

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

**Module – 06**

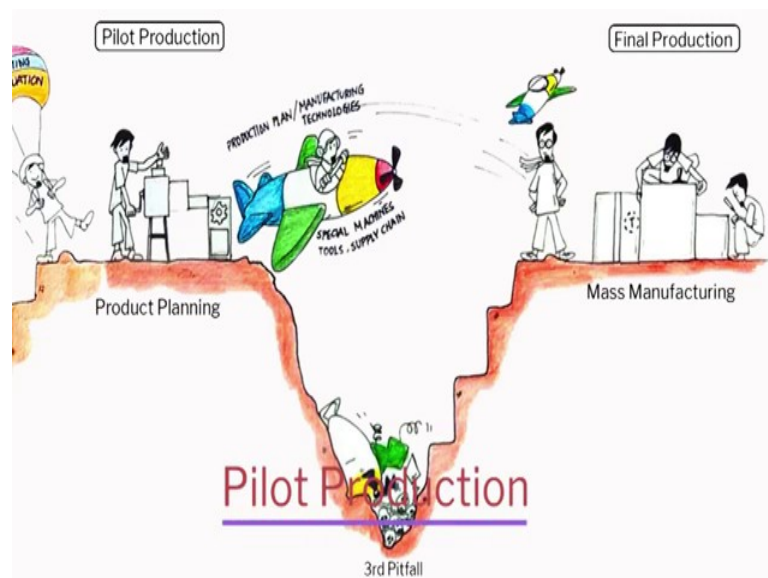
**Lecture - 35**

**5 th C The Conception A new concept for a letter box**

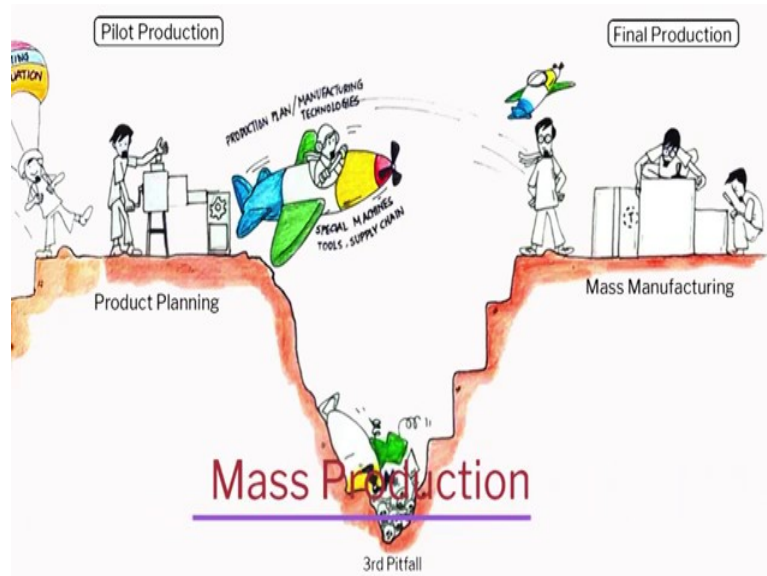
So, good morning all of you.

Student: Good morning sir.

(Refer Slide Time: 00:32)



(Refer Slide Time: 00:37)



Welcome. So, this is a very interesting lecture and in this case study we have reached the pilot production and we are heading towards the mass production for this product. The lecture is the conception which is the 5th concern for innovation.

(Refer Slide Time: 00:44)



We were looking at a case study of a letterbox design for India post which is a government project. How many of you have posted letter last 1 year? last 2 years? It's very good. The biggest problem with our tendencies are that if I do not post later nobody else post letters in the world which is the problem of design where we need to never put ourselves in the shoes of the user thinking that because of the modern technology

because of, you know, very good mobile phones and cell phones and all people are not going to post letters.

So, then we did a survey and found out a lot of people use letters today and the volume of letters have increased multi fold in the business domain.

(Refer Slide Time: 01:26)



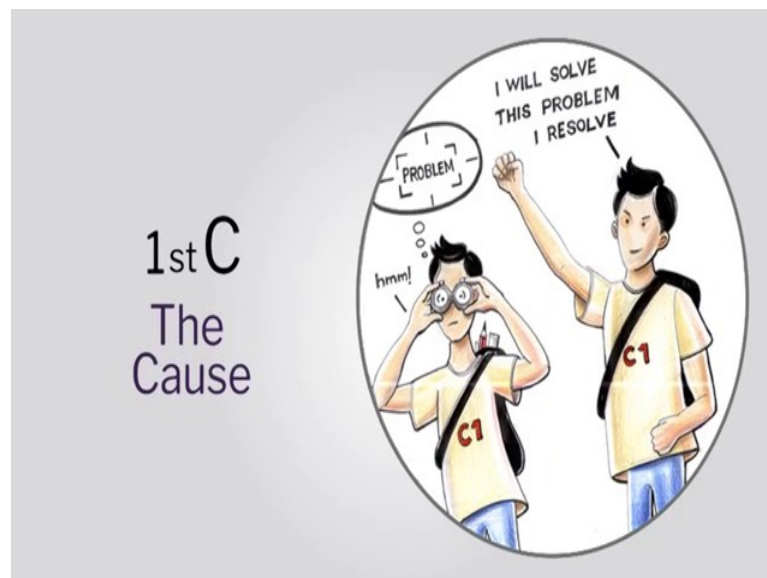
Public number of letters is around the same or increasing little bit, but the volume is very very large. And then during festivals it is like, you know, unbelievably very large. So, here we are. So, we are looking at this box which is rusted. So, I was parking my car and there was this letterbox under the tree and there is a lot of humidity under the tree.

(Refer Slide Time: 01:47)



So, the box was highly corroded the door was dangling people would post letters and you would see a lot of letters from the outside and I was saying can't we just change one product in the country, you know, by having so much of means in IIT. So, we took this as a cost.

(Refer Slide Time: 02:05)



So, that is what we are coming down to you take as a cause that you need to solve this problem and you have all the wherewithal to do this.

(Refer Slide Time: 02:11)

Single line brief:

To design a maintenance-free  
Letter box

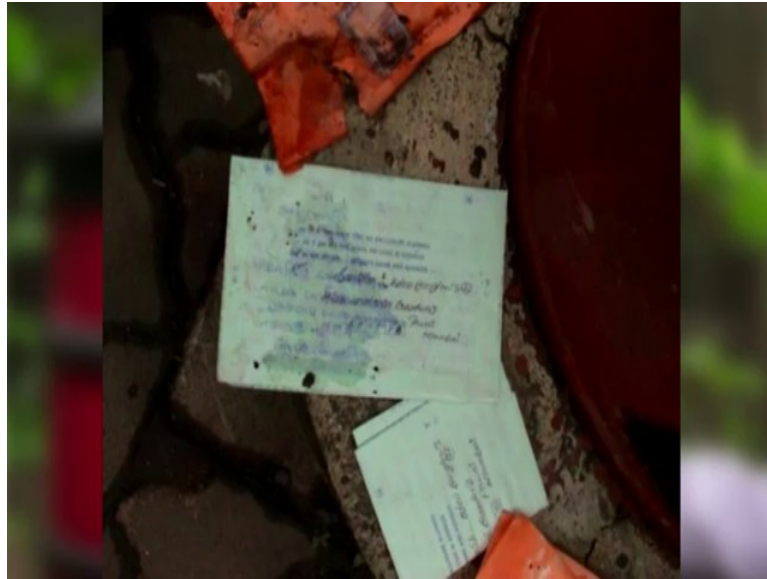
So, designing a maintenance free post box became the single line brief. So, how does this line brief came is very important? We also thought of doing this project who do I have to go to the India post and then I requested one of my students to take this as a project luckily one student agreed he said I would like to do this project.

(Refer Slide Time: 02:32)



The postmaster general in Bombay also was very very happy and to the everlasting credit he gave this one-line brief “Maintenance free Letterbox”. You will see how this is very important for the whole design journey.

(Refer Slide Time: 02:51)



So, then from our side the trigger was very critical I had a concern for the post, I had the empathy for the user the letters are getting spoiled and dirty there was a, you know, strong urge to make a difference like we are all designers here can't do one small product for the country and then the conscious of designers saying that, you know, usability and product features have to be very critical.

So, can't not we change this and generally designers have this dream that I need to do a product which will be seen all over the country. So, that is part of, you know, that motive also. So, then comes our next thing. So, first the cause we have taken up now the Context. A very very challenging context.

(Refer Slide Time: 03:24)



Look at the number of letters the people are sorting there. These letters are in the GPO, the General Post Office in Bombay, where they are sorting them for different regions they are very skilled they actually, you know, throw these letters they just fall in the right bins and then you sort them and take them out. While this is happening they have an high-tech sorting machine too, which is an automatic machine which means of have all the sorting with infrared coded.

(Refer Slide Time: 03:45)



So, in this context this area which is manual sorting for letters which can't be, you know, infrared coded.

(Refer Slide Time: 03:53)



(Refer Slide Time: 03:57)



And there is this high-tech machine which they bought for crores of rupees which does the sorting for most of the other letters which are infrared coded. So, we have a dichotomy. So, there is a whole canvas from low-tech to very high-tech.

(Refer Slide Time: 04:08)





And then we also thought about in the context why do we need new products what is the reason for new products even in this case for example.

(Refer Slide Time: 04:16)



And you look at this timeline or this interesting pillar post box of UK, you started from cast iron post boxes later on when it became more modern you had, you know, sheet metal construction. The cast iron was the only material available during that age later on large rolling pieces came up. So, sheet metals are getting manufactured more and more. So, you have much lighter and different type of sheet metal post boxes and then you can see stainless steel and plastic.

(Refer Slide Time: 04:39)



So, you have a lot of changes because of development, because of availability of manufacturing, new manufacturing techniques and now there is a demand for more and more every season and India post does not have the letter boxes to supply. In fact, I am very proud to show you the slides where this was launched as part of the launch of our design which happened in 2007.

(Refer Slide Time: 05:10)



And it launches commemorative stamps where they showing their earlier boxes in the country. The green and blue what you are seeing, it's called the TV type post box. It is actually designed by a senior professor from IDC, Professor Athavankar and all the

(Refer Slide Time: 05:20)



cities started spotting these post boxes and then again they went back to those two boxes and those are the ones which are the standard letter boxes now in the country. So, what you learn from the context? You learned the history, you learned why things are changing, why you need new products and you also look at the India post. Huge buildings, large offices, large manpower, huge amount of volume of posts.

So, they have given us very interesting insights of the organization. It is an organization is going to stay, it is an organization which has been established long back, but it is an organization which needs a lot of support to move forward.