

Chapter 6 of Design of Everything Tigist Berhe Design Thinking

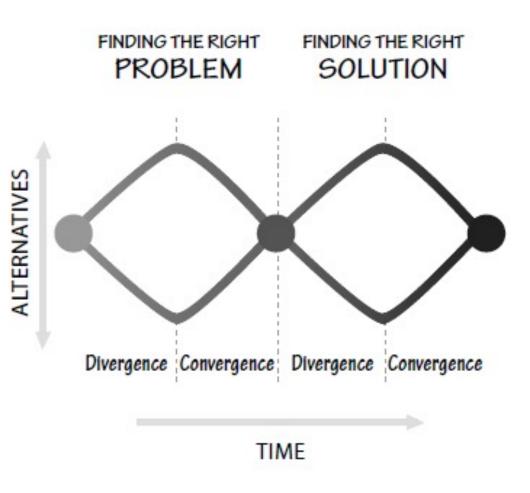
# What is Design Thinking?

Correct and Wrong Problem



### Double Diamond model of Design

- Expands the space of possible solutions (divergence)
- Converge upon a proposed solution
- divergence and convergence phases of finding the right solution
- Repeated divergence and convergence are important in properly determining the right problem to be solved



## Human-Centered Design



Ensuring people's need

Understandable and usable



Acomplishes desired task

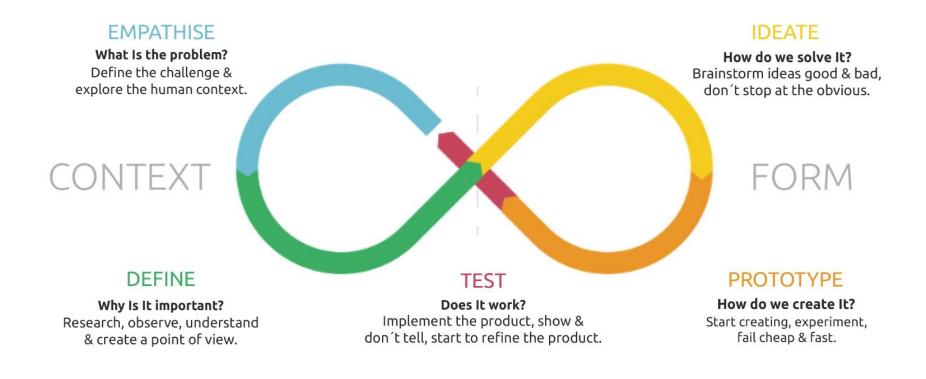


Positive and enjoyable experience





#### DESIGN THINKING A FRAMEWORK FOR INNOVATION



## Iterative design



CLARIFY PROBLEM STATEMENT AND REQUIREMENTS

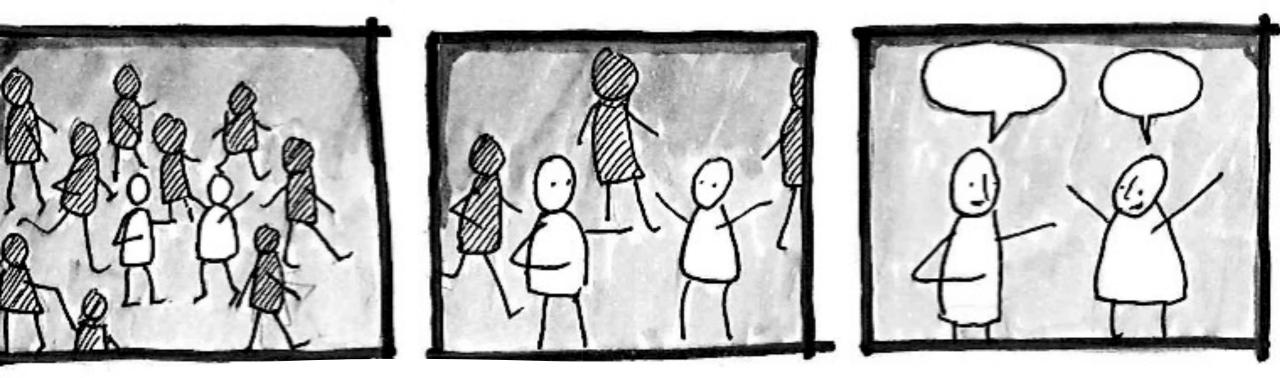
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### Design research vs Market research



#### Design: desired and useability

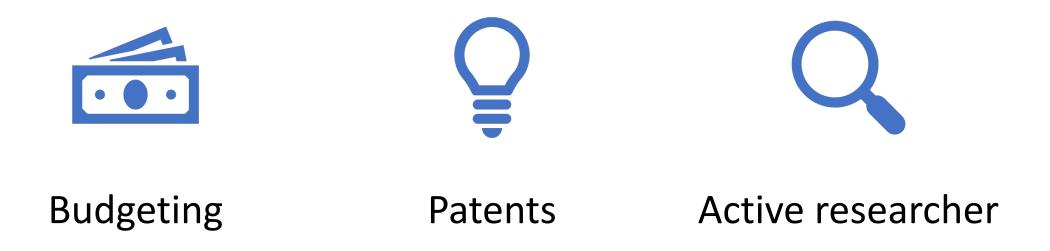
Marketing: purchasing decision



ACTIVITY-CENTERED DESIGN

- Accommodating disparate people focus on activities
- Activity, Tasks, Action, Operation

#### product development



### Design Challenge



Time and budget constraints



#### **Good products require**

Harmonious Smoothly functioning Cooperative Respectful organization

### Solving conflicting requirements



Multidisciplinary team overseeing the design, engineering, and manufacturing process.



Sales and Marketing

### Accommodation

- Inclusiveness
- Universal design
  - Flexibility





### Standardizing

- Laborious, lengthy, and comes with a politicized issue
- Standardize and simplify lives everyone learns the system.
- Don't standardize too soon



### Deliberately Making Things Difficult

- Deliberate difficulty results in good design
  - Keeping unauthorized people from using the device
- Difficulty can be achieved by breaking the rules of good design
  - Making things invisible to find
  - Not providing feedback when action is performed
  - Use unusual mapping



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