

**Design Thinking**  
**Prof. Dr. Bala Ramadurai**  
**Indian Institute of Technology, Madras**  
**Empathize – User Research**

(Refer Slide Time: 0:19)



Interviewer: Hi. Your name?

Interviewee: Devdat Das.

Interviewer: Devdat Das!

Interviewee: Yeah.

Interviewer: Devdat, can you just give me a brief intro about yourself.

Interviewee: I am from Calcutta, so I am perceiving MBA Innovation and Entrepreneurship from Symbiosis Institute of Business Management, Pune. So it has been three months here and I am really enjoying this course. And it is helping me with many aspects to know about businesses and how to deal with real-life problems and solve them.

Interviewer: Can I have your age?

Interviewee: Yeah, I am 26 years old.

Interviewer: 26.

Interviewee: Yeah.

Interviewer: Devdat, basically we are working on solution towards IT and looking at how, where people write, what activities go in and around writing, basically. So few questions to you.

Interviewee: Yeah.

Interviewer: So how frequently do you think you write?

Interviewee: So I write not that often, like nowadays mostly typing in the laptop. But I do prefer to write my some, but my thoughts and emotions I do not find everytime, proper device to write it. So I think pen and paper is the best to write those things now.

Interviewer: So you are saying you do not write very often, but when you have some kind of thoughts.

Interviewee: I do carry my diary with me most of the time and so I jot things down in points.

Interviewer: So diary is where you mostly write.

Interviewee: Yeah. But in some areas I cannot take my bags, so there I write in my mobile phone. So that is very convenient that time but laptop is not that convenient for writing everyday thing. But mobile phone, in message I type those things.

Interviewer: So in mobile phone do you use any applications?

Interviewee: I used to use one application Note.

Interviewer: Note.

Interviewee: Then after that, like I have changed few mobiles that and then after that I did not install any apps. I just write it in the message; I put a number, random number and save it in that draft box.

Interviewer: So do you carry a notebook or a diary like you mentioned?

Interviewee: Yeah, in class I always do.

Interviewer: In the class?

Interviewee: Yeah, I always do. But most of my friends, they do carry copies and all.

Interviewer: Records?

Interviewee: Yeah. They mostly type in the laptops and things are good for them. But I personally still like to write things on paper.

Interviewer: So do you feel like... You said you carry a diary with you, do you, how often do you use that inputs basically?

Interviewee: Yeah, in every class I use it. Like even something I write it down. But sometimes like in nowadays, but in earlier days I used to write in mobile phones. But nowadays I prefer using it because I change my mobile so often, so I think that sometimes data gets lost and all. So I keep the copy so that, yeah, and then I, even if, sometimes I click picture of those pages and put it in the drive.

Interviewer: Okay.

Interviewee: ...so that it always be there.

Interviewer: So you are saying you basically click photos of content that you write on your diary?

Interviewee: Right, because in diary I can draw sometimes. Sometimes when I write, what happens when I write messages, then I do not have time to write all the things in short time, then I draw a picture and connect it with something table and all so that it can be easily accessible. So I write that thing.

Interviewer: Next, could you just take us through how your process would be when you are preparing for an exam? Imagine you have an examination the next day and just previous night you are starting your preparation. Can you just take us through that?

Interviewee: Yeah, firstly I would, first important is that I know, I should know what is the important like syllabus, a kind of like what is, what has been like the syllabus, what they are going to ask, from which category of questions.

Interviewer: So basically you want to know what you are going to do?

Interviewee: Yeah. First, identifying all those things and then after that thing, I will search on Internet like what is the most common question that they ask, so that I have a very short time, I cannot read the whole concept in one time.

Interviewer: Right.

Interviewee: Then you know all the important concepts I just check it from the YouTube, like videos, because I have a tendency of learning things on video rather than reading it a lot. And yeah, people go through the last thing here and all. I really do not go through the last thing is, but videos and all and my many other sources, I look for the sources. Like people who say this kind of thing can be important, this kind of like from videos and all, they have an idea of the things like what are the important things which will help you to at least get good marks, score extraordinarily good. But at least they will help you pass the exams, so you can have that idea of that.

So in one night, we can, I can do that thing. And what is the main important questions from each chapter, 1 or 2, just go through that.

Interviewer: So your important material for preparation is basically Internet and...

Interviewee: Internet, yeah.

Interviewer: YouTube videos.

Interviewee: Yeah, YouTube videos, Internet yeah, mostly them.

Interviewer: Do you refer any kind of notes prepared that you have prepared or your friend has passed?

Interviewee: Yeah, like now as I am going, I have been preparing notes every day like in here. But my strategy changes sometimes. Like sometimes I do not prepare notes. I have good books and all; I just go through them like important points. When I am in the class 11<sup>th</sup> -12<sup>th</sup>, we had a good set of books there.

Interviewer: Basically you can share your experience not only from SIBM, your entirely, from your entire learning experience you can tell us how you probably approach examinations.

Interviewee: As I grew up, like in this, like as we do an MBA, there is set of books, there are lots of books. So that is why notes and teacher's PPTs are very important this time. So like in 11<sup>th</sup>, 12<sup>th</sup> we have NCERT few books, and we know that these things are going to be important thing and we have to note these things whatever it is. But in here I think since so vast...

Interviewer: Right, topics are there.

Interviewee: We have to go through some teacher's notes and those are the primary source and after that if you have time and if you are very much interested, you can go to the library and get these books.

Interviewer: So how do have access to these teacher's notes basically from...?

Interviewee: I click pictures of the PPT and yeah...

Interviewer: Click pictures of the...

Interviewee: PPTs.

Interviewer: Lecturer shares with us.

Interviewee: Yeah, and then sometimes I ask for the PPTs but what happens that teachers take a bit little time to forward those PPTs. So for that time I just click those pictures and I also write everything down. So this is how I get those things. And I upload it in the drive, common drive for all the class members so that everybody could see it.

Interviewer: So there is a common drive available for everyone?

Interviewee: Yeah, everywhere. Since I am the CR, so I am doing that thing so that everybody could benefit. That is the thing. Because I think that it is important to get a track of things like what has been taught in the class. That is how I am doing.

Interviewer: I think that is it for you. Thank you so much.

Interviewee: Thank you so much.

(Refer Slide Time: 7:40)



Interviewee: My name is Heet Thakkar. I am from Mumbai and I am 21 years old. And I am doing my MBA in Innovation and Entrepreneurship from Symbiosis Institute of Business Management.

Interviewer: So I would like to ask a few questions related to learning and writing. Just how frequently do you write?

Interviewee: Not that frequently, not that regularly. But when something is important, I do make it a point of noting it down.

Interviewer: So important, you are saying this environment would probably be in the class, in the classroom, right?

Interviewee: Yes.

Interviewer: So in classroom do you carry any kind of material to write?

Interviewee: Yes, I do carry a notebook which is where I write my stuff which is important and relevant to me.

Interviewer: Okay. So you carry a notebook and if you feel there is something that is important, you note it down.

Interviewee: Yes.

Interviewer: Great. Do you feel, are there scenarios where you feel it is more necessary to write than, say for example, a certain subject, a certain kind of learning where you feel you need to write more, where you feel you generally write more?

Interviewee: It depends on your subject interest. For example, if there is fundamental of entrepreneurship as a subject, like if you like, I personally like that subject. So it might be, I might be noting few more questions and answers than say example there is a subject probably I might not take interest to. So it depends on the subject which...

Interviewer: Subject and your interest.

Interviewee: Interest.

Interviewer: Okay, great. So can you just take us through your, how your process would be when you are preparing for an exam? Imagine you have an exam the next day, the previous night you are starting your preparation, what all kind of activities that you do?

Interviewee: So yeah, again I like to watch more videos than reading books. So I would be watching relevant videos to the subject and then noting it down and preparing notes and then learning the material.

Interviewer: So there is an activity where you watch videos?

Interviewee: Yeah.

Interviewer: What are your, where do you search for videos?

Interviewee: YouTube and there are different sites where you get access to.

Interviewer: Do you think that comes to...

Interviewee: So while I was preparing for my SNAP exam, so I had prepared through the site known as the 'Hitbullseye'.

Interviewer: Hitbullseye.

Interviewee: Yeah...so which had relevant material to offer to.

Interviewer: And you are also saying that along with the video you also had a notepad or notebook where you...

Interviewee: Yeah. So whatever the insights from the video, I used to note it down and then refer it later.

Interviewer: Okay, great. So other than videos, do you use any other material in your learning activity? Imagine for the time being that you are actually seating and preparing, you have your laptop open and you are watching videos. Anything else that you are using while learning other than your laptop?

Interviewee: I have a small notebook with me which again I write a few important insights from the video and I keep stick notes where I can pick for that important notes.

Interviewer: And no other material, right?

Interviewee: No.

Interviewer: I think that is it. Thank you.

Interviewee: Thanks.



(Refer Slide Time: 11:27)



Interviewee: So my name is Kunal. I am in first year of I&E course.

Interviewer: And your college?

Interviewee: SIBM, Symbiosis Institute of Business Management.

Interviewer: Can you just give us your age?

Interviewee: I am 22.

Interviewer: Okay. Kunal, just a few questions on your writing and learning activity. How frequently do you think you write?

Interviewee: On notebooks?

Interviewer: Yeah, it could be anywhere.

Interviewee: Every day.

Interviewer: Every day?

Interviewee: Yeah.

Interviewer: Very good. When do you generally write and what do you write?

Interviewee: So when lectures, I do carry my laptop with me. So I make notes on my laptop itself or if I have any ideas which come any times, so I you a short notepad with me which I carry in my bag, so I do write those things. Or any important key points which I think are important and could be referred in future, I write those points with the notebook which I have.

Interviewer: So your basic material for writing is either your notepad...

Interviewee: Or my laptop.

Interviewer: Your laptop?

Interviewee: Yeah.

Interviewer: Other than the classroom environment, do you write anywhere else?

Interviewee: Yeah, on the notebook which I said which I just mentioned.

Interviewer: Not and in the sense other than in the classroom, any other place where you do not write?

Interviewee: So I am active on Quora, so sometimes I do write on Quora. It is very less but yes, I do sometimes.

Interviewer: Can you just take us through what process you follow when you are preparing for an exam? Imagine you have your exam on the next day, so previous night just ready to prepare for the exam, just take us through the process?

Interviewee: For exams, I try to be, I try to go systematically. So for any question, first I try to analyze what the solution to give for that, solution for it. Then I try to note it down point-wise and then explain all those points, each and every point in detail.

Interviewer: So what kind of study material do you use? What kind of materials do you have around you when...?

Interviewee: So for the competitive exams?

Interviewer: It could be for any exam.

Interviewee: So reference books, websites which could give me some more insights about, or detailed view about that thing, or some portals which are the education portals which helps in gaining more knowledge or shortcut tricks for those particular things.

Interviewer: Okay. So these are like the most common materials that you use? You said you write notes regularly, so do you refer those notes while you prepare for the exam?

Interviewee: Sometimes, yes I do. Yeah.

Interviewer: Does that depend on anything, you referring your notes?

Interviewee: So suppose the paper which I have to give tomorrow was something which I find difficult, so surely I do refer to all those notes from the day one which I am preparing. Or for something which is very practical, I prefer going on websites and getting different knowledge from it so that I could give some examples which I have learned from those websites and then put it on my exam the next day.

Interviewer: So imagine you are referring in your case websites, online content, at that time do you feel the need to comprehend and write it down in the notes, activity like that?

Interviewee: So again I write the keywords of those examples to see, suppose I get an example of case study about TATA, so there is one paragraph which is important for me for tomorrow in my exam next day. So I just write about that short para, very short one line or two lines, which will recollect me the entire example the next day and which will help me to write down that example in the exam.

Interviewer: In the exam?

Interviewee: Yeah.

(Refer Slide Time: 15:28)



Interviewee: Okay, my name is Amruta and I am an engineer and now I am here in SIBM to do my MBA.

Interviewer: Can you tell us your age?

Interviewee: Yeah, I am 23 years.

Interviewer: Amruta, just a few questions on writing and how you learn. And how frequently do you think you write?

Interviewee: Maybe a year back, till I did my engineering it used to be almost every day and now maybe it is once every two to three days.

Interviewer: Okay, once every two to three days.

Interviewee: Yeah.

Interviewer: So when do you feel the necessity to write?

Interviewee: Usually in class or if I am in a hurry to just write some notes and I do not want to take my phone or the any electronic device.

Interviewer: Okay. So you are saying you write in multiple materials like notebook and notepad. Where all do you write those mostly?

Interviewee: Mostly my notebook. Mostly, that is predominant thing.

Interviewer: Then anywhere else? Even if it is not predominant, anywhere else?

Interviewee: Maybe lists, to-do lists, then in my diary probably, since I maintain one

Interviewer: Diary is also physical.

Interviewee: Yeah, it is a physical diary.

Interviewer: So you have notebooks that you use in class and you have a diary that you use.

Interviewee: Correct, yeah.

Interviewer: Can you just take us through the process of your preparation for exam? Imagine you have an exam the next day and you are going to prepare this night, so what will you be exactly doing?

Interviewee: Yeah. Now in I&E course, there are no exam as such, but initially like the conventional exam mode, I would usually read once and then if I feel something important or if I need to practice any diagrams, I always had a, made it a point to like write and practice.

Interviewer: Writing.

Interviewee: So writing was always part of my preparation process.

Interviewer: So this reading used to happen, what kind of material it used to be?

Interviewee: Either hard copy preferably, I used to prefer hard copy. Otherwise, like on the laptop like soft copy of the textbook.

Interviewer: Any reason why you prefer hard copy over soft copy?

Interviewee: For me personally my eyesight, I mean I would find it more convenient to use the hard copy to read.

Interviewer: Hard copy.

Interviewee: Yeah.

Interviewer: And anything else that you take while you are preparing other than just reading and writing notes?

Interviewee: Also sometimes maybe like competitive exams, I used to listen to the audio tapes maybe. And yeah, so that is one thing.

Interviewer: So while you were listening to these tapes, would you again like to write?

Interviewee: Important points, yes, I would like to write. So only to refer back to it, I would prefer my notes rather than going through the tapes.

Interviewer: So you prefer to use your personal notes.

Interviewee: Yeah, my notes, yeah I use it.

Interviewer: Do you think you share you're, because you said you write a lot of notes and refer your notes, do you share these notes with anyone?

Interviewee: Yeah, like my friends, they were like close friends of mine, I used to share it and in fact now I've shared it with my juniors since, they asked me for it, so I have given it to them.

Interviewer: So you used to give your hard copy, notebooks itself or how did you share it?

Interviewee: I used to give it after a year, like I used to not pass it on immediately because I thought I would read it for my reference. But maybe like after a year or couple of years, then I would. I wouldn't mind sharing it.

Interviewer: Okay, you wouldn't mind sharing it. And did you ever feel the need to, if I had those notebooks and that notes right now, it would have helped me out?

Interviewee: Maybe but it is not always possible for me to physically have all my material in hand. So I feel like at least if somebody else is benefitting from it, that is okay.

Interviewer: Great. Thank you.

Interviewee: Thank you very much.

(Refer Slide Time: 18:59)



Interviewee: Hi, I am Shubam Kaushal. I am a mechanical engineer. Now I am here pursuing MBA in IT in SIBM.

Interviewer: SIBM, okay. Can I ask your age?

Interviewee: 22.

Interviewer: 22, great. Shubam, just a few questions on writing and how you learn and everything. How frequently do you think you write?

Interviewee: Actually I will tell you, I used to write daily.

Interviewer: Daily, okay. When do you think you write the most?

Interviewee: Actually the thing is like whenever I have something in my mind, I used to write it.

Interviewer: Did you write in classrooms when you were learning?

Interviewee: Yeah.

Interviewer: And what materials or mediums did you use to generally write? Whatever it is that you own?

Interviewee: Whatever is coming, like if your teacher is speaking something...

Interviewer: No, I am asking, where do you write?

Interviewee: Notebook.

Interviewer: Notebook?

Interviewee: Yeah.

Interviewer: Any other medium that you used to write or?

Interviewee: Notebook, notepad.

Interviewer: That is fine. Can you just take us through how your preparation would be for an exam?

Imagine you have an exam coming up the next day, but what would be your preparation for it?

Interviewee: I will try completing the course, if I have two chapters to do, I will try...

Interviewee: Okay, fine. So if I have two chapters to do, I will go thoroughly to first chapter complete and second. I will not write it, I used to learn like by repeating the whole thing I will learn it. And that is what it is.

Interviewer: So basically you are saying that you used to read?

Interviewee: Yeah, I used to read. Understanding the things like not writing but understanding.

Interviewer: Understanding. So there was no writing involved but you were reading?

Interviewee: Yes.

Interviewer: So where would you be basically reading from?

Interviewee: Books and Internet.

Interviewer: So you used to use both hard copy books and...

Interviewee: And soft copy.

Interviewer: Internet also?



Interviewee: Yes.

Interviewer: Anything else other than books and the Internet to help you learn?

Interviewee: PPTs and all, not from Internet but even that PPTs from the teachers as well. So I use that.

Interviewer: Okay. And do you have the habit of writing while you are preparing for exam?

Interviewee: No.

Interviewer: So you are basically reading and understanding. I think that is it with you.

Interviewee: Alright. Thank you.

(Refer Slide Time: 21:27)



Interviewee: My name is Nikhil, I've done my B. Tech from BIT University in Electronics and Communication. And I am pursuing my MBA from SIBM, Pune. I am 25 years old.

Interviewer: Thanks Nikhil. Just a few questions on writing and learning generally. How frequently do you think you write?

Interviewee: Right now in college like we have a lot of assignments in the course and...

Interviewer: Generally over your learning experience?

Interviewee: Apart from this I do not write that much.

Interviewer: You do not write much. If at all you write, in what environment or when do you think you probably write?

Interviewee: Very rarely. Actually in studying I do not really write, I do not. That is something but apart from that maybe if there is something sort of, if you are learning everything, some sort of formula, then you, just might because it is a big formula, then you might have to write it again and again. Otherwise, it is fine.

Interviewer: So you generally carry some kind of copy to your class?

Interviewee: I have one but I do not really make notes. I prefer listening.

Interviewer: Can you just take us through how your process of learning for an examination would be?

Interviewee: Okay. For examination, I generally do not, I watch videos maybe, like if online videos you find. Like in school there is always books, you have a particular book that is different scenario. But in college we have a lot of options, in that presentations which professor shares, that is something which you refer. Otherwise, you go, I preferably go for Internet videos. This NPTEL, that is something, they have a lot of good videos on every topic I wanted. So I just go through them, but I do not really write.

Interviewer: You do not really write.

Interviewee: Even after watching a video or presentation, I have, I think I have that sort of memory like even if I read something, I can retain 80 to 90 percent of it. So I just need a recap later on like maybe just before the exam half an hour. That is it.

Interviewer: So videos, the Internet generally, content that your teachers or prof have shared with you?

Interviewee: No, it is not something like that. They generally share big presentations; they have their own PPT, so that is something which I refer to. But apart from that, if I want to understand, have a better understanding of a topic, it is more theoretical. But I find myself videos, like NPTEL

is the national platform. You can search videos on any, specifically for technical it is there. So I search technical videos over there. I go through that, they are IIT professors that teach on that. So they just give a glimpse of it. It is an half an hour video but explains a lot about the topic. So that is what I do.

Interviewer: I think that is it.

Interviewee: Thank you.