



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

Coimbatore – 35.



DEPARTMENT OF BIOMEDICAL ENGINEERING

UNIT – 1

PEOPLE CENTERED DESIGN & EVOKING THE ‘RIGHT PROBLEM’

This course is an introductory orientation to this topic. Today, we have industry leaders from across various industries, speaking and writing a lot about design thinking and about being customer centric. It has become center stage in many organizations which are trying to rapidly adopt a people centered approach and culture in order to be more innovative.

So, design thinking is enabling organizations to create products and services that are not just what people want, but they are also differentiators in the market. But what is design thinking? This course will help you understand that. It will also help you understand how a people centered design approach is different from traditional engineering or marketing focused approaches, and understand as well how do you create designs that are focused on the people who will use them. The simple approaches, methods, concepts and tools are versatile and adapt well to various industries, settings and projects.

This course, however, is only an introductory orientation. While in this course you will answer questions in a traditional kind of exam. Design is not just about acquiring knowledge, it is as much about doing and making. Until you put your learning's into practice, hands on, a real project you will not have internalized the content and the concepts. While the doing and making is not a part of this course I would encourage you to try and actually apply what you learn at any and every opportunity you get, because opportunities to make things better are all around us, and because design is a way of life, it is not just a subject or a discipline.

I hope you will enjoy this course as much as I have enjoyed bringing it to you, and I am sure that equipped with the understanding and the appreciation of a different way of thinking and looking at the world, you will have learnt to approach a problem in a way

that makes the outcome a lot more innovative; not innovative just for the sake of being innovative, but innovative in the service of people and I hope that going forward, you will make these approaches a way of life for yourselves.

Objectives of this Course

1. Understand the Design Thinking Approach
2. Learn how it applies to Innovating People-Product-Experience Systems
3. Apply it hereafter and ONGOING in ALL you do
Applicable in any context, situation or challenge
Design is a WAY OF LIFE

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Let's now get started. So, what are the objectives of this course? First off, to understand the design thinking approach; secondly, to learn how it applies to innovating people-product-experience systems, and we will speak a little later about this notion of people product and experience as a whole. And of course, to apply it hereafter and ongoing in everything that you do because, as I said it is applicable in any context, in any situation, in any challenge, because design is a way of life.

Terminology

1. Human Centered, People Centered
2. Design, Innovation
3. Design Thinking
4. Product, Service, System, Product-Service System
5. Experience Design

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Before we get going, some of the terminology that I will use, that you will hear me use over and over, and perhaps sometimes used interchangeably.

First off, human centered and people centered, you will hear them both. Design and innovation: We will address these and what it means in a few minutes. Design thinking: the whole approach to thinking along a particular way in order to be more innovative. Product, service, system and product-service system. So, when I speak about product, given that in today's world, it is mostly that products and services come bundled together, and for a customer it is one big system, a relationship with a company. So, often times when I say product or service it also means the bigger notion of a product-service system. And the notion of experience design: the product-service system when interacts with a user you know, it creates an experience. So, how do we design those experiences?

“The only important thing
about design
is how it relates to people.”

-VICTOR PAPANEK



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Lift please come UP
because I want to go DOWN?



I want to go DOWN



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So, these two arrows, the up and down arrows, are the two buttons of the lift. I am sure many of you have been through situations, where you have wondered should I press the up arrow or should I press the down arrow, which one is it? Because what is going on in your head is possibly, do I press down because I want to go down, or do I press up because I am thinking, lift please come up, because I want to go down. So, this is what it

looks like when you view it not just as a product, but as a people-product-experience system. There is the product, which is those two buttons and there is the people, the thinking that's going on in people's head.

Now, there are situations where this can be too expensive. For example, this sign that I saw outside the lift in a hospital. As you can imagine, in a hospital it is a time critical that the lift comes right when they need it. So, people randomly pressing, the wrong button and the lift going and then, taking longer to come to the right floor, is not acceptable. Therefore, in the hospital, they have put up this sign where they have called it 'press up to go up and press down to go down'. Why does this need a signage? That is the question that we need to think.