Innovation by Design Dr. B. K. Chakravarthy Department of Engineering Design Indian Institute of Technology, Bombay

Module – 02 Start of section 6 Lecture - 12 Knowing the context

Now, I think we are very clear about the cause. And now you know we will see how we can go ahead with our next journey.

(Refer Slide Time: 00:08)



So, I show you a video of cooking and you know you go home and cook yourself. Will you get it first time right? Difficult, but you have to cook to know how the food is or how the taste of the food is and how you can learn.

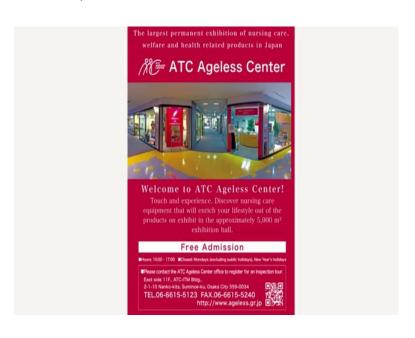
(Refer Slide Time: 00:28)



Similarly cycling, I show you thousand videos of cycling thousand case studies of how people learnt cycling. Will it help you to? It will help you little bit, you will get to know some techniques your fear of cycling will go away you will see all the fun in that. And then, you have to get onto the cycle to learn otherwise you will never be able to learn.

So, our whole course is on that premise that you need to get on the cycle and get on the cycle is to get on to real projects. And a real projects are very very exciting we have taken a large domain elderly.

(Refer Slide Time: 00:56)



And I must tell you I was in this exhibition in Japan; Japan has the largest elderly population right?

(Refer Slide Time: 01:02)



(Refer Slide Time: 01:06)



(Refer Slide Time: 01:06)



(Refer Slide Time: 01:08)



(Refer Slide Time: 01:11)



They have museum for elderly products in Japan. Large museum from commodes, to goggles, to walking sticks, to wheel chairs, to stair climbers oh God full of products. From what type of house walls elderly should have, what type of doors they should have.

(Refer Slide Time: 01:18)



(Refer Slide Time: 01:20)



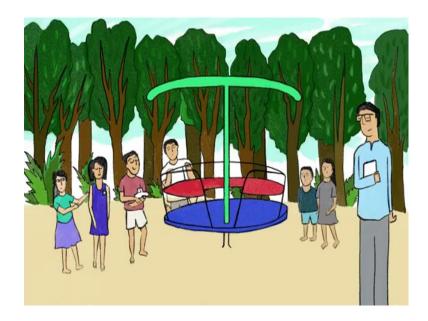
(Refer Slide Time: 01:21)



What type of door handles they should have, what type of dustbins they should have, what type of cooking utensils they should use. The whole you know complete, you know large exhibition and all for them. So, you have to be so narrow, so focused on your cause. You need to have firsthand experience.

So here now you are saying that you need to make phone calls, you need to make visits like, you can visit homes. In fact, when I was a student my professor said you have to visit homes. So, then I said I will go to one context.

(Refer Slide Time: 01:49)



So, I went to Dadar near that Parsi colony area; and in all those flats I saw the children were never nobody was buying bicycles for them. And all of them wanted bicycles. So, I went to each of their houses I said 'Aap bicycle kyu nahi khareed te?' (Why don't you buy bicycles?) the mom was like 'Kahan rakhenge?' (Where will we keep?) one target champion cause 'Kahan rakhenge?' (Where will we keep?) and what is the biggest problem of a bicycle?

It occupies lot of volume, even a childrens bicycle occupy lot of volume. So, what should be your you know design intervention? Tell me, folded bicycle toh thousands are there in the market.

(Refer Slide Time: 02:30)

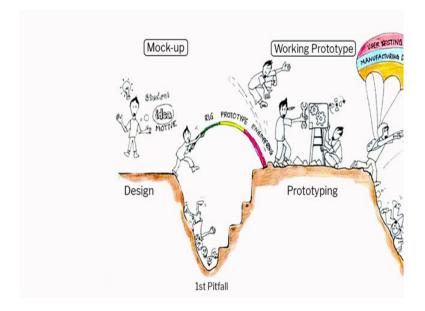


Who is designing foldable bikes till now? For whom are they designing?

Student: Office going.

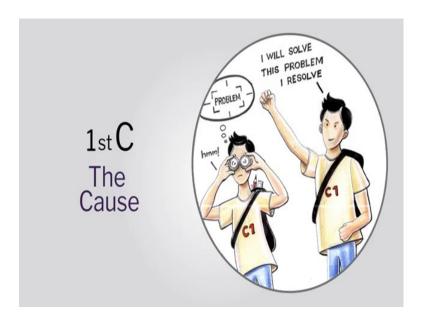
Office going people for car user to put in the dickey, I want for kids to put in the house so, what type of folding will I have? I want a bicycle, I want it low cost because you know if you are rooming in a one room house and your children are not able to get a bicycle to you know learn what type of folding will I do? So, I designed this bicycle, where the handle folds horizontally without turning the wheel, I press a button the pedals fold into the frame. And then you can hang these on the wall like a photo frame or you can push it under the sofa like a luggage.

(Refer Slide Time: 03:23)



So, this product never came into the life; it's in the first value of death, but I did not talk to the manufactures, but it can surely be done if you build up a great team.

(Refer Slide Time: 03:33)



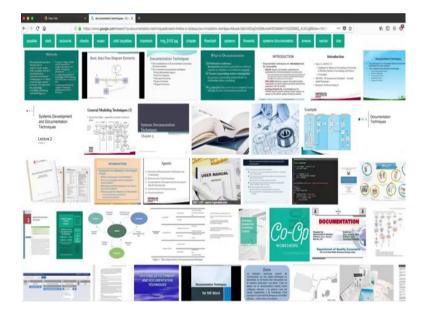
So, that is the whole idea of understanding the cause and the type of cause you stand for.

(Refer Slide Time: 03:43)



How do you document user study? There is picture documentation, there is video documentation, there is audio documentation, there is making notes, there is doing sketches, different ways of documenting the cause, the user need you will have to you know learn yourself from the net.

(Refer Slide Time: 03:56)



(Refer Slide Time: 04:00)

Module 2: The Cause Summing up

• The "cause" is not merely the problem or the reason why a design journey was undertaken. It is a deep need perceived by the designer as something that merits urgent attention.

(Refer Slide Time: 04:13)

Module 2: The Cause Summing up

• In the case of the vein tracer, the cause came out of a deep empathy for blood donors who have to endure venipuncture. Module 2: The Cause Summing up

• It is important to not just identify a need, but to stand for it and to "work for the cause".