



**INSTITUTION'S  
INNOVATION  
COUNCIL**  
(Ministry of Education Initiative)

Department of Technology  
Institute Innovation Club  
**ABHIKALPA**  
Let's Ideate, Innovate and Prosper!!



Estd. 1962  
"A+" Accredited by  
NAAC (2021)  
With CGPA 3.52

## ACTIVITY REPORT

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# **'Workshop on Design Thinking, Critical Thinking and Innovation Design'**

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Organized by  
Institution's Innovation Council,  
Shivaji University, Kolhapur

In collaboration with the  
Department of Technology  
Abhikalpa Institute Innovation Club

Venue:  
Room No. 319, Department of Technology

Day and Date:  
Saturday, 25<sup>th</sup> February, 2023, 4 pm onwards

• <b>Title of the event:</b>	Workshop on Design Thinking, Critical Thinking and Innovations in Design
• <b>Type of event:</b> (seminar/workshops/FDP/ STPP/conference/Training/ Alumni talks etc.):	Workshop (Level 1: 2 Hours duration)
• <b>Level:</b>	I
• <b>Program theme:</b>	Innovation and Design Thinking
• <b>Day and Date of the event:</b>	Saturday, 25 <sup>th</sup> February 2023
• <b>Objectives of the event</b>	<ol style="list-style-type: none"> <li>1. Introducing the concept of Design Thinking.</li> <li>2. To motivate students by blending design thinking with critical thinking, and to foster innovation that delivers customer-centric solutions</li> <li>3. How to overcome challenges with critical thinking</li> <li>4. Solve real-world problems</li> </ol>
• <b>Contents</b>	<ul style="list-style-type: none"> <li>• Basics of design, design thinking and critical thinking</li> <li>• Importance of critical thinking and innovative design</li> <li>• Discovery, invention and innovation</li> <li>• Protection of innovative ideas</li> <li>• Intellectual Property and its types</li> </ul>

**Details of the speaker:**

- **Name:** Prof. [Dr.] Shivalingappa Sapali  
Currently working as Director, Department of Technology, Shivaji University, Kolhapur. Ph.D. Guide. Design, development and experimentation of RAC machines is research area. 30 years of research and academic experience. 7 patents are awarded.
- **Designation with institution address**

Director, Department of Technology, Shivaji University, Kolhapur. Maharashtra. 416004

- **Mobiles No. :** 9423582575
- **Any online profile link:** <https://www.linkedin.com/in/dr-s-n-sapali-sapali-a8365628/>

- **Er. Harshwardhan Pandit**

Currently working as an Assistant Professor in Mechanical Engineering at the Department of Technology, Shivaji University, Kolhapur. Works to promote design thinking culture amongst students, 5 patents published and 2 patents granted. Published book on IPR, Management of Startups and Business Management. Conducts workshops on design thinking and innovation.

- **Designation with institution address:**

Assistant Professor – Mechanical Engineering, Department of Technology, Shivaji University, Kolhapur. Maharashtra. 416004

- **Mobiles No. :** 9860839117
- **Any online profile link:** <https://www.linkedin.com/in/er-harshwardhan-pandit>

• <b>Participant details:</b>	Program was open for the engineering students and faculty members.
• <b>A. Students:</b>	1. Boys: 34 2. Girls: 11 3. <b>Total: 45</b>
• <b>B. Faculty:</b>	1. Male: 9 2. Female:2 3. <b>Total:11</b>
• <b>Photographs:</b>	Attach at the end of the report
• <b>Key Outcomes of The Activity:</b>	1. Students were inspired by how the lead-by-design company solves critical problems 2. They were motivated and taught how to solve problems and come up with innovative ideas using the thinking process.

<ul style="list-style-type: none"> <li>• <b>Media coverage:</b></li> </ul>	Attach at the end of the report (if any)
<ul style="list-style-type: none"> <li>• <b>Feedback received from the guests/participants</b></li> </ul>	Attach at the end of the report (if any)

### **Introduction:**

On the Saturday, 25<sup>th</sup> February 2023, an workshop on design thinking and innovation was held by Harshwardhan Pandit, Coordinator of Abhikalpa Institute Innovation club of Department of Technology. The session was chaired by Prof. Dr. S. N. Sapali, Director of Department of Technology.

The lecture was attended by second-year and third-year mechanical engineering students, along with faculty members.. The aim of the lecture was to provide an introduction to design thinking, innovation, its need, and some examples to encourage students to think innovatively.

### **Innovation and design thinking basics:**

The lecture started with an introduction to innovation, design thinking and its importance. Er. Harshwardhan Pandit explained how design thinking and innovation is the process of creating something new or improving existing products or services. He emphasized the importance of innovation in today's fast-paced world, where there is a constant need for better and more efficient solutions. He also spoke about the different types of innovation, such as product innovation, process innovation, and business model innovation.

### **Need for Innovation:**

Harshwardhan Pandit then talked about the need for innovation in various fields, including engineering. He explained how innovation can lead to increased efficiency, reduced costs, and improved quality. He also highlighted the importance of innovation in driving economic growth and creating new jobs.

**The following points were covered in the program:**

1. **Introducing the concept of Design Thinking:** The workshop aimed to educate participants on the concept of Design Thinking, its history, and why it is essential in problem-solving.
2. **Developing critical thinking skills:** Participants were taught how to identify and analyze problems critically. This involved asking the right questions, examining assumptions, and evaluating evidence.
3. **Fostering innovation:** The workshop encouraged participants to think creatively and innovatively. Participants were taught how to generate new ideas and test them.
4. **Promoting collaboration:** The workshop encouraged collaboration among participants. Participants were taught how to work in teams, brainstorm ideas, and share insights.
5. **Enhancing problem-solving skills:** The workshop equipped participants with problem-solving skills that they can apply in their personal and professional lives.
6. **Demonstrating the importance of empathy:** Participants were informed how to empathize with their target audience. This enabled them to design products and services that meet the needs of their customers.
7. **Applying design thinking to real-world problems:** The workshop offered participants an opportunity to apply the skills learned in the workshop to real-world problems. This helped participants to see the value of Design Thinking, Critical Thinking, and Innovation Design in action.

- **Innovation Examples:**

To help students understand the concept of innovation better, Harshwardhan Pandit provided some examples of successful innovations. He spoke about the innovation in the automobile industry, such as the development of electric cars and hybrid engines. He also discussed how the healthcare industry has benefited from innovations in medical devices and treatments.

- **Importance of Innovation for Engineering Students:**

Prof. Dr. S. N. Sapali, Director of Department of Technology, then spoke about the importance of innovation for engineering students. He stressed the need for students to think critically and come up with innovative solutions to real-world problems. He also talked about the role of institutes in nurturing the innovation ability of students. Prof. Sapali, also shared the importance of institutions playing a crucial role in being instrumental and supportive in facilitating students with opportunities for innovation.

- Miss. Gayatri Gokhale was comparer.
- Mr. P. A. Prabhu, Mr. S. B. Kale, Mr. N. P. Raut, Mr. G. R. Shinde, Mr. Porlekar, Mr. M. N. Vhatkar, Mr. M. N. Jadhav, Mr. Bagwan were present.
- Ms. Gayatri Gokhale, Student Coordinator and her team organised the program.

- **Conclusion:**

In conclusion, the expert lecture on design thinking provided valuable insights into the importance of innovation, design thinking and creativity in engineering and other fields. Harshwardhan Pandit's examples of successful innovations helped students understand the concept better, while Prof. Dr. S. N. Sapali's talk emphasized the need for innovation and the role of institutes in nurturing innovation ability. The lecture was a great learning experience for students and faculty members alike, and we look forward to more such lectures in the future.



**Photo 1: Prof. S. N. Sapali speaking on Innovation.**



**Photo 2: Er. Harshwardhan Pandit speaking on Design Thinking**



**Photo 3: Participants**



DEPARTMENT OF TECHNOLOGY  
SHIVAJI UNIVERSITY, KOLHAPUR.

Attendance Sheet

Name of Program: Workshop on Design Thinking. Critical Thinking  
Class: (SY-TF) and Innovation Design.  
Day and Date: 25<sup>th</sup> February, 2023

Sr.No.	Name of Student	Class	Mobile No.	Signature
1	Prachi Pawaskar	T.Y.ME	7218609877	<u>Pawaskar</u>
2	Samiksha Divate	T.Y.B.Tech M.E.	8951365151	<u>Divate</u>
3	Om done	T.Y.B.Tech me	9834348755	<u>omb</u>
4	Prathamesh Dhula Khanamane	T.Y.ME	7559121812	<u>Prathamesh</u>
5	Sanket Kalyan Dhane	T.Y.ME	9021855973	<u>Dhane</u>
6	Aakanksha R. Morbale	T.Y.ME	8329056516	<u>Morbale</u>
7	Gayatri Adhikrao Thorat	T.Y.ME	9503183902	<u>Thorat</u>
8	Pratibha Gairwad	T.Y.ME	9767521493	<u>Gairwad</u>
9	Balange Sandip Laxman	T.Y.M.E	9307739426	<u>Balange</u>
10	Gujale Ajay Adhikrao	TYME	9373209545	<u>Gujale</u>
11	Patil Pratik Pravin	TYME	9284516865	<u>Patil</u>
12	Bansode Shivrav Shankar	TYME	8637798852	<u>Bansode</u>
13	Karade Tejas	T.Y.ME	8767159020	<u>Tejas</u>
14	Patil Sankalp Tufan	T.Y.ME	8921656505	<u>Patil</u>
15	Gherade Yogesh Maruti	T.Y.M.E	7028805646	<u>Gherade</u>
16	Rohit Dattatray Kashid	TY.ME	9511698378	<u>Kashid</u>
17	Aniket prakash Repale	TY.ME	7304841400	<u>Repale</u>
18	Dudhal Nikita Tukaram	T.Y.ME	8459119311	<u>Dudhal</u>
19	Charan Prachi Rajabhai	T.Y.ME	9579551589	<u>Charan</u>
20	Sujit Sudhakar Randive	TY.ME	7066402372	<u>Randive</u>
21	Pandhare Avinash A.	T.Y.B.Tech	7020790081	<u>Pandhare</u>
22	Shalldhar Nandkumar Sutkar	T.Y.B.Tech	9130794710	<u>Sutkar</u>
23	Mohanish Ravindra Lohar	T.Y.B.Tech	7028672619	<u>M.Lohar</u>

