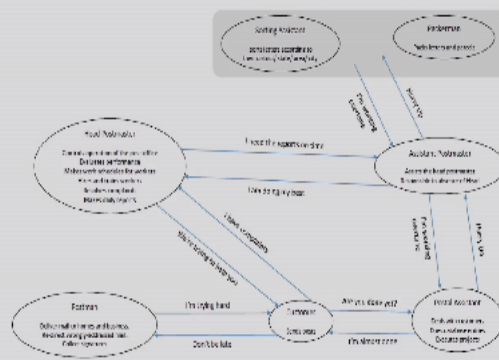
For example, take the coffee making machine. Now while the user was been using the machine to prepare a cup of coffee, suddenly if the electricity goes out or if certain, if someone else arrives into the house and the user realizes, "oh, instead of one cup of coffee, I need to make 2 cup of coffee," another more cup of coffee, so all these informations will influence the way he will behave or he will act in that particular situation.

These are called the influences. If you can see here in the cultural model that is being highlighted, the influences here are the sorting assistant between the sorting assistant, the packer man and the assistant postmaster. The assistant postmaster shouts at the packer man to hurry up things and get the things dispatched and also the statements of the sorting assistant and the packer man influences the assistant postmaster to keep on saying hurry up, hurry up for a particular period of time.

Similarly, there are influences between the head postmaster and the assistant postmaster who needs to report the reports on time. So time is an influencer, right. There are influences between the postman and the customer and the postal assistant, you know. Here same the time is the influencer. So this is how a cultural model is prepared, highlighting the individuals, these individuals and the influencers that are affecting the way they do an activity.

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Physical Model



Moving on to the next is the physical model.