

# Overview of Design Thinking

## ➤ What is Design Thinking?

Design thinking is a blend of logic, powerful imagination, systematic reasoning and intuition to bring to the table the ideas that promise to solve the problems of the clients with desirable outcomes. Design thinking is a methodology that designers use to brainstorm and solve complex human-centric problems. It's solution-based and user-centric rather than problem-based. This means it focuses on the solution to a problem instead of the problem itself.

## ➤ History of Design Thining:

- It is a methodology of design that originated in Stanford University and is today considered to be one of the most sought after skills in the industry.
- The concept of design thinking began only with a few domains under consideration, but is now found to be applicable to a myriad of disciplines, ranging from medicine and aeronautics to management, operations, and human resource planning.

- Stanford University in the United States and the University of Potsdam in Germany have also promoted design thinking, citing it as one of the most useful skills for professionals.
- The references of using design as a way of solving complex problems in a simplified manner is seen in many books Like 'The Sciences of the Artificial', authored by Herbert A.Simon in 1969. 'Experiences in Visual Thinking', authored by Robert McKim in 1973.In 1987, Peter Rowe's book titled, "Design Thinking" described methods and approaches that planners, designers, and architects use.

- The work of Robert McKim was consolidated by Rolf Faste at Stanford University during 1980s to 1990s and then, David M. Kelly adapted design thinking for business interests. David M. Kelly founded IDEO in 1991

# Features of Design Thinking:

- Finding simplicity in complexities.
- Having a beautiful and aesthetically appealing product.
- Improving clients' and end user's quality of experience.
- Creating innovative, feasible, and viable solutions to real world problems.
- Addressing the actual requirements of the end users.

# Use of Design Thinking:

- How to optimize the ability to innovate?
- How to develop a variety of concepts, products, services, processes, etc. for endusers?
- How to leverage the diverse ideas of innovation?
- How to convert useful data, individual insights and vague ideas into feasible reality?
- How to connect with the customers and end-users by targeting their actual requirements?
- How to use the different tools used by designers in their profession for solving your customers' problems?

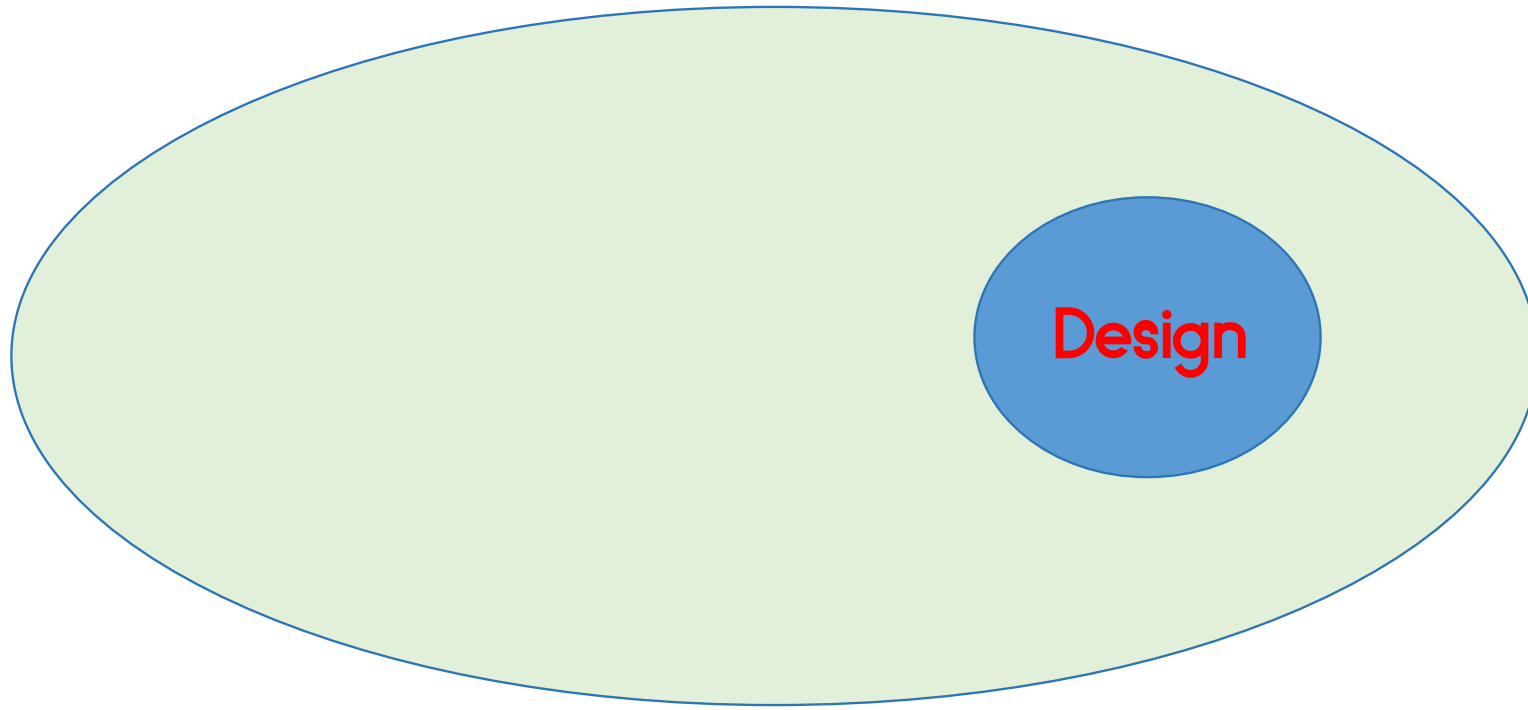
# Applications of Design Thinking:

- Design thinking is halfway between analytical thinking and intuitive thinking. Analytical thinking involves purely deductive reasoning and inductive logical reasoning that utilize quantitative methodologies to come to conclusions. However, intuitive thinking refers to knowing something without any kind of reasoning.
- Business: Design thinking helps in businesses by optimizing the process of product creation, marketing, and renewal of contracts

- Information Technology: The IT industry makes a lot of products that require trials and proof of concepts. The industry needs to empathize with its users and not simply deploy technologies.
- Education: The education sector can make the best use of design thinking by taking feedback from students on their requirements, goals and challenges they are facing in the classroom.
- Healthcare: Experts worldwide are concerned about how to bring quality healthcare to people at low cost.



# Design vrs Design Thinking:



**Design Thinking**

# Overview of Design Thinking Process:

Phase	Tool and Methods
Understand	<ul style="list-style-type: none"><li>➤ Create a persona</li><li>➤ Use the Hook Canvas</li><li>➤ Job to be done framework</li><li>➤ Create Future user</li></ul>
Observe	<ul style="list-style-type: none"><li>➤ Complete Empathy Map</li><li>➤ Perform AEIOU</li><li>➤ Check Critical assumption</li><li>➤ Need finding discussion including open questions</li></ul>

- Lead Users
- WH questions
- Be Mindful
- Use Talking Stick
- Include Empathy in UX Design

### Define Point of View

- Carry out 360° view
- Use 9 window tool and daisy Map
- Formulate sentences for PoV

### Ideate

- Hold brainstorming session
- Apply creativity technique
- Gain depth of ideas
- Scamper
- Structure, Cluster, Documents the ideas
- Idea communication sheet

<b>Prototype</b>	<ul style="list-style-type: none"><li>➤ Develop Prototype</li><li>➤ Different kinds of prototype</li><li>➤ Boxing and selfing</li><li>➤ Hold prototyping workshop</li></ul>
<b>Test</b>	<ul style="list-style-type: none"><li>➤ Test Procedure</li><li>➤ Use feed back capture grid</li><li>➤ Conduct A/B testing</li><li>➤ Experiment Grid</li></ul>
<b>Reflect</b>	Use Retrospective board