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Identifying Users and Requirements

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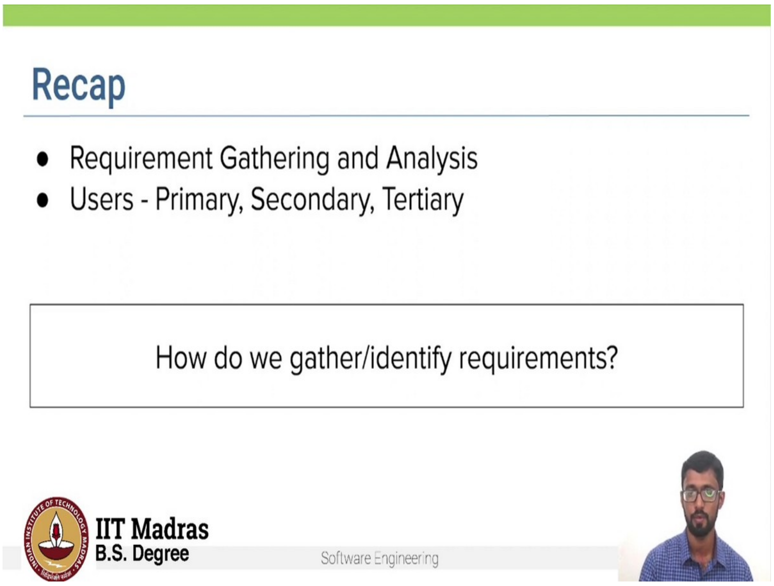

So, in the previous video, we looked at requirement gathering and analysis. And we also looked at how we need to consider primary, secondary and tertiary users of a system. Now that we have identified these different types of users, the question is now how do we gather or identify requirements from these users? Do we just talk to users? Or are there other ways to gather these requirements? So, let us reflect on this question for a moment.

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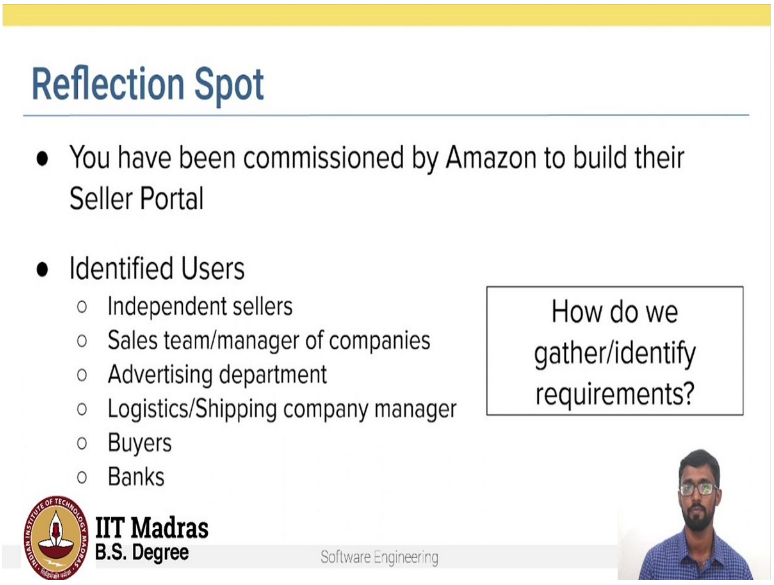

And let us take the example of the Amazon Seller portal that we looked at in the previous video. Let us say that it is the early days of Amazon and you have been commissioned by Amazon to build this Amazon seller portal. So, here are some of the users that we identified in the previous lectures. So, we have independent sellers, we have a sales team or a sales manager of different companies. We have people from the advertising department, we have logistics or shipping company managers, of course, we have buyers, and we have banks. So, these are different users of the system.

So, now the question is what are ways in which we can gather requirements from these different users for developing a seller portal? You can pause this video and think about these answers before proceeding.

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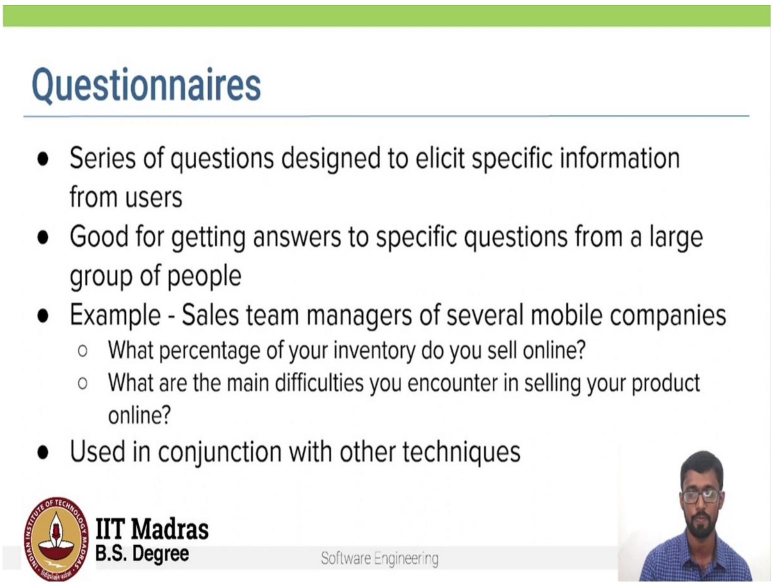

So, there are different requirements collection techniques. And let us look at them one by one. So, one type of requirement collection technique is what is known as a questionnaire. So, a questionnaire is nothing but a series of questions, which are designed to elicit specific information from users. And I am sure most of you would be familiar with questionnaires as you would have filled such questionnaires, as part of different courses and the program as well. And these questions can be of different types can be a simple yes or no question. Maybe you have to choose from a set of answers, or it can be a longer response or a comment. And questionnaires are good for getting answers to specific questions from a large group of people who are usually spread across a wide geographical area.

So, for example, you can send questionnaires to sales team managers of several mobile companies. And you can ask them questions like what percentage of your inventory do you sell online? Or what are the main difficulties you encounter in selling your product online? So, these answers to these specific questions can help us elicit requirements from different users. And an important thing to note is that this should be used in conjunction with other techniques, other requirement gathering techniques, which we will see the next slide.

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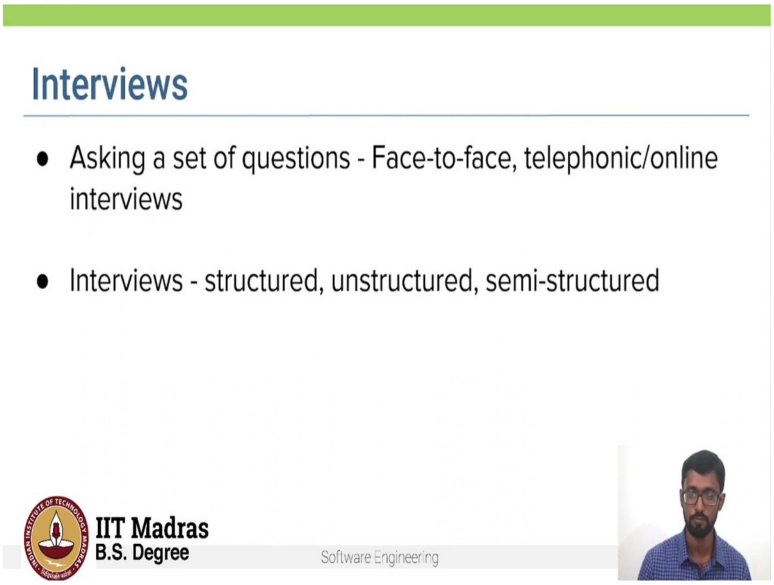

So, another important requirement gathering technique is interviews. An interview, it involves asking someone a set of questions. It is often face to face but it need not be. We can use telephonic interviews or even online interviews to ask questions. And interviews are broadly classified as structured, unstructured or semi structured interviews, depending on how rigorously the interviewer sticks to a prepared set of questions. So, an interview can be structured, which is nothing but a fixed set of questions. And the interviewer asks those questions and elicit responses.

And in an unstructured interview the interviewer does not really know what type of questions to ask, because they do not know what the user does or what exactly the needs are. So, in such cases, we can ask users broad questions and based on their responses, we can probe further into specific aspects.

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So, what are the purposes of these interviews? One is, it helps us get or understand issues which people have. And it can be used early in the requirements gathering process to illustrate different scenarios. So, for example, we can conduct interviews with independent sellers, and ask them what are different platforms which you use to sell your products? This is a fairly open ended question. And they might give answers like, we use WhatsApp, Instagram and then we can probe them and ask what are disadvantages or advantages of these portals?

And they might say, well, I get customers it is easy to get customers, but then tracking orders, you know, tracking payments, tracking my inventory, what are different selling options, all of this is huge overhead. So, from, from these questions, we can elicit requirements, which involve tracking orders, tracking payments and all of these things.

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So, now, we looked at interviews and one drawback of interviews is that it offers only one perspective. And an alternative can be to get a group of stakeholders to discuss issues and requirements. And the advantages of using focus groups are one as it helps us gain consensus. So, if different groups of stakeholders if they highlight the same issue or the same concern, then we know that this is a key requirement, which we need to build into our system. And this is also useful for highlighting areas of conflict or disagreement. So, different groups of people might not agree. And this helps us get a nuanced understanding of the needs of different stakeholders.

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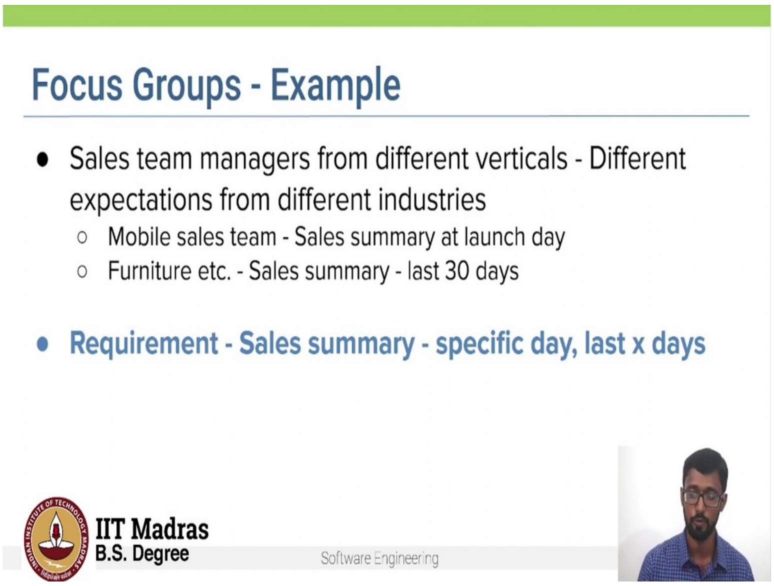

So, let us take an example from the Amazon seller portal itself. So, we can conduct focus groups with different sales team managers from different verticals. And there might be different expectations from different industries. So, for example, a mobile sales team might be very interested in understanding what is the sales summary at the launch of a particular mobile whereas departments like furniture, they might be more interested in the sales summary of the last 30 days. So, from such focus groups, we can elicit requirements like such as the summary of the sales in the past x days or in a specific day. So, these are some requirements which can be elicited from focus groups.

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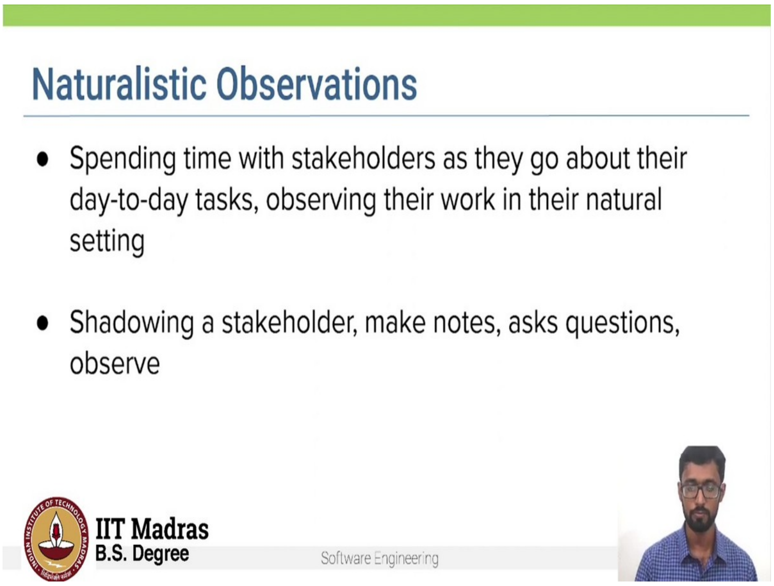

In the previous requirement gathering techniques, we looked at interviews, focus groups, in these techniques, we are asking people questions, but one thing to remember is that what people say is often different from what they do. And it is very difficult for humans to actually explain what they do or describe accurately how they do a particular task. For example, how do buyers buy online? What are they looking for in a product? This might not be very easy to articulate. And hence an important technique which we can use is observe users. It involves spending time with stakeholders as they go about doing their day to day tasks and observing their work in their natural setting.

And this involves shadowing a stakeholder, making notes, occasionally asking them questions, but primarily observing what they do.

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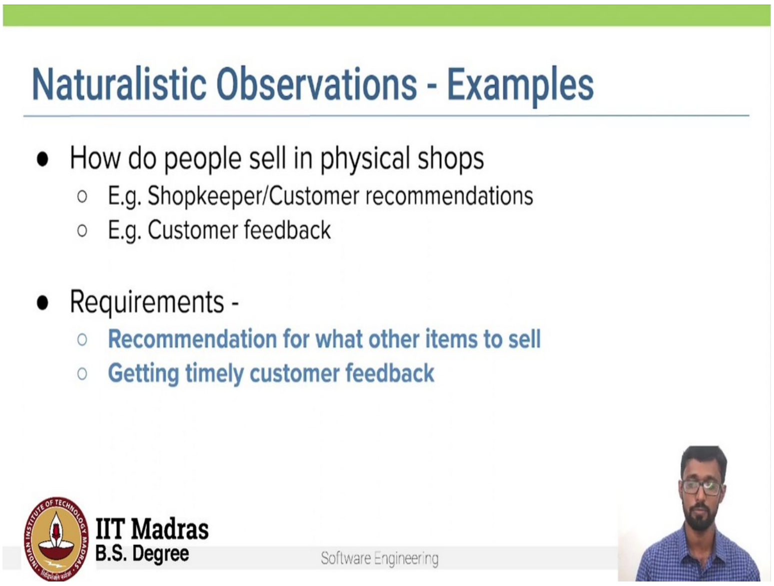

So, let us take the example of a seller, the seller portal. So, one way in which we can gather requirements is to look at how people sell in physical shops. So, for example, shopkeepers or customers they give recommendations, the customer might ask the shopkeeper for a new product or the shopkeeper might ask the customer to try a new product. Customer feedback is also very important, the shop owner, they appreciate feedback about a product which they sold to their customer. So, these can be translated into the online setting as well in the form of recommendations as well as getting timely customer feedback.

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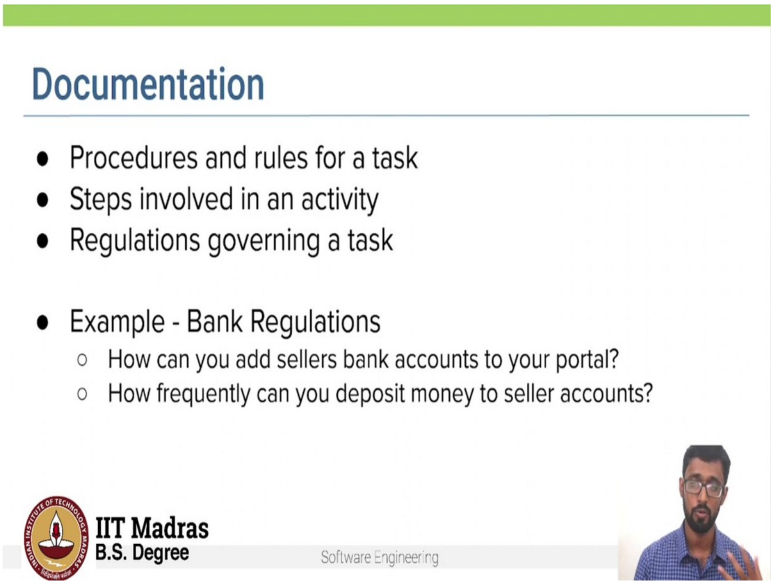

Another type of requirement gathering technique is documentation. So, there are places where which helps several procedures and rules for doing a particular task. And these might be written down in manuals or documents or there might be steps which are involved in performing an activity or there might be regulations which might be governing a task. So, in our case, in case of a seller portal, bank regulations are an important requirement to consider. So, for example, how can you add sellers bank accounts to your portal? Or how frequently can you deposit money to seller accounts? What are practices of other online marketplaces? All these can be gathered from different documents or different procedures and regulations.

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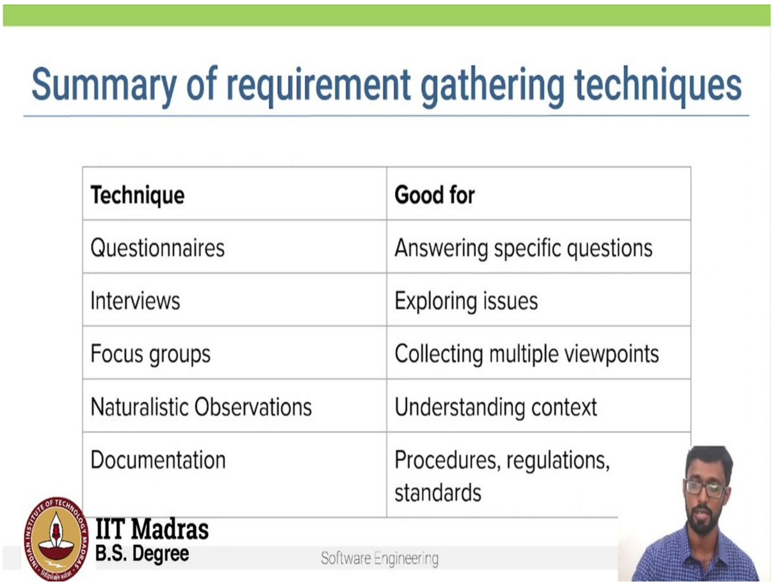

So, here is a summary of the requirement gathering techniques which we saw till now. So, we looked at questionnaires, interviews, focus groups, observations and documentations. And each of them serves a specific purpose. For example, questionnaires are good for answering specific questions. And interviews are good for exploring issues and for which we do not really have the answers for. Focus groups are important for collecting multiple viewpoints. And observations are good for understanding the context in which a user performs a particular task. And then we looked at documentation which involves procedures, regulations and standards.

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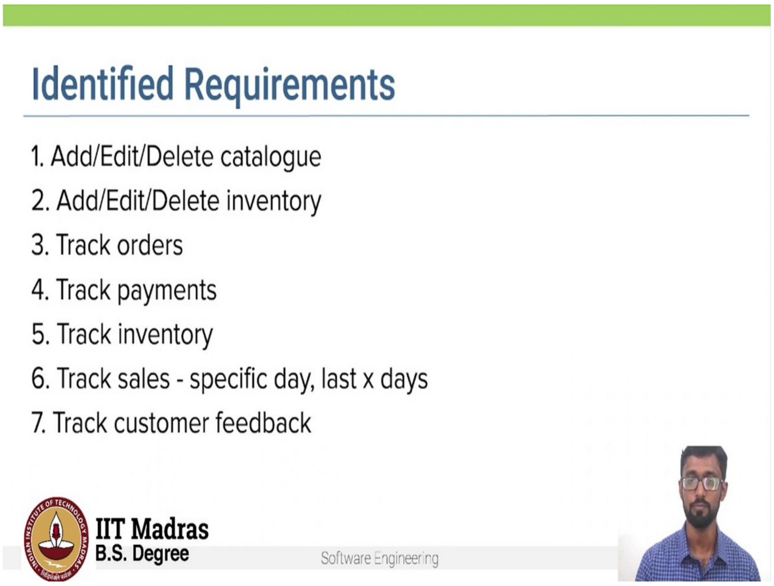

So, we looked at several requirement gathering techniques and using thought experiments on how we can gather requirements, we were able to identify several requirements for the Amazon seller portal. For example, we understood that a catalog and inventory are necessary and it is essential for us to track different things like orders, payments, the sales as well as customer feedback.

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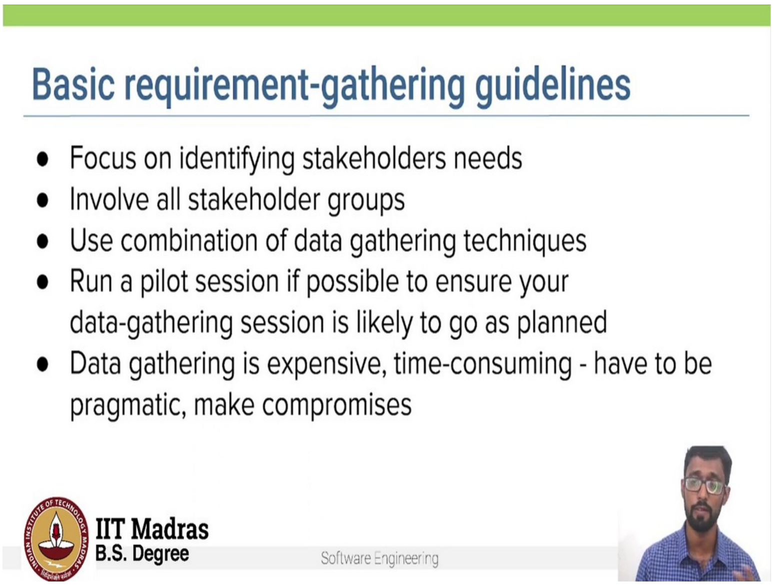

So, to conclude, let us look at some basic requirement gathering guidelines. So, first, we need to focus on identifying stakeholders needs. And we need to involve all the stakeholder groups, the primary secondary as well as the tertiary users, because each of these types of users have different needs and requirements. And it is advisable to use a combination of different requirement gathering techniques, mainly because different techniques have different purposes. And we need to use them according to our needs.

Another important point to consider is to run a pilot session, if possible to ensure that your data gathering session is likely to go as planned. Many a times especially for questionnaires, you might miss out on a particular question, you might have wrong options, you might be having missing options. So, it is difficult to go back and ask users to fill the survey again. And hence, it is important to test your gathering techniques before you actually go about and gather requirements.

And finally, data gathering is expensive and it is time consuming because you have to talk to different types of users. And once you get their responses you need to analyze them and all of this is a time consuming and effort consuming activity. And hence often at times we have to be pragmatic and we have to make certain compromises.