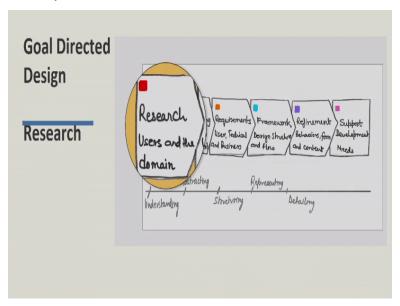
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### Lecture – 09 The Research Phase in Goal Directed Design Process- Part 3

Hello, let us position ourselves once again in the goal directed design process because there have been continuous sessions. So there might be a possibility when you are not sure where we are in terms of understanding that process. So we fairly know that we are trying to understand the research component in the goal directed design process.

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And when it comes to understanding that component we have seen that we have gone through several of these.

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Research

- Literature review

- Competitive review

- Stateholder interviews

- SMEs interviews

- User interviews

- Observation

- Contextual inquiry

We have understood what is our literature review and how do we do it. We have understood what is a competitive review involving products and different prototypes which may belong to the same domain. We have also gone through stakeholder interviews. We have understood what these are and also we know that you know how they should be performed. Subject matter interviews why they are so important in the goal directed design process especially in a research stage that also something that we have been through.

And we have also been through user interviews observation and method very special method involving both interviews and observation in the context of use that is what we call contextual inquiry. We have gone through these different activities in the research component of the goal directed design process, but let me ask you can you spot a huge disconnect in this process at this point of time. Take a moment to look at the slide again, read through all these 3 different activities and you spot the disconnect. Let me tell you what the disconnect is?

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Research

- Literature review

- Competitive review

Identifying candidates

- Stakeholder interviews

- SMEs interviews

BUT WHOM DO WE CONSIDER FOR THESE

**ACTIVITIES?** 

- User interviews

Observation

Contextual inquiry

If you see from literature review to competitive review to stakeholder interview to subject matter interviews we fairly know what do we need to study and whom do we need to ask, but right after the subject matter interviews and before you approach your users in terms of the interviews observations or contextual inquiry you need to assert and you need to really find out whom do you consider for these activities. So what are these activities?

User interviews, observations or method like contextual inquiry which involves both observation and interviewing in the context of views. So this is the disconnect that we really need to know very precisely that whom do we go and ask questions, whom do we consider as users for performing activities which are related to users in the research phase of goal directed design process.

So this is what we call problem of identifying candidates and we wonder if process has some proposal to address this problem. We do find out that there are certain proposals through which we can address this problem. We can know whom do we go and approach in terms of conducting user interviews, observation or something like contextual inquiry.

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### Designers' entry point The persona hypothesis a.k.a. User model, or User archetype Hypothetical Attributes are arranged with respect to likely behaviour patterns or relevant factors affecting differentiating these patterns E.g. matter-of-fact user who does everything at hand to achieve his goals

Your entry point towards identifying your candidates starts with something called the persona hypothesis. We have spoken about it earlier if we remember in one of our earlier sessions when we are taking about domain model and user model we had an understanding of domain model in terms of work flows and information flow and understanding of user model in terms of persona at that point of time we have come across persona briefly.

So now in this goal directed design process designer's entry point when it comes to identifying who are the most probable candidates to interview when it comes to user group identification the persona hypothesis once again comes into picture. It is also known as, as we had discussed. It is also known as user model or user archetype. The point is it is a hypothesis. It is a bit hypothetical in nature.

It means that one has to imagine it and you make this imagination based on certain assumptions. So let me get you back again to the previous slide so from the literature review, from competitive review involving products and prototypes, from stakeholder interviews and subject matter experts interview you get that estimation who are the most probable users and based on that estimation.

Based on assumptions which come from earlier activities involving stakeholders and subject matter experts are competitive review and literature review you make an approximation. You

assume, you hypothetically assume a particular user archetype or persona. So attributes are

arranged with respect to likely behaviour patterns. So when we say likely behaviour pattern it is

what your estimation is.

So your stakeholders might have told you or your subject matter experts might have told you or

out of a competitive review or product and prototypes you might have come across then likely

behavioral patterns so that is why we are saying that attributes of our persona are arranged with

respect to likely behaviour pattern or relevant factors affecting those behaviour patterns. These 2

are different things, patterns themselves, behaviour pattern themselves, and the factor affecting

those patterns.

So that is why we have made a differentiation when we are saying that attributes are arranged

with respect to likely behaviour pattern or relevant factors affecting those behaviour pattern. We

have known earlier given example which was of a matter of fact user who would do everything

in his hand to achieve his goal. So attributes are arranged with respect to likely behaviour pattern

or relevant factors differentiating these patterns.

And earlier known example is of matter of fact user archetype. Imagine the time when I had

asked all of you to consider booking tatkal ticket or a priority ticket you would do everything in

your hand, you would use every possible platform, you would log in through several modes to

achieve that end so that is the matter of fact user archetype.

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Behaviour patterns
 People who treat time as a premium
 I need to find the information fast because I have classes to conduct
 I don't waste even a single minute in office because I need to take care of my kids

Behaviour patterns. Now look at these behaviour patterns and factors affecting behaviour patterns separately so I am going to give you few examples that will help you understand behaviour patterns. So let us say one of the behaviour pattern could be people who treat time as a premium. So these are the people if you ask them they would say that I need to find the information fast because I have classes to conduct.

So there might be people associated with academics who are required to take classes. So they are pretty much they need to find information fast because they have classes to teach or classes to conduct. I do not waste even a single minute in office because I need to take care of my kids. So imaging parents with their kids in nuclear families, now parents when they are out in the office they tend not to waste even a single minute.

Because they have to get back to the office and to take care of their kids. So these are the archetypes. These are the archetypes were time is treated as a premium commodity. So people who treat time as a premium is 1 behaviour pattern.

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Research

Identifying candidates

Behaviour patterns

- People who treat detailing as a premium

· No matter how much time does this (an activity of interest) take, but I need to bring in all the details

I studied about it in my school days. I pursued it in

my bachelors, and then in masters. Now I am in PhD

to know more details about it (topic of interest)

There could be another behaviour pattern given that people who treat detailing as a premium. So

they are very much interested in details of any task that they do of any activity that they

undertake or any project that they invest their time in. So there could be people who says that

you know no matter how much time does this take, but I need to bring in all the details. So for

them time is not a premium here the details are premium.

So they are saying no matter how much does this activity of interest take I would keep on doing

it to bring all the essential details. Now there could a similar statement by a similar group of

people they will say that I studied it about it in my school days. I pursued it in my bachelors and

then in masters and now I am in PhD to know more details about it. So this is 1 behaviour pattern

that they keep pursuing until they get all the details very well in place.

So people who treat detailing as a premium might establish a very different behaviour pattern

then people who treat time as a premium.

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## Behaviour patterns Most often I listen to my music of interest only over the weekends. Rest of the days I don't mind listening to the ever active FM channels with advertisements and so much of news but a little music I love listening to FM channels. It resonates with the hustle bustle of my daily commute to the city and my lifestyle

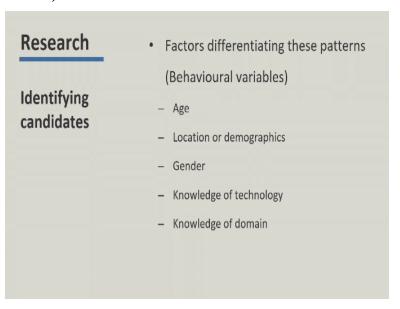
You know there could be another set of behaviour pattern also. So listen to these 2 statements, most often I listen to my music of interest only over the weekends. Rest of the days I do not mind listening to the ever active FM channels with advertisements and so much of news but a very little music. So these might to be user archetypes corresponding to an activity which is listening to music.

So the first statement kind of sums up attributes of a persona who listen to music very seriously over the weekend and all throughout the week days he or she does not mind listening to FM channels with so much of advertisement and use but a very little music so they are serious listener of music only over the weekend. So if you are a member of a design team who is interested in designing a music playing application or a music organizing applications you can very well consider a user archetype like this.

There is another user archetype. I love listening to FM channels it resonance with a hustle bustle of my daily commute to the city and my lifestyle. So there might be people who would render statements like that they would actually like listening to FM channel because kind of resonates with their hustle bustle of their daily life. It is a kind of resonates with their frequency of doing so many activities in a very single day and it suits their lifestyle.

So these 2 user archetype with respect to an activity of listening to music might be very important for you to consider if you are one of the member of the design team designing a music application. Now comes factors differentiating these behaviour patterns. We also call them behaviour variables.

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So these might be attributes in terms of age, location or demographics. You can see people considering demographic details in most of the user research studies. Gender can also be one of the behaviour variable, then knowledge of technology and knowledge of domain. These are 2 essential things which mostly all the design team members involved in the research phase. They do consider because essentially it is about as we have said earlier that an interactive product that is getting designed will address to a particular domain.

And since technology is involved in designing those interactions it is very essential to kind of know knowledge of technology and knowledge of domain so there for different persona may have varying knowledge of technology different, persona may have varying knowledge of domain. So that is something which you would like to know in this particular phase.

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# Research Identifying candidates - Environmental considerations - Smaller enterprise vs. bigger companies - Company size - Company location - Industry/ sector - Reliance on IT infrastructure - Tolerance w.r.t. privacy and security

Now environmental conditions you know so for example while you are designing persona it really makes sense when you are designing application for enterprises and for industry so it really makes sense to kind consider the environmental conditions also while you are coming across your known persona hypothesis. So you need to consider certain environmental conditions. For example, these conditions could be the size of the company whether it is a small enterprise or it is a big company.

So for example, in a small enterprise people take up different roles actually they put up different heads and then they do one thing and the other thing and then the third thing. So they take up different roles and they are very well synced with each other like for a small company to grow even that is essential requirement so they take up different roles and they are very well synced. While in case of a bigger company people would take a specialized source.

There will not be someone who would do only an activity A and then there are hierarchies within their placement so they are communicating with each other, but following a certain hierarchy. So that is what you call the environment. So if you are considering to design your persona for enterprise application or for an application to be used in industry you should definitely consider environment as the behaviour pattern.

So apart from company size there could be other things which may come under environment behaviour variable. So you should consider environment as a behaviour variable. There are other factors which you would like to include as behaviour variables also with the environment so what are these? These are company location, industry or sector and how much the industry or the particular enterprise relies on IT infrastructure.

And what is that tolerance with respect to privacy and security of data and of different communication flowing within the organization. So these are the different environmental consideration, which come within behavioral variable.

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Research

Identifying candidates

• Factors differentiating these patterns

(Behavioural variables)

- Designing for Interactive consumer product

• E.g. An interactive television, an interactive voice agent in the form of a speaker etc.

• Users' stage of life (Single, Married, young children, older children, others)

So let us also consider that for an interactive consumer product because there are lot of consumer product that are available in the market. So when it comes to consumer products like that you would also like to consider a different set of more advanced behavioral variables. What are these? So let me just first tell you about the consumer interactive consumer product examples. So maybe it is an interactive television or interactive voice agent in the form of a speaker.

So these days we see a lot of buzzer round interactive speakers. Speakers are devices that talk to you and you can talk back to them and you can delegate different tasks to these devices. Essentially if you even look at the way these proposals are made they would show you a typical

set up of a house where someone is there along with few other people they are trying to delegate task to this device which in turn it is delegating it further to different devices.

So there might be a speaker which listens to you when you say put on the television and the speaker puts on the television. So here you want to consider more ones behaviour variables like user's stage in life because there are people who are involved like these are family settings so they are people involved across different stages of life so single whether what is the marital status is so single or married, whether they have young children or older children or other situations.

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| Research               | <ul> <li>Securing access to candidates</li> </ul>  |
|------------------------|--|
| Identifying candidates | <ul> <li>Enterprise/ Company officials facilitating access to different user groups</li> </ul> |
|                        | Employees if the intended product is meant to be used internally                               |
|                        | <ul><li>A loyal user base</li><li>Firms specialising in finding user groups</li></ul>          |
|                        | Crowdsourcing platforms  |
|                        | <ul> <li>Friends, family members</li> </ul>  |

Now once you know that what are different behaviour patterns and what are different factors which affects these patterns and you kind of also know whether you need to go advance in terms of consumer product or in terms of a industry product. So once you have that knowledge and you have designed your persona now you want to based on that persona you want to secure access to different user goals because you have let us say 3 personas which kind of indicate 3 different user groups.

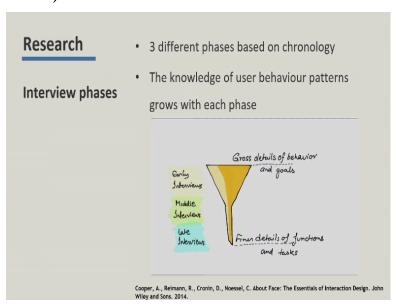
Now it is the next activity that you secure access to these 3 different user groups. So when it comes to securing access to candidate your enterprise could help you. People who have commissioned the project could help you. So enterprise or company officials may facilitate

access to different user groups. So if the intended product is meant to be used internally enterprise or company would ask their employees to be your users.

And a loyal user group may be if the product is meant to be consumed by the users may be the enterprise has a loyal user group which they have kept on board to help you in the design process. So the enterprise or the company may help you secure access to the candidate. In cases when this is not possible then you can also seek help forms which specializing finding user groups and there are recently.

We have seen that there are crowd sourcing platforms also which are providing you access to different candidates. So you can log into one of these crowd sourcing platforms you can list your requirement and then there are different people who would work for you as part of crowd source protocol and at last if you know if really finds it all very different then you can approach your family or friends to work with you as users that is our last resolving most of the cases.

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Now what the interview phases. So you see we have done 3 things by now. We have a kind of understood how to basically select user groups which is how do you create a persona and what are the constituents of this persona. Then we have understood the second thing is that how do you secure access to the different users. So now assume that you have secured access to different user groups.

Now the real act of interviewing has to begin and there are different stages, there are different

phases within the interviewing process also. So there are 3 different phases as you can see on

your slide that and these phases are based on chronology, I mean the order of occurrence these

phases are based in the order of occurrence. So that is what we call chronology. The knowledge

of user behaviour patterns grows with each phase as you complete phase I you have particular

knowledge.

And when you embark on to phase II and you complete phase II, your knowledge grows about

user behaviour patterns and by the end of phase III it is expected that you have adequate

knowledge about user behaviour patterns. So it is almost like the phenomenon of furling down

from gross details of behaviour and goals to final details of functions and task and you would

appreciate that functions and tasks are based on behaviour and goals so there is a relationship

between behaviour goals and functions and task.

So gross details of behaviour and goals you know might be the focus in the early stage of

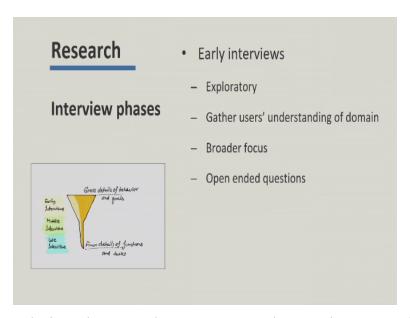
interviewing while the focus of the later stages or the final stages of interviewing would be final

details of functions and different tasks. So there are 3 different stages, chronologically defined

the first one is the interview which is happening earlier so you call it early interviews, then

middle interviews, then late interviews.

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Now what about early interviews. So they are more exploratory in nature. They are you can explore different dimensions of user interaction and his environment and his context of use in the early phase of the interview. So you can gather users understanding of the domain or technology that also you can do. It has got a broader focus so remember the figure of funneling down this is the broader focus from gross details to final details.

So it has got a broader focus and more open-ended questions are included and let me give you example of these open-ended questions, but keep these 4 things in mind about the early interview. What are these exploratory in nature? gather users understanding of domain, broader focus, open ended questions. Now with these 4 things in mind let us look at what these open ended questions look like.

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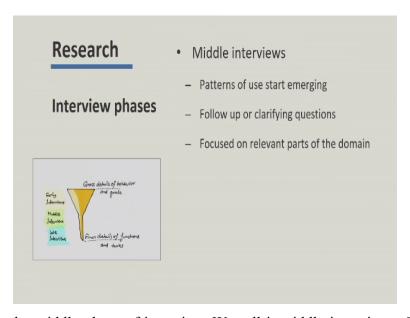


So you could ask a question like as we sit before your desktop computer and imagine that you have a user next to you, you are telling this to the user saying that as you said before your desktop computer would you walk me through a typical day when you use it for different reasons. So you see that this question is pretty much open ended. We are asking him more to narrating, it's a tour based questions, and you tour around different activities that he accomplish or undertake.

With the involvement of the computing machine and we say that as we sit before your desktop would you walk me through a typical day when you use it for different reasons. So now can you describe what you are thinking of feeling as you arrive to attend your day's work in office so that is also one of the open ended question you can see that the question is pretty much an open ended one.

You are asking them to describe their thoughts and feelings as they arrive to attend their work in office. So we are considering the context of office for different context these questions would change. Can you tell us some of your favourite experiences in office this is also pretty much a open ended questions. So if you see that there are 3 questions which pretty much open ended in nature and in the early phase of the interviewing you should involve questions like that.

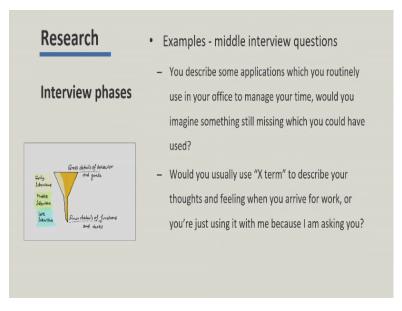
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Now we come to the middle phase of interview. We call it middle interviews. So pattern of use start emerging. You remember the intent that we had in mind as a design team member we were intend to find out behaviour patterns and at the middle stage of the interviewing these patterns start emerging surfacing up and you have to follow with more clarifying questions and these questions, these clarifying questions may be focused on relevant parts of the domain.

So let me give you an example about middle interview questions, but first again keep these 3 things in mind, pattern of use start emerging follow up or clarifying questions need to be asked which had to be focused on relevant parts of the domain. So now we are moving on to seeing the examples of middle interview questions. They look like this.

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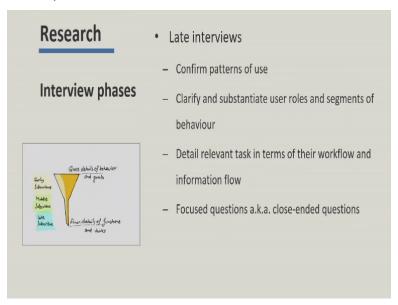
So again imagine that there is a user to what is the right of me and I would ask such a question to this user saying that so you describe some applications which you routinely use in your office to manage your time. Would you imagine something is still missing which you could have used? So you see in this particular question I am asking my user about this activity of time management and I am saying that you have told me that you use a certain set of applications for managing time, but you still thing that there could be to something else.

There is something missing or some of these applications waste your time or does not prove to be more fruitful so you are asking this question which is in the middle phase of the interview which is more focus around which is more clarifying in nature. So it is focused around the parts of the domain. So you describe application which you routinely use in your office to manage your time would you imagine something is still missing which you could have used.

And the other form of this question could be let me ask you would you usually use X terms to describe your thought and feeling when you arrive for work or you are just using it with me because I am asking you. So this is also 1 questions when we are trying to probe user about whether he is with reference to a particular activity what are the usual way of describe it so we are probing we are trying to know what else is possibly there.

So this is the middle phase of the interview remember these are more focus on finding details on parts of the domain and we are asking more clarifying questions and patterns of behaviour or starting to surface up.

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Now into the late phase of interview. We call it the late interviews. Now since the patterns of use have surfaced up and you have asked clarifying questions and those questions are now more focused on parts of the domain it is now important to confirm those patterns. You have to now ask questions to confirm what you have found in the early 2 stages. So this is one more opportunities for you to confirm your findings.

So you need to confirm patterns of use. You need to clarify and substantiate user roles and segments of behaviour. So in this particular phase of interviewing when the behaviour pattern is emerging and you have asked clarifying questions now within this behavioural patterns there would be segments where you need more clarification so this is your opportunity to ask questions around those segments.

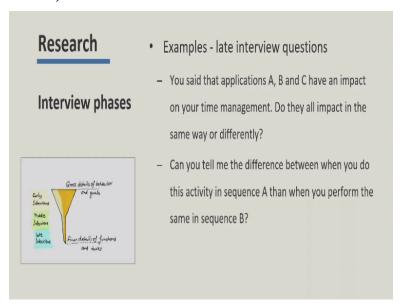
So you can clarify and substantiate user roles and segments of behaviour and you can detail you can see to find details around relevant tasks in terms of their work flow and information flow. So remember the domain model which is a composite of information flow and work flow. So you are trying to find more details around that domain model and detail relevant tasking terms of the

work flow and information flow focus questions also know as closed ended questions are now the major part of questioning they are the major spectrum when it comes to the later interviews.

So keep these things in mind and we will go on to see the examples of late interview questions. So first one is, confirm patterns of use. Second one, clarify and substantiate user roles and segments of behaviour. Third one, detail relevant task in terms of their work flow and information flow. Fourth one, focus questions that is what you should be asking questions which are close ended in nature.

So let us look at examples of such question. Again it is the imagine the user toward the right side of mine. I would ask the following question to the user.

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So I will say that you said that applications A, B, and C have an impact on your time management. Do they impact all in the same way or there is some difference between them? So that is you see now we are trying to we know that these are the 3 different activities A, B, and C these are 3 different applications where user has mentioned already before us that these are the 3 applications which impact his time management.

Now we are saying that whether all impact in the same way or there is a difference in the way the impact is time management. So we are trying to get more details on this activity called time

management by the user. There could be another question that we can ask. Once again can you tell me the difference between when you do this activity in sequence A then when you perform the same in sequence B? So you see these sequence A and sequence B are nothing but information flow and work flows.

So we are trying to see that if the user does the same activity with the particular work flow and the particular information flow and if the information flow and work flow is something that gets changed would there be a preference in his mind about doing that activity in a particular way in a particular work flow and information flow. So you see that our questions have become more and more closer ended and we are trying to be more.

And more sure about the details of the domain and about different tasks and activities which correspond to the user goals and motivations. So this is the last phase of the interview, this where your interview should end. Let us look at these questions once again. I have seen repeatedly that students get confused with what these questions are so I want to focus more on this topic of questions.

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Question types
 Goal-oriented questions
 GOAL
 What makes a good and a bad day for you?
 OPPORTUNITY
 List activities where you end up wasting your time.

So what are the different question types? So there could be questions about goal-oriented questions. So what are these questions? So there could be a set of questions which are oriented towards the goal. So what makes a good day or a bad day for you is an example of a question

which is oriented towards a goal. Now, opportunity. So list activities where you end up wasting your time. So we can ask users to list activities where he ends up wasting his time.

So that this is again is a goal oriented questions there are 2 more question types which are coming within goal oriented questions.

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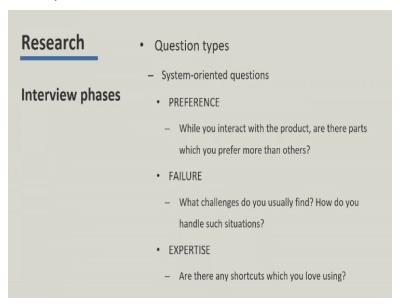
You can ask users about the priorities. So tell us about your priorities in a defined context of course it is important for you to stay contextual because you are conducting interviews and observation in the context of views in the environment involving user and the product itself. Now information. What all information do you need to make decision in a given context again in a given defined context which therefore different questions which can be asked and which can be grouped together as goal oriented questions.

What are these questions which are directly ended knowing the goal? questions which are aimed at knowing the opportunity, questions which are aimed at knowing the priorities, the questions which are aimed at knowing the information requirement. So these are what we call goal oriented questions. After goal oriented questions comes the system oriented questions. So these are the set of questions which are oriented towards knowing the system details.

So it might be about you want to know more about the function or its frequency. So a question which focuses on function in a most common functions of the product which uses so you can ask them to list those questions. You can ask users about most common functions of the product which they use.

So this is 1 question which is focused around knowing more about the function of the system. You can also ask question which are focused around knowing frequency of use. So what are the different functions which are frequently used by the users so such a question would come under frequency of users question which is again a question with system oriented question group.

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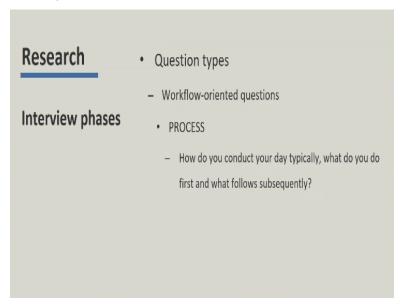


Few more things are possible within this question group. You could also users about the difference. So while you interact with the product other parts which you prefer more than others so you can ask them about the differences while they use an interactive product this is also a system oriented question. You can ask them about the failure also. So what challenges do they usually find while they interact with the product how do they handle such situations.

So either recovery occurrence of error and how do they recover from error can also come under system oriented questions. You can ask them about the expertise that is also 1 important aspect of user behaviour. How expert are they in a particular task or activity? So are there are any shortcuts

which you love using is a question which is focused around knowing their expertise and these questions very well comes under system oriented question group.

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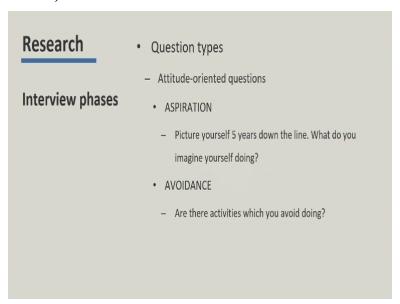
After we have seen goal oriented questions and system oriented question it is a time to understand workflow-oriented questions. So these are the questions which could be around the process. So how do you conduct your day typically? What do you do first and what follows subsequently? You know you are trying to know about the sequence of activities, work flows, different activities in a parts of those activities.

You know activities broken up into different parts further. So you are trying to bob your users about the process that they follow through a complete particular activity over the day. How do you conduct your day typically what do you do first and what follows subsequently is a question about the process? and you are trying to know more about the work flow. It could be also about the occurrence. So are there any repetitions in what you do.

Have you laid your activities separately as daily, weekly, or monthly? so you can ask them about how many times do they do a particular activity or whether they have a schedule for a particular activity so that is also something which is about the occurrence. So these are the questions which are about the workflow orientation. Then there could be a question about exception.

So are there any surprises which sometime break your typical day routine here in this questions are trying to know what are different things that may occur accidently which may hinder is typical day routine so you are trying to know the exception to the routine and this will help you no more about the workflow.

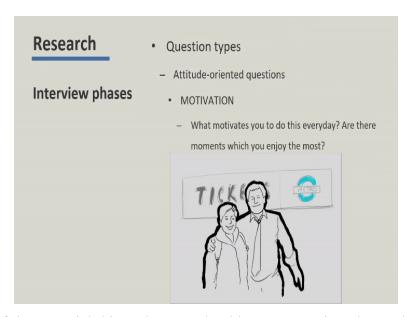
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Then after you have finish workflow-oriented questions there could be a set of questions which are more oriented towards knowing the attitude of the user. So what is his aspiration? So picture yourself 5 years down the line. What do you imagine yourself doing? Is a question that may bring out details of user's aspiration. You can ask this question in all different ways, but remember that when it comes to knowing the attitude of the user it is good to know what they aspire to be.

So you can ask this question in several different ways, but for an example just read it once again. Picture yourself 5 years down the line what do you imagine yourself doing is a question which is aimed towards knowing the aspiration of the user and in turn his attitude. So you also would like to know what does he avoid what does he try to avoid. Other activities which you avoid doing is a question which will tell you about what are different things that your users are trying to avoid again a good understanding of attitude of the user.

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You know one of the essential things that you should never mess is to know the motivation. So what motivates you to do this every day? Are there moments which you enjoy the most? So let me tell you 1 story. What you are seeing in the picture is a ticketing official who issues ticket in a metro station and one of the things that he loves doing is to guide different visitors and tourist.

So you know somebody who is doing a particular job of issuing tickets might like to do something else all together. He loves his part of his job of issuing tickets. He often come across tourist and visitors and backpackers who ask questions to him and he loves being a guide to them. So that is something which is about motivation. So what motivates people is something very essential to know when it comes to conducting user interviews and user research.

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A quick recap
 Stay contextual during probing
 A void a fixed set of questions
 Use both open-ended and close-ended questions
 Master-apprentice model

Now let us do a quick recap of most of the things that we have learnt till now. So if it comes to interview you need to stay contextual during probing something that you should always remember. Do not interview users in a wide room in a laboratory area which is comfortable to you rather as a design team member you are required to go into the field interview them and observe them at the same time when they are interacting with different products in their natural environment.

So it is very important to stay contextual during all the probes that you conduct. Avoid a fixed set of questions as we have seen from all given examples of the question. We had questions which were open ended and then we have question which were close ended. So we had questions which gave us gross detail. We had questions which were giving us gross details of the activity then we had questions which were giving us final details of the functions and tasks. So include both of these kind of questions, open ended questions as well as close ended questions.

Follow a master apprentice model. So if you have attended the session on contextual inquiry you would understand what a master apprentice model is. While we are approaching and conducting interviews with the users it is good to treat them as master craftsmen and you yourself become the new apprentice that they had for that duration and with this relationship you conduct the interview. What it brings is a more advance and minute details of the task which is of interest to you as a design team member.

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A quick recap
 Stay focused on goals and not on tasks
 Choose to avoid discussions on "ways on developing or designing"
 Ask them to narrate their experiences
 A complete sequence over a momentarily taken action

Stay focused on goals and not on task. We had said it repeatedly choose to avoid discussions on ways of developing or designing. So you know what are these ways of developing or designing and ways of designing is something that designers are concerned with. Now if you ask your users to raise discussions on ways of designing or developing, remember that your users are neither of the developers or designer.

So you should not engage them you should try to avoid discussions on technology which is like how do you go about developing it or you should also not consider them as you should also not stay focused on goals and not on task. This is something that we had repeatedly understood so now we are moving to the next one that is choose to avoid discussions on ways of developing or designing. So what are these ways of designing or developing?

So you know ways of developing or concern for the development team and ways of design are a big concern for the design team. So when you are approaching your users keep that in mind that your user is neither the developer or the designer so you should avoid discussions on design or technology or more specifically ways of how to develop it you know whether I use this technology.

And that technology that you should need for developers and whether we have this web designing would work better than that particular manner of designing that task also you leave it for designers. You should only gather information about the domain and the different contextual understanding users, goals, motivations, their context of use, their environment and how do they perform and what all different tasks do they perform and what are their goals and while you are asking and seeking their responses you should encourage them to tell you narrations.

So ask them to narrate their experiences a complete sequence is far, far better in a momentarily done action. A knowledge so when you basically hear about users narrating their experiences you get the sense of the complete sequence not a momentary reaction that they might have taken at a particular time or moment. So ask them to narrate their experiences. So can you show me how do you do this is one show and tell questions.

So you are asking them to give you a walkthrough of how do they would do an activity. So can you show me how do you do this and avoid leading questions?

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A quick recap
 Ask for walkthroughs
 Can you show me how do you do this also?
 Avoid leading questions
 Wouldn't this feature help?
 Does this (a specific design idea of the interviewer) seems a good idea to you?
 That is not right, isn't it?
 This is easier for us to design, would this be OK?

So would not this feature help does this which may be a specific design idea in the mind of the interviewer does this seems a good idea for you that is not right, is not it? This is easier for us to design would this be okay with you are all examples of leading questions where you are trying to gather a certain response in a certain direction. So would not this feature help does this seem a

good idea to you that is not right isn't it that is easier for us to design would this be okay are all leading questions.

Again you are trying to gather response in a certain pre-specified direction that is not appropriate when it comes to interviewing. So, today we have seen how do we identify candidates for contextual inquiries and interviews and observation based activities and you have seen that what are the different kind of question which are possible or which member of the design team should adopt while conducting these interviews and observations sessions.