



SAL INSTITUTE OF TECHNOLOGY & ENGINEERING RESEARCH

Mechanical Engineering Department

Workshop

FOR

**“ DESIGN THINKING, CRITICAL THINKING AND
INNOVATION DESIGN”**

On

28th Dec, 2020.

Director & Principal: Dr. Rupesh Vasani

Session Conducted by - Asst.Prof Bhavik Padhiyar

Asst.Prof Rupal Tank

Head of Department- Ass. Prof. Manish Patel.

Name of the Discipline & the Programme:

Mechanical/Automobile engineering department, SALITER.

Department had organized a Presentation Session on "**Design Thinking, Critical thinking and Innovation Design**". The same was organized with the view of introducing the students to this knowledge .

Relevance:

This is a mid-level course designed for those who have undergone the fundamentals of design thinking. So now a day product design designer uses innovation thinking to design a product.

Objective: Applying Design Thinking, Critical thinking and Innovation

The workshop aims to validate the learning's from the understanding design thinking by translating the concepts into exercises.

In this module, students will work upon community based projects to validate their learning of Design Thinking process and try to solve real issues

Course Contents:

Here in 6th semester, emphasis will be on Observation, Empathy and Ideation

Few general points needs to be covered are as mentioned below

- Design Thinking Skills
- The psychological principles of problem solving and creativity
- The relationship between creativity, problem solving, and product performance
- How to generate and identify creative ideas
- Seeing different perspectives
- Identifying Customer Needs
- Designing and defining product Specifications
- Applied Creativity
- Prototyping

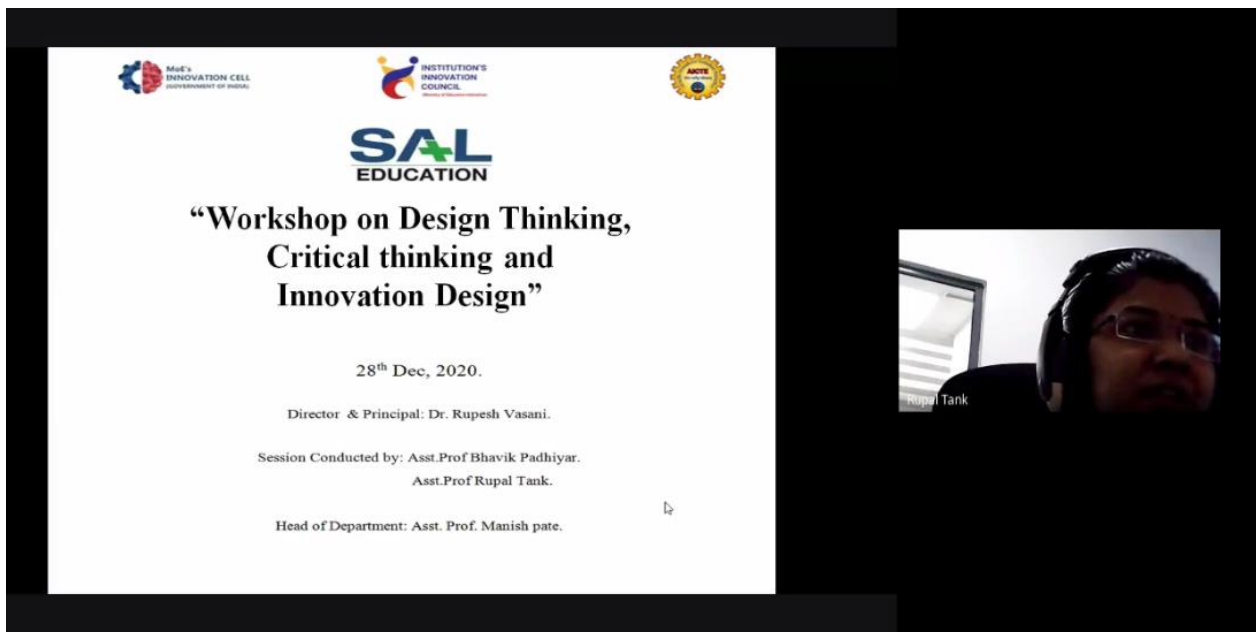
- Design for Services
- Design for Environment etc.

Designing something new involves several iterations on different stages/ components/ aspects. Before investing further resources in terms of time/ money/ manpower.

It is important to strengthen these five principles to advance for novelty. It will include several rigorous iterative efforts to make final product/process.

The medium for this session was the Online due to the COVID-19 circumstances.

101 Students joined for this session on Google meet over the link meet.google.com/kyk-rofg-uux. The presentation was conducted by **ASST.PROF BHAVIK PADHIYAR** and **ASST.PROF RUPAL TANK** at 9:00 Video Link. This two hours workshop was held in the **SRC-2(SALITER)** on **28th Dec, 2020**. There were 101 students who attended the workshop and got benefited by it.



The image shows a screenshot of a Google Meet session. On the left, there is a presentation slide with the following content:

Mae's INNOVATION CELL
GOVERNMENT OF INDIA

INSTITUTION'S INNOVATION COUNCIL

ACTE

SAL
EDUCATION

**“Workshop on Design Thinking,
Critical thinking and
Innovation Design”**

28th Dec, 2020.

Director & Principal: Dr. Rupesh Vasani.

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Asst.Prof Rupal Tank.

Head of Department: Asst. Prof. Manish pate.

On the right side of the screenshot, there is a video feed of a participant wearing glasses and a headset. The name 'Rupal Tank' is visible below the video feed.

REC B Bhavik Padhiyar is presenting

Meeting details

People (101)

- P Pallav Gajre
- P Panchal Ujas
- p pandya karmesh
- Parmar Digu
- Parmar Vishal 19_43
- Parth Dixit
- Prince Patel_18_9033
- pritesh 18.9042
- priyansh patel

Meeting de... ^

Raise hand

Turn on captions

Bhavik Padhiyar is presenting

REC B Bhavik Padhiyar is presenting

Design Principles for Solutions

Design Thinking

Functional Innovation

Emotional Innovation

Process Innovation

People (desirability)

Technology (feasibility)

Business (viability)

Supremacy Innovation

Brands

Relationships

Marketing

Meeting details

People (101)

- M Milan Tripathi
- M Mohit Pareek 17-9511
- Mohit prajapati
- Naman Patel 18.9031
- N Neil Christian
- N Nikhil Patel SALITER 17 9...
- NIRAJ PATEL
- Nisarg Dodiya 19_9030
- N Nisarg Thakker
- O Ojha Mihir 18 - 9017

You

Bhavik Padhi...

U Umang Patel

A Akash Amda...

T Thakur Vijay

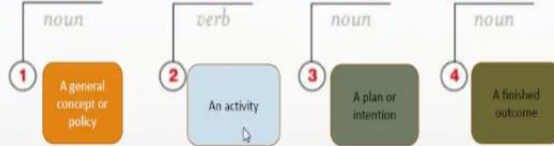
Ravi Chauha...

Tejas Hirpara

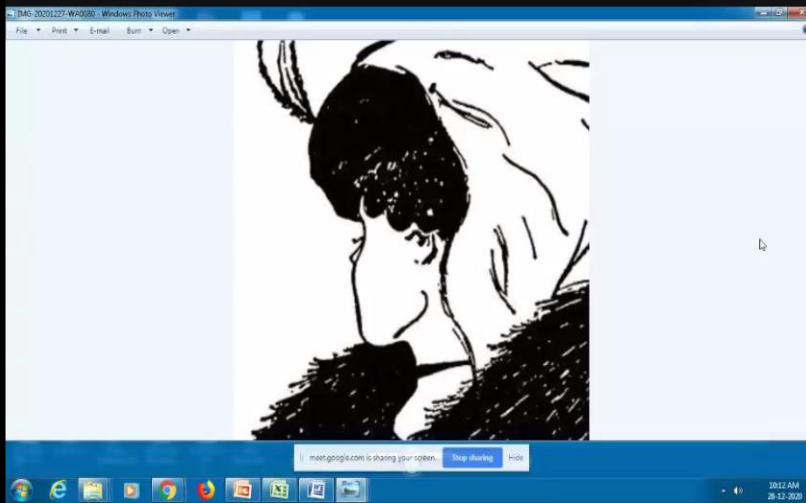
Design

What is »Design«?

design is to **design** the **design** of a **design**.



Bhavik Padhiyar



Rupal Tank

1) Noble men! There is a very important matter before the court today.

2) The raw material price is shooting up. The material cost of a sword has gone up by Rs. 10 - And ... We are adding 50,000 soldiers to our army this year.

3) I want to handle this situation without increasing the taxes. Please give your valuable suggestions as to how we should face this situation.

ARS Igniter

Bhavik Padhiyar

What is Product Process Design?

- **Process design** means the complete delineation and description of specific steps in the production **process** and linkage among the steps that will enable the production system to produce **products** systems to produce **products** of the desired quality, in the required quantity.

Rupal Tank

REC B Bhavik Padhiyar is presenting

jatin prajapati 19... and 91 more

101 9:32 AM You

Design Thinking Skills

Design Engineering is very unique and pioneering initiation of based on globally accepted and implemented techniques by designers and engineers called "Design Thinking".

You Bhavik Padhiyar

Jay Patel - SETL_19... Akash Amdavadi

V Vishal Khandla V vasu nariya

Hirani Nachiket 16 ... Nikhil Patel SALITE...

REC B Bhavik Padhiyar is presenting

Brain Storming – Ground Rule

- Defer Judgement
- Encourage wild ideas
- Build on the idea of others
- Stay focus on the topic
- One Conversation at a time
- Be visual
- Headline your idea
- Go for Quantity & not for Quality

Meeting details

People (97)

Chat

- Mohit Pareek 17-9511
- Mohit prajapati
- Naman Patel 18_9031
- Neil Christian
- Nikhil Patel SALITER 17 9...
- NIRAJ PATEL
- Nisarg Dodiya 19_9030
- Nisarg Thakker
- Ojha Mihir 18 - 9017
- Pallav Gajre

You Bhavik Padhi... Umang Patel Akash Amida... Thakur Vijay Ravi Chauha... Tejas Hirpara

Project Goal

Empowering **efficient** employees and **informed** customers, leading to a **faster, simpler** DMV experience and **safer** roads for everyone.

Next, we test our most appealing ideas with real people using 'service prototypes' -

Rupal Tank

Report Prepared by

Mrs. RUPAL TANK.
Asst. Professor,
SALITER,
SAL Education Campus.