# Design Thinking

Module-2

**Necessity of Design Thinking**

# Meaning of Design Thinking

- Design Thinking is not just the property of designers — all the great inventors of engineering, science, literature, art, music, and business have used it. Design thinking supports in developing, teaching, learning, and applying strategies to solve complications in a creative manner in the projects and processes of the business.

# Definition of Design Thinking

- Design thinking is a term used to denote a set of strategic, conceptual, and practical processes in which design concepts are developed (product proposals, structures, equipment, communications, etc.). Many key concepts and aspects of design thinking have been identified through studies, across all different design fields, design concepts and design work in both laboratory and environmental contexts.
- Design considerations are also linked to the establishment of products and services within the business and social environment. Some of these guidelines have been criticized for simplifying the design process and undermining the role of technical knowledge and skills

# Features of Design Thinking

1. Design thinking understands from the perspective of the customers and provides solution for improving the product and service quality in the organization.
2. The role of design thinking is to collect feedback from the customers and employees by iteration of prototyping
3. Expanding the range of solutions to the problems identified in the organization and employee better customer and employee satisfaction
4. Enable the design thinkers to develop new products, features or services to customer and process satisfaction.
5. Providing and eco-system through the interaction with the employees, technical capabilities and customers

# Principles of Design Thinking

*Human Focused Design Thinking:* The process that understands from the perspective of the human including the employees and customers. While doing so design thinker needs to consider the individuals, beliefs, values and attitudes.

*Diversity to work in a team*: Design thinking needs to consider individuals from different background and train to work in a team. While group membership should be balanced throughout the project, it may be wise to occasionally include outside-organization participants — such as clients, suppliers, and other topic professionals — in specific modes or activities.

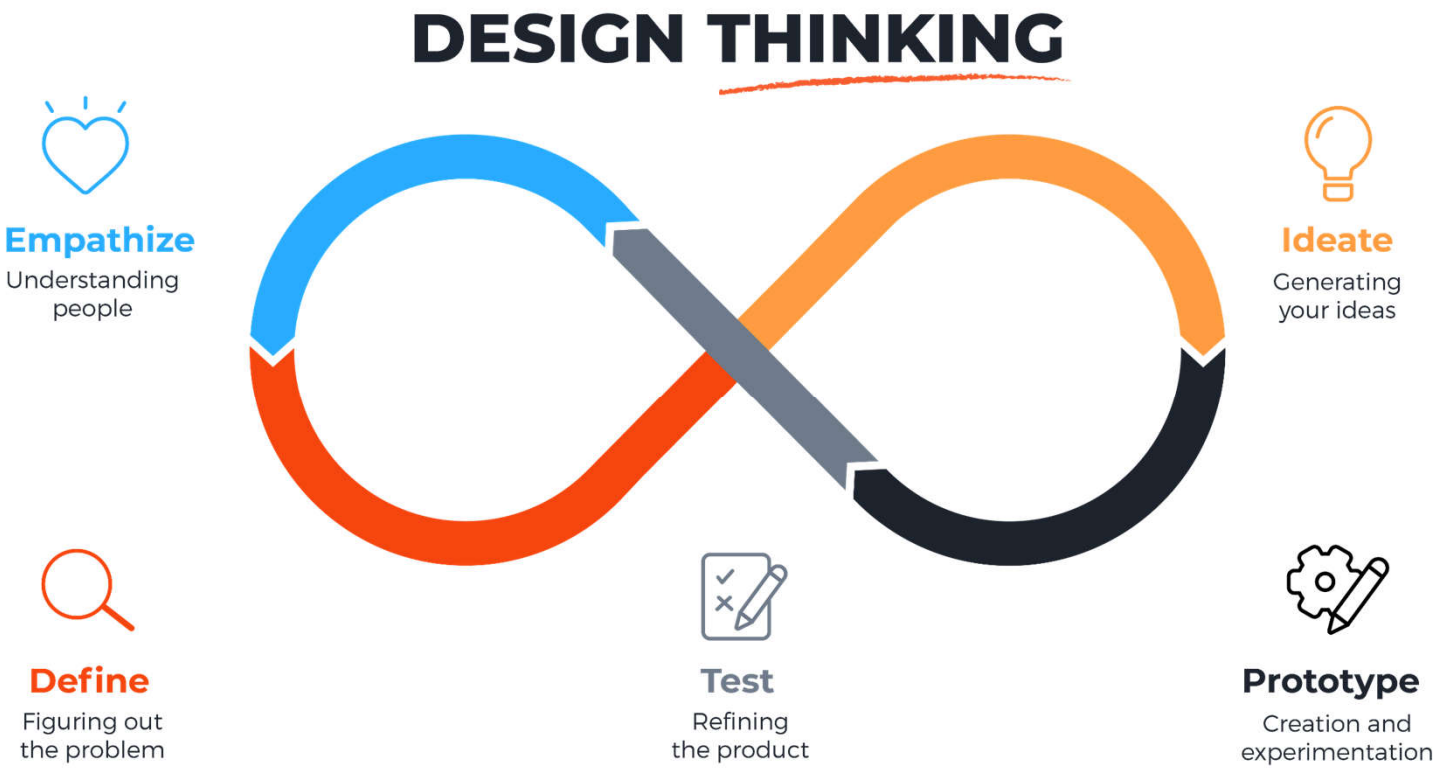
*Comprehensive*: Although details are important, design experts are also able to identify and consider relationships, collaborations, and communication between seemingly different ideas.

# Principles of Design Thinking

*Flexibility and unconventional comfort*: Design thinking is best suited to deal with problems and opportunities described in an incomprehensible way, and requires great flexibility in terms of both content and methodology (e.g., with the required repetition of modes and categories).

*Communication Skills*: Willingness to communicate and work in a variety of ways, including speaking, visual, and touch. Design experts design and build prototypes, without the perceived lack of skill or
competence.

# Stages of Design Thinking



**Stages of Design Thinking**

## Empathy:

when you feel what the other person is feeling and can mirror their expression, their opinions, and their hopes.

## Why?

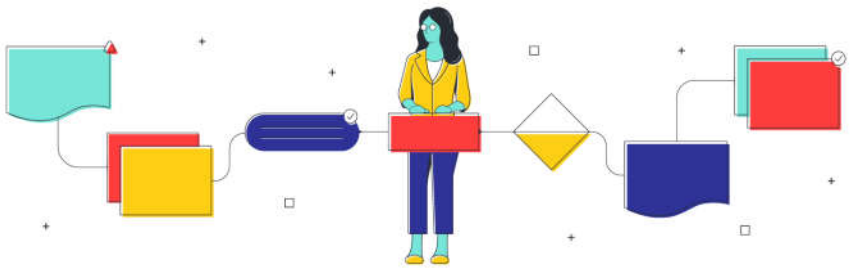
to discover people's explicit and implicit needs so that you can meet them through your design solutions.

## example

understanding how the elderly with arthritis take medication

## Define:

Defining the problem using a unique, concise reframing of the problem that is grounded in user needs & insights



## Why?

expose new opportunities by looking at things differently; guide innovation efforts; make sure we've identified something worth working on

## Ideate:

generating many possible solutions to a problem

## Why?

generate maximum innovation potential in a short amount of time; incorporate different perspectives; build excitement

## example

design thinking for better healthcare derived from experience from hotel and airline industries

**Prototype:**

is creating a concrete embodiment of a concept which becomes a way to test your hypotheses get you closer to your final solution

**Why?**

to gain empathy; to explore; to test; to inspire

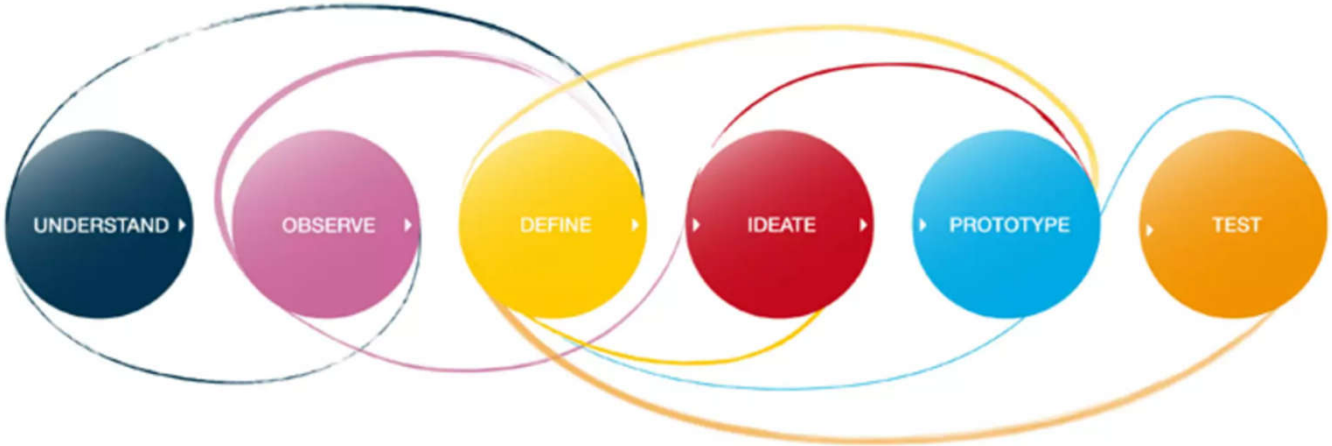
**Test:**

test your concept with users using your prototypes/

**Why?**

To understand how users understand and use the concept. It is a way of continuing to gain empathy for your users and evaluate your solution.

# non linear process



# Benefits of Design Thinking

*1. It helps to overcome creative challenges:* Design Thought gives you the freedom to look at problems in many ways. It involves a lot of brains to come up with the best ideas, which helps to improve students 'knowledge.

*2. Helps to meet customer requirements effectively:* As we discussed earlier, design thinking involves developing prototypes when testing and using customer feedback repeatedly to ensure quality assurance. By following a successful design idea, your product will eventually meet the needs of customers.

*3. It helps to increase your knowledge of Design Thinking:* You will do a lot of experiments in the design thinking process. You will always try to improve your model by using customer feedback to ensure customer satisfaction.