INNOVATION & ENTREPRENEURSHIP

LECTURE 3

Q. Statements about design thinking:

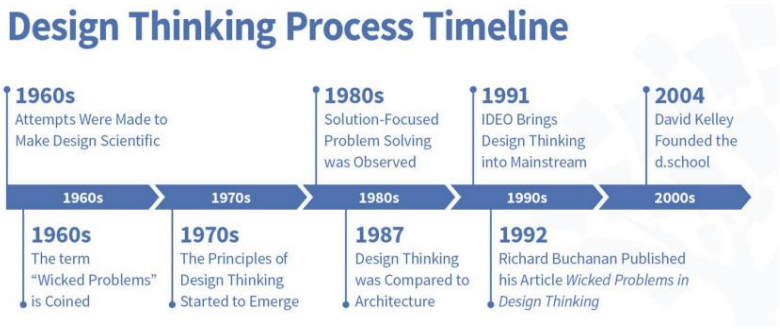
- Design thinking is not about aesthetic looks
- It is not about thinking about the design

"Design is not just what it looks like and feels like. Design is how it works" – Steve Jobs

Q. What is Design thinking?

- Design thinking is the process to solve problems taking 'USERS' into main consideration.
- Originated at Stanfors University in 1960s and finally accepted as a problem solving method in 2004 – **David Kelly**
- Human centred approach- Not a product centred
- It's a method that enhances innovation

Q. Design Timeline:



Q. Steps of the Stanford Design Concept:

- **EMPATHISE**
  - Interviews
  - Shadowing
  - Seek to understand
  - Non-Judgmental
- **DEFINE**
  - Personas
  - Role Objectives
  - Decisions
  - Challenges
  - Pain Points
- **IDEATE**
  - Share ideas All ideas worthy
  - Diverge/Converge
  - "Yes and" thinking
  - Prioritize
- **PROTOTYPE**
  - Mockups
  - Storyboards

    - Keep it Simple
    - Fail fast
    - Iterate quicky
- **TEST**
    - Understand impediments
    - What works?
    - Role Play
    - Iterate Quickly

Q. What are the main features of design thinking?

- Human centred
- Mindful of process
- Show; don't tell
- Bias towards action
- Radical collaboration
- Culture of prototyping

Q. EMPATHISE- Empathise by engaging with the users

- Foundation of human-centred design process where you observe and engage with users and immerse yourself to uncover their needs.
- Look for issues they may or may not be aware of.
- Think in terms of guiding innovation efforts and identify the right users to design for.
- Look to discover the emotions that guide their behaviours

Q. DEFINE- your users' problem and needs, and articulate your insights

- Unpack and synthesize your empathy findings into compelling needs and insights, and scope a specific and meaningful challenge.
- It's critical to the design process because it explicitly expresses the problem you are striving to address through your efforts.
- Often, in order to be truly generative, you must first reframe the challenge based on new insights you have gained through your design work.

Q. IDEATE- solutions by challenging your assumptions and creating innovative ideas

- It is the mode of design process in which you aim to generate radical design alternatives.
- Mentally it represents a process of "going wide" in terms of concepts and outcomes- it is a mode of "FLARING" rather than "FOCUS".
- Step beyond obvious solutions and try and harness collective perspectives. Uncover unexpected areas of exploration.
- Create fluency (volume) and flexibility (variety) in your innovation options. Get the obvious solutions out of your heads and think differently. This is where you can explore wild ideas, while trying to stay on topic.

Q. PROTOTYPE- A lightweight solution to your problem

- Getting ideas and explorations out of your head and into the physical world.
- It can be anything that takes a physical form- wall of post-it notes, a role playing activity, a space, a model, an interface or even a storyboard.

- Learn- solve disagreements. Start a conversation. Fail quickly and cheaply. But still manage the solution-building process.

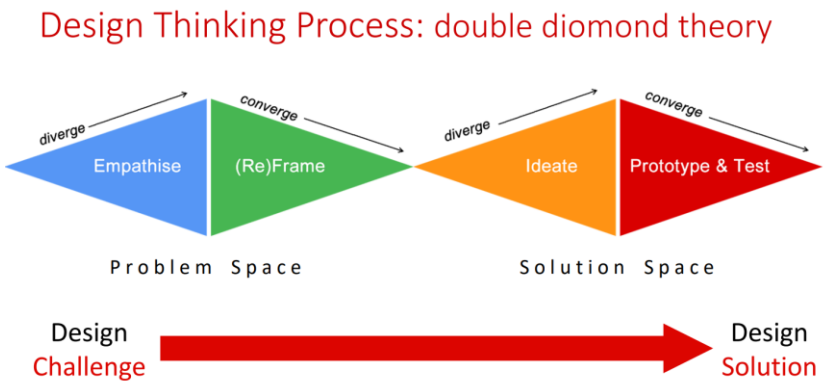
Q. TEST- solutions with actual users

- A chance to get feedback on your solutions to make them better, and continue to learn about your users. Prototype as if you know you're right, but test like you know you are wrong.
- Test to refine your prototypes and solutions, to learn more about your user, with the goal of testing and refining your POV.

Q. Design thinking process, methods and tools.

- **Empathise- Understand your customers**
  - User feedback, Persona and empathy map, survey forms
- **Define- clear project/business objectives**
  - Point of View, How might we, design brief, stakeholder map, context map, opportunity map and customer journey map
- **Ideate- Explore Ideas and solutions**
  - Ideation methods, divergent method, convergent method, prioritization map, affinity map and ideas evaluation matrix.
- **Prototype- Build and visualize ideas and solutions**
  - Physical prototypes, wireframes and story boards, show and tell
- **Test- Review and Decide**
  - User feedback and prototype evaluation, customer validation

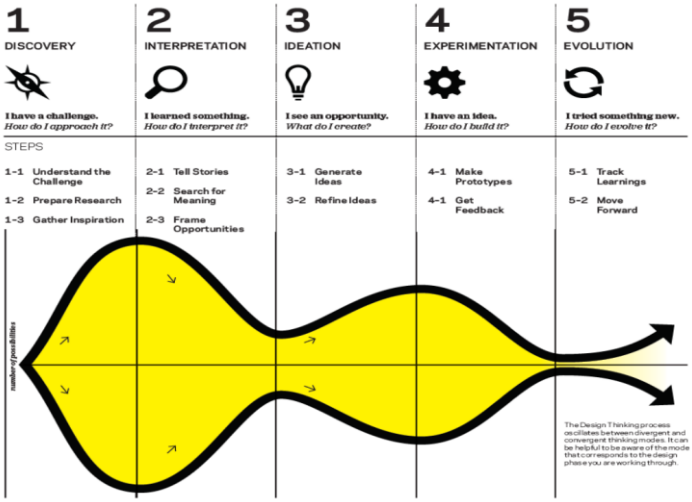
Q. DOUBLE DIAMOND THEORY



Q. Design thinking by 'DEAO V2.0'

- **Discovery-** I have a challenge. How to approach it?
  - 1: Understand the challenge
  - 2: Prepare Research
  - 3: Gather Inspiration
- **Interpretation-** I learned something- How to interpret it?
  - 1: Tell Stories
  - 2: Search for meaning
  - 3: Frame opportunities

- **Ideation-** I see an opportunity- What do I create?
    - 1. Generate ideas
    - 2. Refine Ideas
- **Experimentation-** I have an idea- How do I build it?
    - 1. Make prototype
    - 2. Get feedback
- **Evolution-** I tried something new- How do I evolve it?
    - 1. Track learnings
    - 2. Move forwards



Q. Difference in Design and System Thinking

DESIGN THINKING	SYSTEM THINKING
Focus on people and their needs	Focus on the system and the relationship between the parts
Intuitive, empathetic, iterative	Systematic, analytical and multi-dimensional
Carry out many iterations quickly	Gradual refinement of the system
Visualization and prototyping	Mapping and modelling

It is a problem solving approach that involves understanding people's need and empathising the challenges to create a needful solution