

## **BENGKEL ADVOKASI SERVICE-LEARNING MALAYSIA – UNIVERSITY FOR SOCIETY (SULAM)** SERVICE LEARNING MALAYSIA UNIVERSITY FOR SOCIETY

20 Mei 2024 (Isnin) | Kementerian Pendidikan Tinggi





## BRIDGING GAPS WITH DESIGN THINKING: INNOVATIVE APPROACHES IN SULAM

### **Overview**

Introduction to Design Thinking Core Principles in Design Thinking Case Study

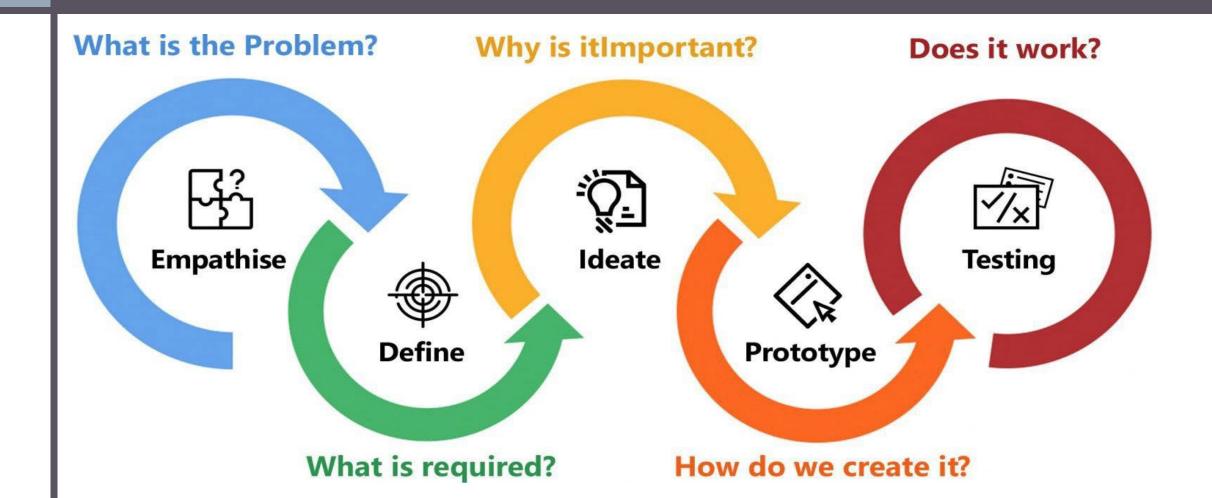
## INTRODUCTION TO DESIGN THINKING



### **DESIGN THINKING**

- A human-centered, iterative problem-solving process commonly used in product design and business innovation.
- It involves five main phases: Empathize, Define, Ideate, Prototype, and Test.
- The goal is to foster creativity and innovation to solve complex problems by focusing deeply on the needs and experiences of the people you're designing for

### FIVES PHASES IN DESIGN THINKING



### WHY IS IT IMPORTANT IN DESIGN THINKING?

- Promotes critical thinking, creativity, and practical problem-solving skills among students.
- Encourages collaboration and empathy, as students learn to understand and address real-world issues from the perspectives of those affected



## CORE PRINCIPLES IN DESIGN THINKING

#### **Methods to Gather Insight**

- Surveys: Useful for collecting quantitative data from a larger group.
- Interviews: provide qualitative insights into the feelings, experiences, and motivations of community members which can uncover deeper issues.
- Observation: Involves watching and noting how people interact with their environment and each other within the context of their daily lives.

#### **Deep Engagement with Community**

Build Trust: build relationships and trust. Transparency about the goals and processes of the project.

Be Inclusive: Diverse range of voices and perspectives in the research phase.

Active Listening: Train students and participants in active listening skills.

Feedback Loops: validates information

### **1. Emphatizing with the Community:** Empathy: The Heart of SULAM

Techniques include:

•Problem Statement: Clear, concise problem statement that focuses on specific needs. The statement should be human-centered, reflecting real issues faced by real people.

•5 Whys Technique: cause-focused perspective.

•How Might We (HMW) Questions: Transform problems into opportunities using "How might we" questions: creative solutions and innovative ideas.



### 2. DEFINING THE PROBLEMS: Articulating community needs

Brainstorming: Brainstorming sessions: Engaging in openmindedness, fostering unconventional ideas. Emphasize the significance of establishing a secure environment where every person feels at ease in expressing their opinions.

Brainwriting: Participants write ideas on cards or sticky notes, which are then passed around for others to expand upon, allowing for quieter members to contribute just as actively.

SCAMPER Technique: Substitute, Combine, Adapt, Modify, Eliminate, and Reverse.

### **3. IDEATION TECHNIQUE: Fostering Creativity in Problem Solving**

"There is nothing new under the sun, but there are lots of old things we don't know."

### SCAMPER TECHNIQUE

| S          | C       |       |                     | P                     |              | R       |
|------------|---------|-------|---------------------|-----------------------|--------------|---------|
| Substitute | Combine | Adapt | Modify /<br>Magnify | Put to<br>Another Use | Eliminate    | Reverse |
| QO         |         |       |                     | $(\rightarrow +)$     | $\mathbf{x}$ | çoç     |

- Encourages active learning: test theories and ideas in real-world scenarios; designing a product, service, or digital application
- Experiment different aspects of solutions, learning to adapt based on feedback and iterate to improve their designs.
- Quick feedback, refining ideas, (solution: physical product, a service workflow, or a software interface).
- Abstract problems more concrete.

### 4.PROTOTYPING SOLUTION: Prototyping As A Tool For Learning

- 1. METHOD OF COLLECTING FEEDBACK: Survey, focus group discussion and user testing
- 2. ADAPTING SOLUTION BASED ON COMMUNITY FEEDBACK: Responsive Adaptation and emphasize the importance of establishing continuous feedback loops that allow for ongoing adjustments.

# **5. TESTING AND FEEDBACK: Iterative testing and improvement**

### **CASE STUDIES**

**Situation 1**: Students with disabilities face navigation challenges on a university campus.

**Situation 2**: A local community has low engagement in preventative health services.

**Situation 3**: A significant amount of food waste is generated by campus dining services.

**Situation 4**: Large volumes of used cooking oil are disposed of improperly in certain area, causing environmental issues.

### THANK YOU