Design Thinking
Prof: Dr. Bala Ramadurai
Analyze Workshop
Part 02

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Prof Bala: Okay, Welcome back! The second part of this module starts, which is on conflict of interest analysis. So we did the five whys, we saw new things that we did with the whys the n compared to what I had demonstrated, that was the multi-forked whys that you saw, that is often used also, so you could try that as well. It sort of becomes very complex, so laying it out on a chart like how we did it makes complete sense. Now for illustration purposes, we have picked one flow of that Y and we are going to work with that and then build up our conflict of interest from there. So that's going to be the demo part of what we are doing for the conflict of analysis for this. It's by no means complete, it's just one part that we are showing for to keep you interested as well as to keep give you a flavour of what it is to do a conflict of interest analysis. Okay, so what have we?

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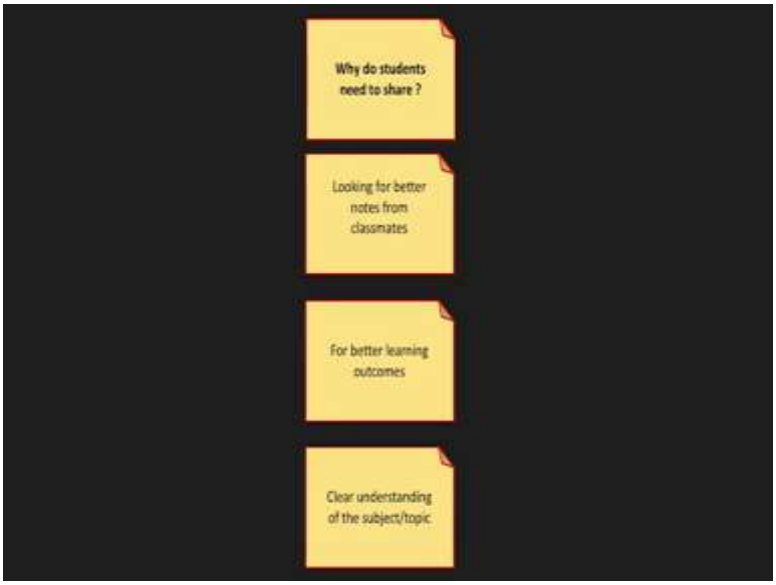

So we have started with why do students need to share notes. So, that was the first why that you brought in which is a serious problem to tackle and you said the answer was, looking for better notes from students, other classmates or people who have paid attention to various aspects, not like I haven't paid attention, but there are other aspects that other people are given The why, for that is, well you want better learning out comes, so that I can piggyback off other classmates who take good notes in my class, and that's the level that we are interested in solving and that is why do they want learning outcomes is well you understand the topic better the entire course its comprehensive understanding out the course better.

So we are going to start here, I am going to hand it off to you, you will have to first of all, build a Y to X plot, which is, if I change a parameter on the X, which is how a Y to X is defined, some performance parameter changes on its own and that's we need to figure out for your particular level. That's what you are going to do. So, over to you guys.

(Refer Slide Time: 2:47)

Nithin: So I guess, the parameter would be the amount of notes that are being shared, the quantity of notes, so sir should we make a plot or?

Prof Bala: No, you can use this as if it's a sample plot, so it's just a visual representation, it's not a scientific data based plot, so this is just.

(Refer Slide Time: 3:13)

Siddharth: Yeah, so like an x-axis.

Nithin: So this is the variable that can change, right, and now we want a quantifiable parameter that will change based on the amount of notes that is being changed.

Prof Bala: What is the performance that you are measuring it up against?

Nithin: So performance of learning outcome would essentially be your scoring in your assessment, right!

Prof Bala: Your assessment scores. Ok.

Nithin: Yeah.

Prof Bala: So, it's a good tip to have a measurable parameter, so that we can track what is going on. Sometimes you will find that there are high and low which is fine. We just want to have understanding of how the whole thing works.

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Nithin: So here our assumption would be that with more notes being shared, students would probably score better. Yes. Now what is the next activity sir?

Prof Bala: Next activity is boiling down to the particular why that you are interested in. I mean the level that you are interested in, which in this case is for better learning outcomes.

Nithin: Right.

Prof Bala: So you will have to replace the X that you have, with the particular level that you are interested in, which is the learning outcomes itself.

Nithin: Okay.

Prof Bala: Right, so.

Siddharth: I think that would be this. Outcome is the assessment score.

Prof Bala: Assessment score, that's what we are performing, I mean assessing the performance, so.

Nithin: Quantity of notes share and this is the X, Y plot right.

Prof Bala: Right.

Prof Bala: So we can start with this. So now to find out just plot the data. So, like a quantitative data, sorry, quantitative data is what is the high side? What is the low side? And what is high side and what is low side here? And how are they related, so you can draw a line like that.

Nithin: Ok, so in terms of you saying that in a class if there are N number of notes being shared on a day or on a timescale.

Prof Bala: So, if you have a high number of notes.

Nithin: Then correspondingly,

Prof Bala: What happens to the score?

Nithin: Okay.

Prof Bala: And if there's a lower number of notes shared, then what happens to the score.

Nithin: Right.

Prof Bala: That would be the direct correlation.

Students: Correlation, fine, so what is it?

Prof Bala: Now you can just draw a plot there.

Siddharth: Okay. Like,

Prof Bala: No this, draw a line like that. Yeah. So, what is the, when you have a high number of notes shared, what is the assessment score look like?

Nithin: Okay, it is high, so I'd think it'll probably be the other way around.

Prof Bala: Yeah, Ok, ok, ok. Normally what we do is, we flip it in such a way that if you have the good thing should always be on the right.

Nithin: Okay.

Prof Bala: And the bad thing is, should be on the left.

Nithin: Okay.

Prof Bala: Okay, so good thing is, if high scores, if you have low number of notes shared. You can put it as 'low' there on the left side, so flip plot .Okay, so low number of notes shared then you get low scores.

Nithin: Right.

Prof Bala: So that's how this works.

Nithin: Okay.

Prof Bala: I'll tell you the reason why we are doing this. So, here the Y is low number of - low scores. Okay, low scores and when we increase,

Nithin: Keep increasing the number of

Prof Bala: the shared notes, there is an increase in this assessment score.

Nithin: So here high number of notes shared.

Prof Bala: High number of notes shared.
Nithin: This will be settled in high score.

Prof Bala: High scores. Okay.

Nithin: So now you get this graph.

Prof Bala: Right you get this graph.

Nithin: This plot.

Prof Bala: Why we are doing this is that the ideal scores, I mean the ideal situation that you want to be in is that you want the high scores and lowest number of notes shared because.

Nithin: That is the optimum that you are looking for.

Prof Bala: Optimum, so let's find out why, okay.

Nithin: Okay.

Prof Bala: So in doing this notes share and if you share a high number of notes what is the flip side of this? What is the negative of sharing too many notes around? And I say. Suppose you are the student Siddharth and you get, you look at all these notes, you have some, you copied or photographed eight notes, eight bunch of notes, so what's the flip side of that?

Siddharth: It means that I am getting access to more number of notes that is, I am investing more amount of time.

Prof Bala: Time.

Nithin: In preparing.

Prof Bala: So the amount of time for preparation or going through each of these notes actually spikes up, which student usually doesn't have. Okay, so that's why ideal would be to be at low number of notes. I get one good notes or two number of notes and I am done right. B ut, by doing that I am actually only looking at one or two which may not be good, sometimes they are good, sometimes they are not, and may have missed a few notes as well, so this is the rationale in this. Okay, so now you can take another note and put a time on that side. Okay, so time for preparation I guess. Okay, so that goes on the left-hand side, so that's what you are conflict is between, so it is a time versus the number of notes shared problem. Okay, which is what we are going to solve, so that's how we look at. Okay.
Now a better way of representing which you have seen me show in the classes is the conflict model. Okay, so are called the element name value ENV model as well. So, we will remove this for a second and okay, we will start with the element. Okay, which is in your case, so we have assessment score. So the variable goes there, the number of notes shared

Students: The number of notes shared.

Prof Bala: Right, so it's the student's number of notes shared and then there is a high and there is a low, and then you can do the rest. Okay, so that's where we start, so this student just to give us, who is whom, whose variable are we looking at, so that could go here.

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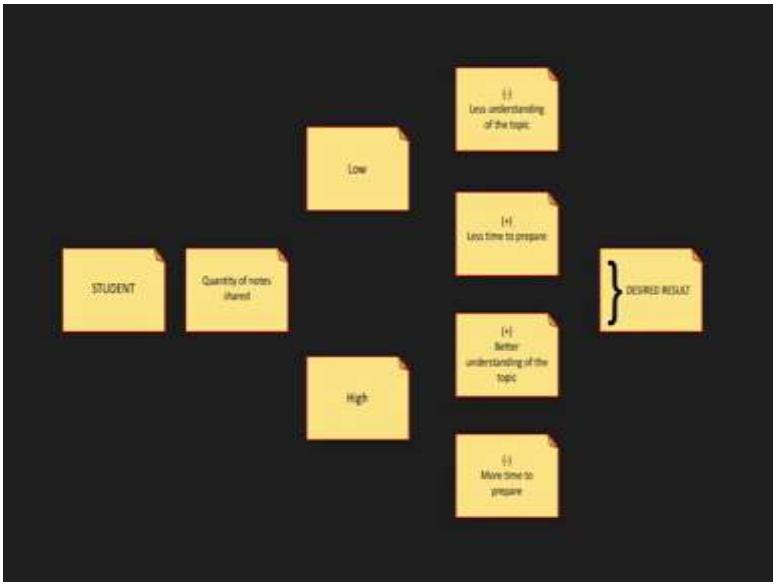

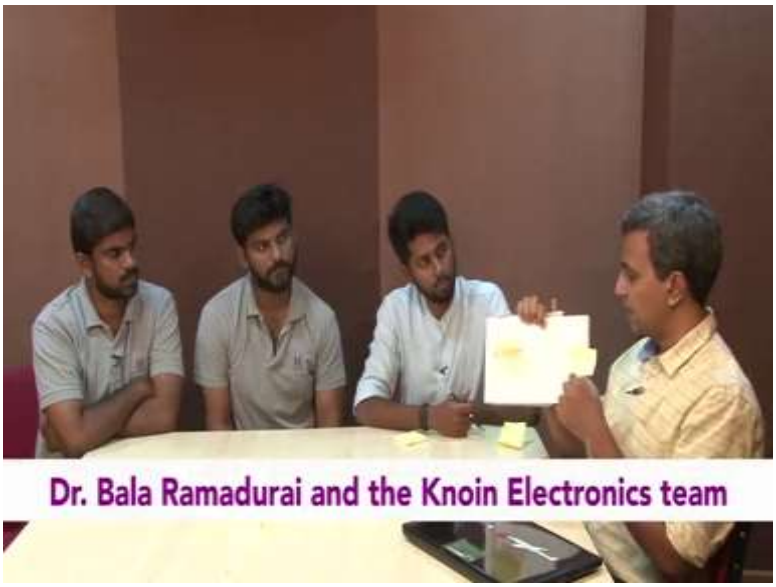

Siddharth: So we are looking at our students.

Prof Bala: And this guy goes here.

Nithin: Notes shared, number of notes shared.

Prof Bala: So this one, so then you can vary the parameter two ways, right that's what we did low number of notes and high number of notes shared, so low and high. Very good. Okay. So, now you have to tell me what happens when the student shares, I mean number of notes shared are low, number of notes shared is low.

Nithin: One thing is the time that he takes to prepare obviously becomes low because.

Prof Bala: Which is a good thing.

Nithin: Which is a good thing.

Prof Bala: Because that way, he can just prepare one-time and I am done. Okay, so that is a good thing.

Siddharth: Less time for preparation.

Prof Bala: Less time for preparation and that's a good thing, so you can mark it with a plus, because that is a positive. Right, and even colour code it if you have the pens. Okay.

Nithin: So understanding will obviously be low because he is only looking at his notes.

Prof Bala: Only at one or two notes.

Siddharth: Less understanding.

Prof Bala: Less understanding of the topic, which related to what you had here, the last note is class understanding of the subject to the topic it's related to that.

Nithin: So that is the negative.

Prof Bala: So that's the negative, now what's the positive of going with high number of notes?

Siddharth: That more content he gets to read and more understanding he has, better understanding of topic.

Prof Bala: Okay, so positive. Okay, and now the flip side of having high number of notes shared.

Nithin: Taking more time for preparation.

Prof Bala: Lot of time to prep. Now he has to go through not his notes alone, but all his classmates' notes as well. So, now our desired result or stuff that we are aiming for as design thinkers is we are greedy people - design thinkers. So we need both the pluses alone. Okay, so we want better understanding of the topic and less time for preparation, so this is what we are aiming for. That's the objective of this analysis, I usually have a desired result and I put there and I pointed arrow, you can just paste on these two. So any solution, you may come up with in the later stages, you have to come back and see, has it reduced the time of preparation, has it increased the understanding of the topic for the student, so that would be your desired result, that's where you are working for that's all the solution, any solution you come up with, you have to go back and refer to this.

Okay, so that was conflict of interest analysis. We saw a few points - one of them was that we flipped the side in which you can probably cannot see this, we will share of graph of this is we flipped the sides of logic, so to speak, so that we have a sloping line. The reason we did

that was that we wanted an optimum that is the desired results that we saw in the plus in both cases have to be on top and so that we can mentally visualise that less time of preparation. High scores is what we would desire and we wanted with less sharing of notes as the, so we want both of this, we want high scores with less sharing of notes and the reason we did that was so that we can reduce the time of preparation for our students.

So this is how we can deal with the five whys, multi-why analysis combining it with the conflict of interest analysis, now with this you can go onto the solve stage, which is a next module. In that after you done with solve, you always come back and check here and check if the conflict is addressed or not and that ends the analyse stage for us.

Thank you.