

# CAD\_Phase1

---

Problem definition and design thinking are crucial steps in the process of solving complex problems and creating innovative solutions. Here's a brief overview of both concepts:

## 1. Problem Definition:

- This is the first step in any problem-solving process. It involves identifying and understanding the problem or challenge you want to address.
- Effective problem definition involves gathering information, conducting research, and engaging with stakeholders to gain a comprehensive understanding of the problem's scope, impact, and underlying causes.
- It's important to frame the problem in a way that is clear, specific, and actionable. A well-defined problem statement guides the rest of the problem-solving process.

## 2. Design Thinking:

- Design thinking is a human-centered approach to problem-solving and innovation. It emphasizes empathy, creativity, and iteration to arrive at innovative solutions.
- The key stages of design thinking typically include empathize, define, ideate, prototype, and test.
- Empathize: Understand the needs, experiences, and perspectives of the people affected by the problem.
- Define: Refine the problem statement based on insights from the empathize stage.
- Ideate: Generate a wide range of creative ideas for potential solutions.
- Prototype: Create low-fidelity prototypes or representations of potential solutions.
- Test: Gather feedback and iterate on prototypes to refine and improve the solution.

Design thinking encourages a flexible and iterative approach, where solutions are developed and refined through multiple cycles of prototyping and testing. It's a collaborative and user-centric approach that often leads to more innovative and effective solutions.

In summary, problem definition sets the stage by clearly defining the problem you want to solve, while design thinking provides a structured framework for approaching complex problems with a focus on user needs and creativity. These concepts are often used together to drive innovation and problem-solving in various fields, from product design to business strategy to social issues.