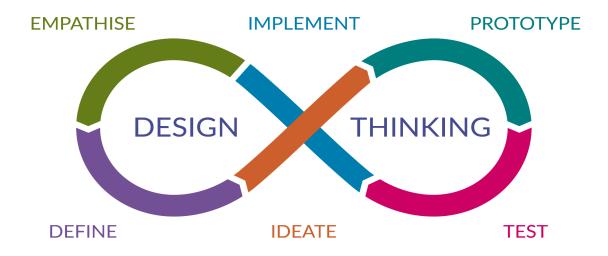
#### **DESIGN THINKING OVERVIEW:**

→ Design thinking is a non-linear, iterative process that teams use to understand users, challenge assumptions, redefine problems and create innovative solutions to prototype and test.



→ Design thinking fosters innovation. Companies must innovate to survive and remain competitive in a rapidly changing environment. Generally design teams use design thinking to tackle the unknown problem in the system.



## Overall process of Design Thinking



## **Empathize:**

Understand the needs, desires, and pain points of the target users.

#### Define:

Clearly articulate the problem and identify the user's needs.

### Ideate:

Generate a wide variety of ideas to address the problem.

#### **Prototype:**

Create low-fidelity representations of the ideas to test with users.

#### Test:

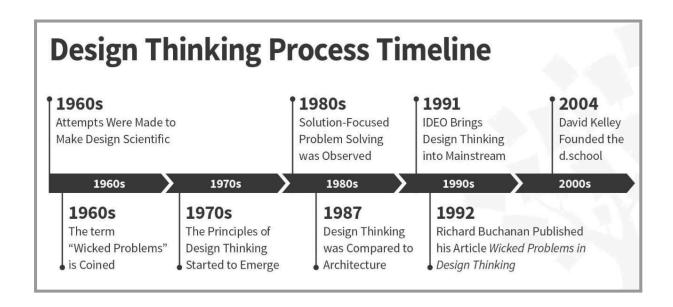
Gather feedback from users to refine and improve the prototypes.

### **Benefits Of Design Thinking:**

- Design Thinking Has A Lot Of Awesome Benefits.
- It Helps Us To Understand People Better, So We Can Create Products And Solutions That Really Meets Their Need.
- It Encourages Us To Think Creatively And Come Up With Innovative Ideas.
- It Also Helps Us To Solve Problems Faster Because We Test And Iterate Our Solutions.
- Plus, It's A Fun And Collaborative Process That Brings People Together To Create Something Amazing.
- So, The Benefits Are Like Having A Superpower That Makes World A Better Place.

### **History of design thinking:**

→Design thinking has a rich and fascinating history, evolving from its roots in design methodologies to the widely adopted human-centred approach it is today. The journey was filled with ups and downs but ultimately led to growth and learning.



# 1. Early Seeds (1950s-1960s):

**Psychological studies on creativity:** Pioneering work by Alex Osborn and others laid the groundwork for understanding creative processes.



Name: Alex Osborn

**Methods of design:** Studies explored design processes across various fields, laying the foundation for structured approaches.

**Wicked problems defined:** Herbert Simon introduced the concept of complex, interrelated problems requiring iterative solutions.

### 2. Taking Shape (1970s-1980s):

**Human- centred design emphasised :** Designers like John Arnold focused on understanding user needs and designing solutions accordingly.



Name: John Arnold

**Stanford d.school established:** IDEO's (Industrial Design Engineering and Operations) David Kelley and Roger Martin brought design thinking to Stanford, fostering its academic exploration.

**Problem-solving frameworks developed:** IDEO's "design kit" and Roger Martin's "thinking in systems" offered practical tools.

### 3. Maturation and Spread (1990s-Present):

**Global adoption:** Design thinking gained traction in businesses, education, and social innovation.

**Focus on empathy and iteration:** Techniques like user research and rapid prototyping became central to the process.

**Digital tools and resources:** Online platforms and communities facilitated collaboration and knowledge sharing.

#### 4. Today and Beyond:

**Continuous adaptation:** Design thinking continues to evolve, addressing new challenges and integrating emerging technologies.

**social impact:** The focus is on designing solutions that benefit all stakeholders and address global issues.