



# DESIGN THINKING

Perancangan Interaksi - Information Systems - Telkom University - Genap 1819

# Why Design Thinking?

## Traditional Approach

Workflow:

1. Defining Problems
2. Gathering Data
3. Making Possible Solution
4. Ranking and Choosing most feasible Solution

- Linear
- Structured
- Needs sufficient data input in the beginning



# Why Design Thinking?

## Design Thinking

Workflow:





1. Empathizing by asking WHY
2. Defining Solution Problems
3. Ideating some possible solution
4. Prototyping them as products
5. Testing to find out what is the best solution

- Flexible Structure
- Allows iteration
- Data input is continuous



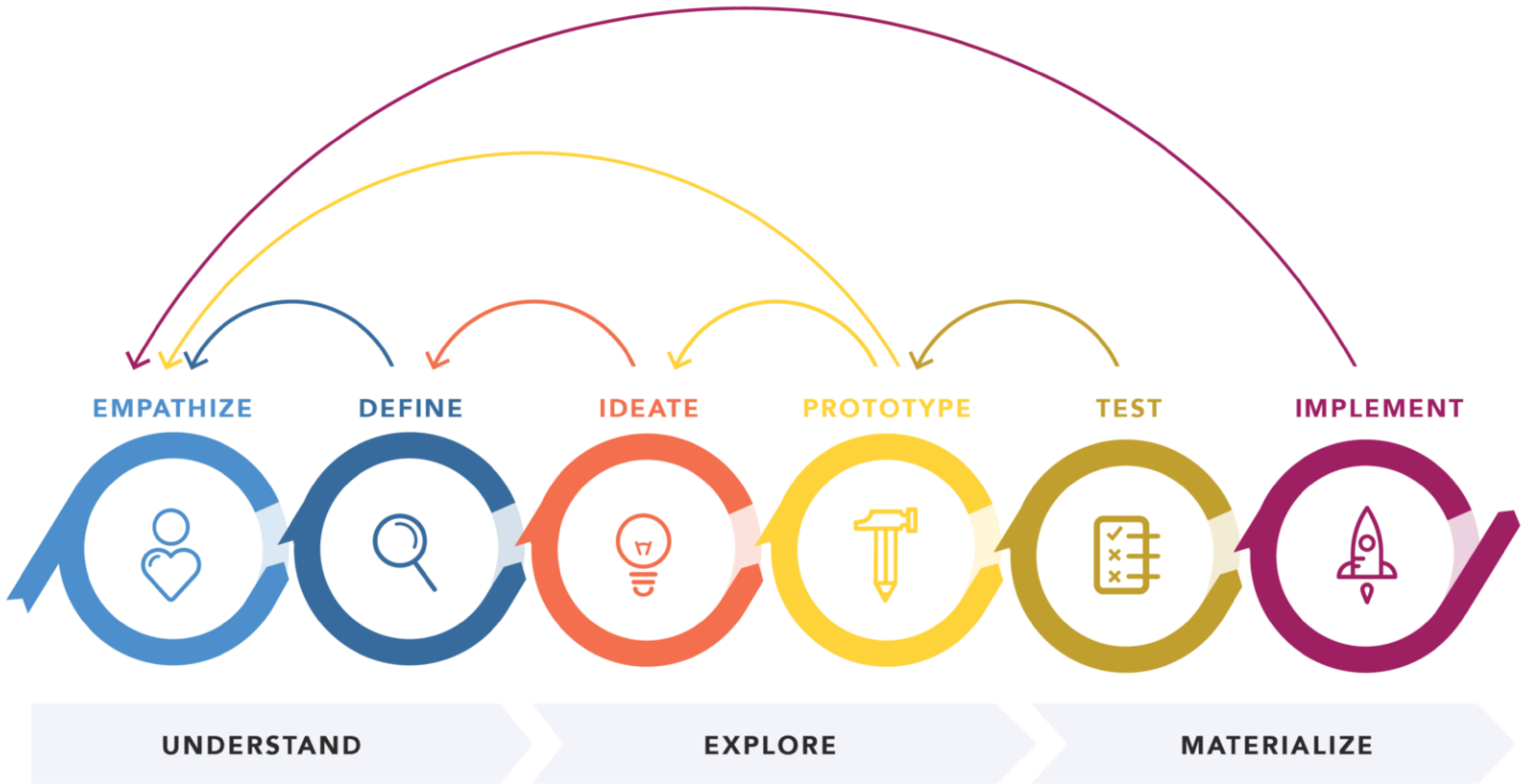
# What are the differences?

## Traditional approach

-  Lots of documentation
-  Scared of failing
-  Certainty is the key
-  Focus on the solution
-  Make perfect for the first time
-  Talk about the ideas

## Design Thinking

-  Show the performance
-  Learn from failure
-  Embrace ambiguity
-  Focus on human values
-  Keep iterating
-  Make the ideas



# Design Thinking Mindsets



**Empathy**



**Optimism**



**Embrace Ambiguity**



**Make It**



**Learn From Failure**



**Iterate, ITERATE**



**Creative Confidence**

- ✓ W10 - Empathize
- ✓ W11 - Define & Ideate
- ✓ W12 - Ideate & Prototype
- ✓ W13 - Adobe XD Workshop
- ✓ W14 - Prototype & Test
- ✓ W15 & W16 - Presentation

# JADWAL



# Project Presentation

1. Goal: membuat prototype sebuah aplikasi mobile dan website

2. Presentasi

[https://docs.google.com/presentation/d/1Qo2O5a9EI66CfdNjGDkm4xiicAE2az\\_ECiKrUhoRPnU/edit?usp=sharing](https://docs.google.com/presentation/d/1Qo2O5a9EI66CfdNjGDkm4xiicAE2az_ECiKrUhoRPnU/edit?usp=sharing)

3. Role-playing - ceritakan bagaimana user menggunakan aplikasi

4. Demo prototype





# Empathize

Know the people you are designing for, so you understand their needs better.

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# What is empathize?

## Empathy

Empathy is the capacity to step into other people's shoes, to understand their lives, and start to solve problems from their perspectives.



# What is empathize?

## How to empathize?

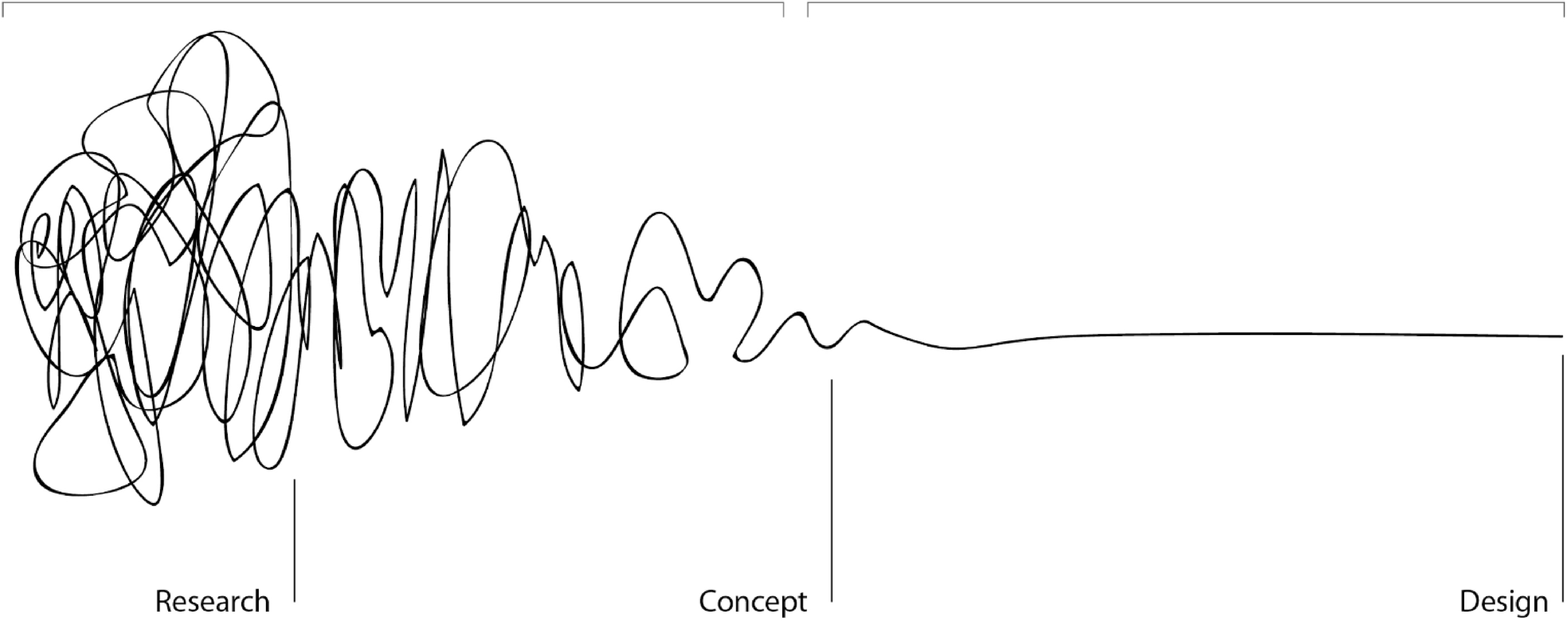
Do research

- Interview
- Observation
- Survey
- Focus group discussion



Uncertainty / patterns / insights

Clarity / Focus



Research

Concept

Design

Groupwork  
Hands on time

# Pick a Theme

5:00

1. Pick one theme/topic to work on
2. Can be from your usability testing theme
3. Discuss with your group
- 4.5 minutes!

# Assumption Dumption

10:00

1. Silently
2. Write as many **problems** you think users have about this theme
3. Write on post-it
4. Stick it on the flipchart paper
5. 10 minutes!

# Assumption Dumption

2:00

1. Present and discuss your problems
2. 2 minutes each team member



# VOTE

2:00

1. Use your dot sticker to vote
2. Vote 3 the most important problems to solve
3. Silently, **NO DISCUSSION!**
4. 1 minutes



# Interview Planning: User Profile

## Who is your user?

- Name, Age, Occupation, Location, Relationship Status
- Likes
- Goals
- Personality

## What does their daily routine look like?

Imagine what your end-user spends their day doing. What do they prioritise? What do they care about? You can then use this to design something that fits into their daily routine.



# Interview Planning: Dive Deeper

1. Critical Incident Technique
2. Bright Spots
3. Recalling a specific time:
4. Life cycle of a particular object
5. 5 Whys - ask as you go

# Critical Incident Technique

- Critical incident technique emphasizes a **specific, recent incident**. The incident can be a situation that was frustrating, surprising, annoying or even funny.
- **Ask the person to describe the incident**, including what happened and why it was memorable.
- **Ask for as many specific details as possible**, then encourage the person reflect on why it was not typical.
- Usually, the person will give an example of a breakdown that occurred, followed by a **description of the "normal" way things should work**.

# Bright Spots

- Although negative critical incidents are more memorable and help to uncover problems that need to be resolved, people also find it easy to remember bright spots, **situations in which something worked particularly well.**
- Even more interesting are the situations in which the person found a solution to a problem, by adapting either the technology, the behavior or the situation.



# Life cycle of a particular object

- A variation of the critical incident technique involves **asking the person to describe the events of a specific time and day**, say, at 11:00 last Thursday.
- Even if nothing memorable occurred on that day, the person is likely to explain a **'typical' day**; including a number of typical breakdowns.
- Often, people continue by describing other interesting examples and discuss other kinds of breakdowns that can occur during their work.
- In general, **aim for specific details first**, then ask for generalizations. Use this interview technique to contrast the "official" view of the work and with what actually happens.

# Recalling Specific Time

- Another variation is to simply ask the person to **select an “interesting” object to describe.**
- For example, find a document, visible somewhere on the desk, wall or computer screen, and ask for its life history.
- When did it arrive? Who wrote it and why? What has happened to it since? What is likely to happen to it next?
- By focusing on the specifics, you can also learn how typical or atypical the situation surrounding this document is, which can spark other stories about related objects and the work practices that surround them.

# 5 Whys

- An iterative interrogative technique used to explore the **cause-and-effect** relationships underlying a particular problem.
- The primary goal of the technique is to determine the **root cause** of a defect or problem by repeating the question "Why?".





# Write Interview Questions

1. Write down questions you want to ask user
2. Write on post its, stick it on flipchart paper
3. Work and discuss together
4. 15 minutes



- ✓ Bring your design thinking supplies
- ✓ Interview 1 user each team member
- ✓ Bring results of interview/interview notes
- ✓ Support and collaborate with your team member

NEXT  
WEEK





# Thanks!

Any questions?