

**Innovation by Design**  
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**Module – 7**  
**Start of section 1**  
**Lecture – 43**  
**6th C – The Crafting**  
**A letter box in stainless steel**

Good morning all of you.

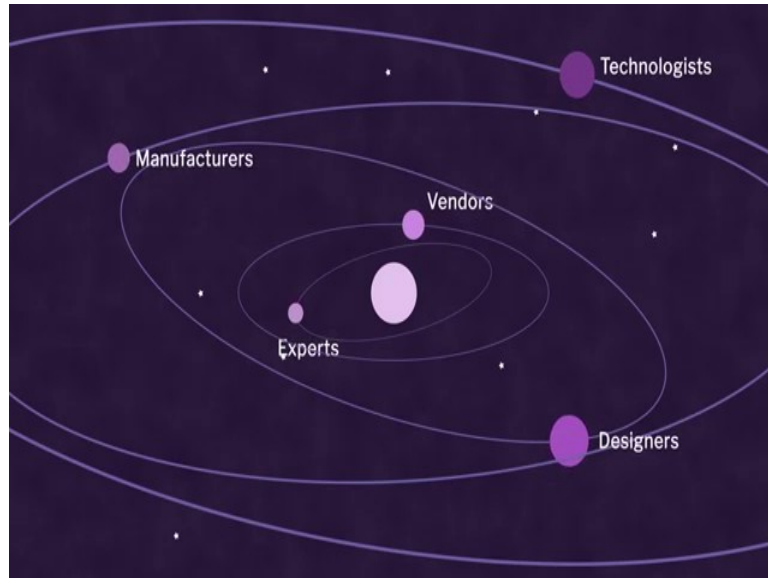
Student: Good morning sir.

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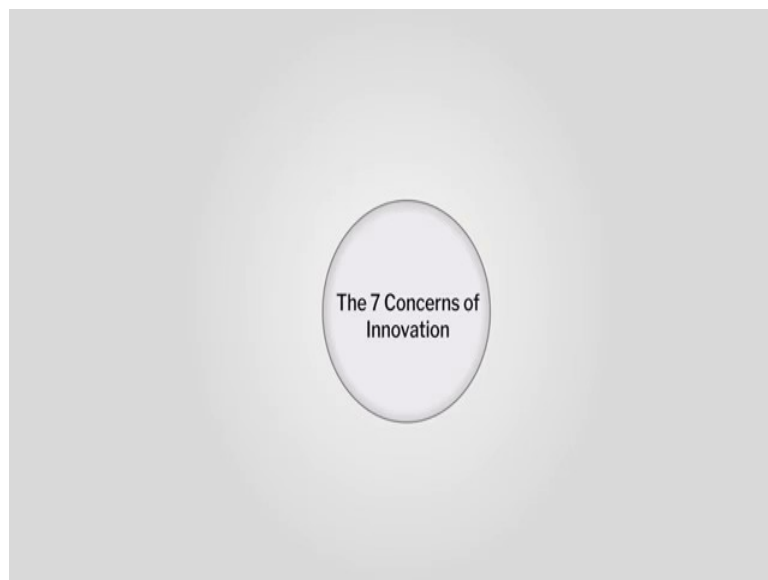
Good morning. Today we are going to discuss the 6th Concern, which is "The Crafting" you see that this stage of concern for innovation is very active with engineers and technologists.

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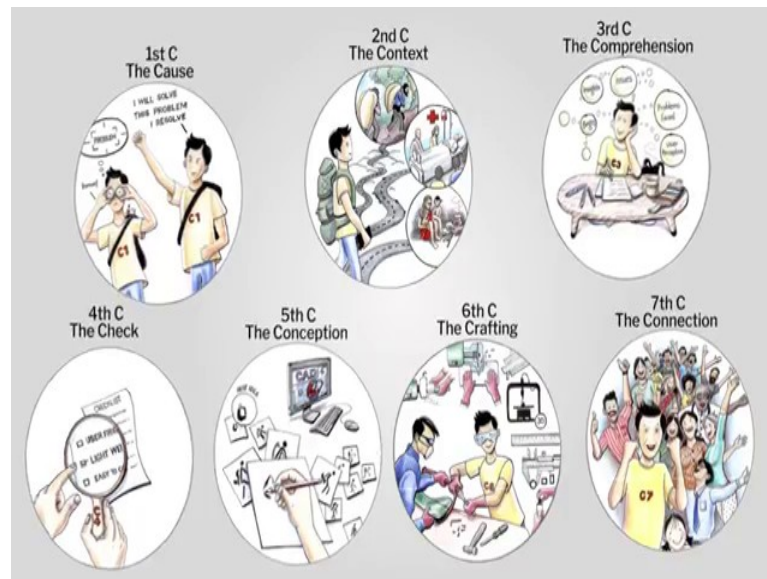


This is a stage where all the aspects of engineering come in, and designers, managers, and product developers have to work with engineers and manufacturers to get the things out. So, I will show you this intricate journey of how your product can fail; and once the product fails how getting back onto track is extremely difficult and what are the very important aspects we must consider, so that we do not reach that stage of failure.

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So, I will again like to take you back to our 7 Concerns of Innovation, especially, you know, showcasing this 7 concerns from point of view of aspects of the post box itself. So, like I was mentioning to you, we are going to check up the 7 concerns of innovation by design. We check that we, you know, stood for a cause,

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where we said we will look at the rusting post boxes,

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change the design, so that is convenient for the users, we can make it with better materials and

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also, you know, make it more comfortable for installation

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and as well as sort of good for the post man to collect the letters;

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and as well as the end user to post the letters. So, multiple levels of problems we identified and we solved all that.

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So, we also went and understood the context, who actually is the one who is collecting the letters, what are his problems, who are

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posting the letters, what are the scenarios around,

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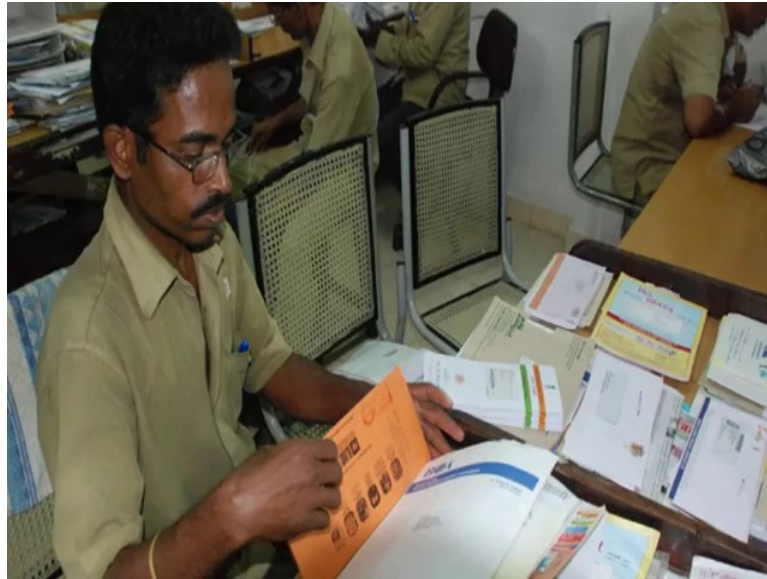
what are the problems in installation of post boxes, when there are muddy areas as well as concrete surfaces.

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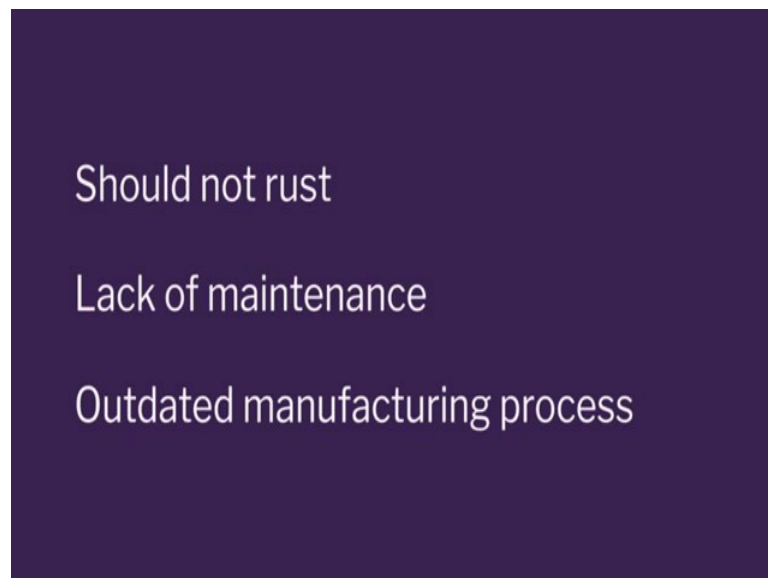
We also looked at the other aspects of posts where how they collect letters.

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How many letters are coming nowadays, are the letters completely personal or business letters coming in. So, we understood the whole context. And then we went ahead and know sort of check the understanding of both the context and the cause and found out the current key aspects, you know, this post box. We have to very clearly understand that it should not rust.

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There is a lot of lack of maintenance and outdated manufacturing processes. These are the key comprehensive points which came up then we went ahead and made up our brief.

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Single line brief:

To design a maintenance-free  
Letter box

When we say it has to be maintenance-free. Remember this one line brief given by our postmaster general said that it is maintenance-free. So, even when I fail in the product development stages, I cannot compromise on the points of the brief.

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### The Check *(Product brief)*

- ◆ Maintenance free
- ◆ Robust manufacturing *(use of contemporary materials and manufacturing)*
- ◆ Modular design *(small and large box)*
- ◆ Unique identity for India post *(should have a strong identity, should reflect a modern new image for india post)*

So, it has to be a maintenance-free box, it has to use contemporary materials if today's materials are like plastics and stainless steel and mild steel and powder coating and use those type of processes for my manufacturing. The product has to be very robust, because it is in the public domain, robust means the strong it has to be installed. It has to be modular because you need to have areas where there are people posting, a number of letters and some places they are less traffic.

So, you need to have a smaller and a larger box, at the same time you have to do design, so that you can amortize the cost and we call it modular design where you can use some parts common and some parts big. And, the last but not the least, we said India post is growing they also want to be in the field, they also becoming a very good organization. So, why cannot we think of creating a unique identity for India Post.

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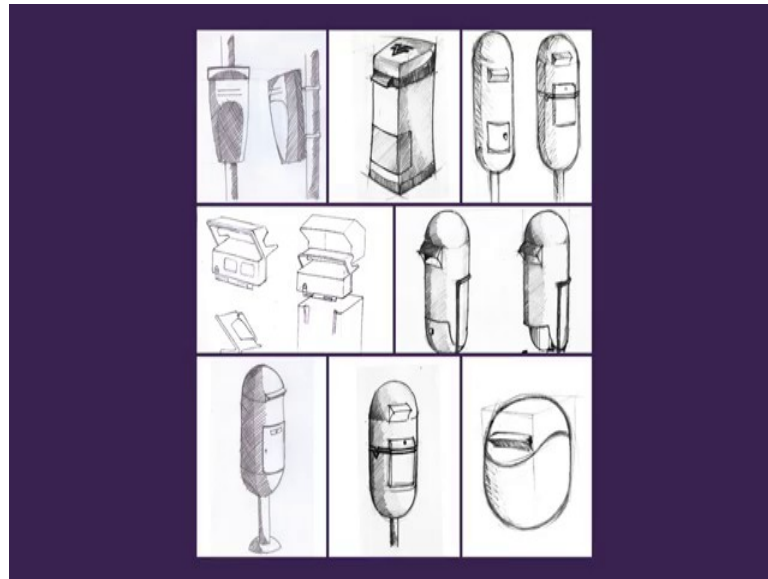


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This unique identity is very interesting. It also is an identity point of view of what we think from design, and when you have a new product, the identity becomes very important. I will just show you while we go in the journey forward.

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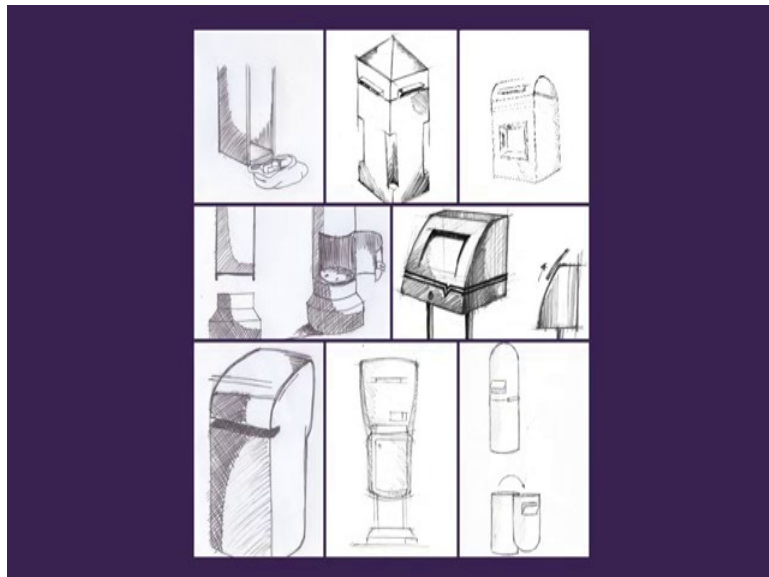
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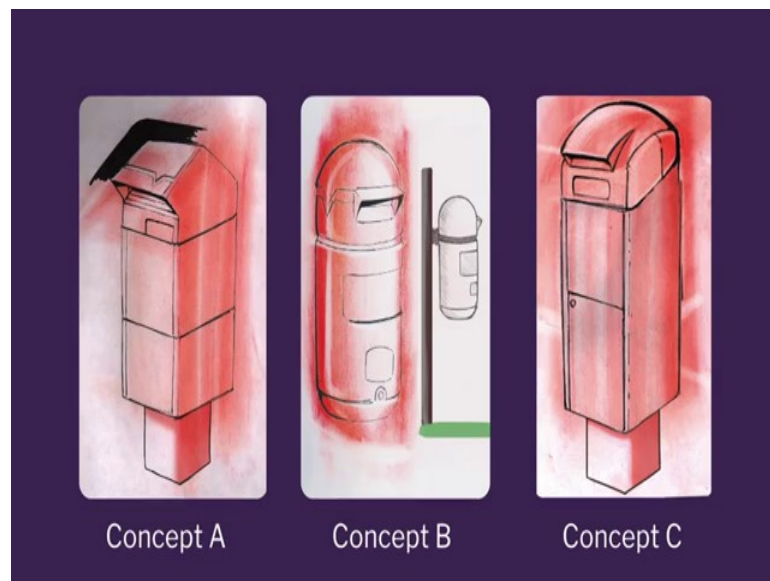


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So, then we came up with these ideas very clear, how we amalgamated the ideas and came up with concepts.

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And then how we chose the final sort of concept and took it to manufacturing, I discussed that with you. I am going to discuss this in detail today.