Applying Systems and Design Thinking

GLOBAL FORUM APRIL 2018

UNIVERSITY OF MINNESOTA
Driven to Discover℠

A SYSTEMS APPROACH

- Definition of the Problem
- Root Cause Analysis
- Ideation
- Simulation, Optimization, Analytics
- Implementation
- Evaluation

SYSTEMS CHANGE

- Small changes can have large effects.
- A change in one part of the system can impact outcomes in another part of the system.
- Turbulent systems may be very sensitive to change. Stable ones are highly resistant.

DESIGN THINKING

Based on the simple, yet radical idea that the people who face the problem every day are the one who most likely hold the keys to their answer.

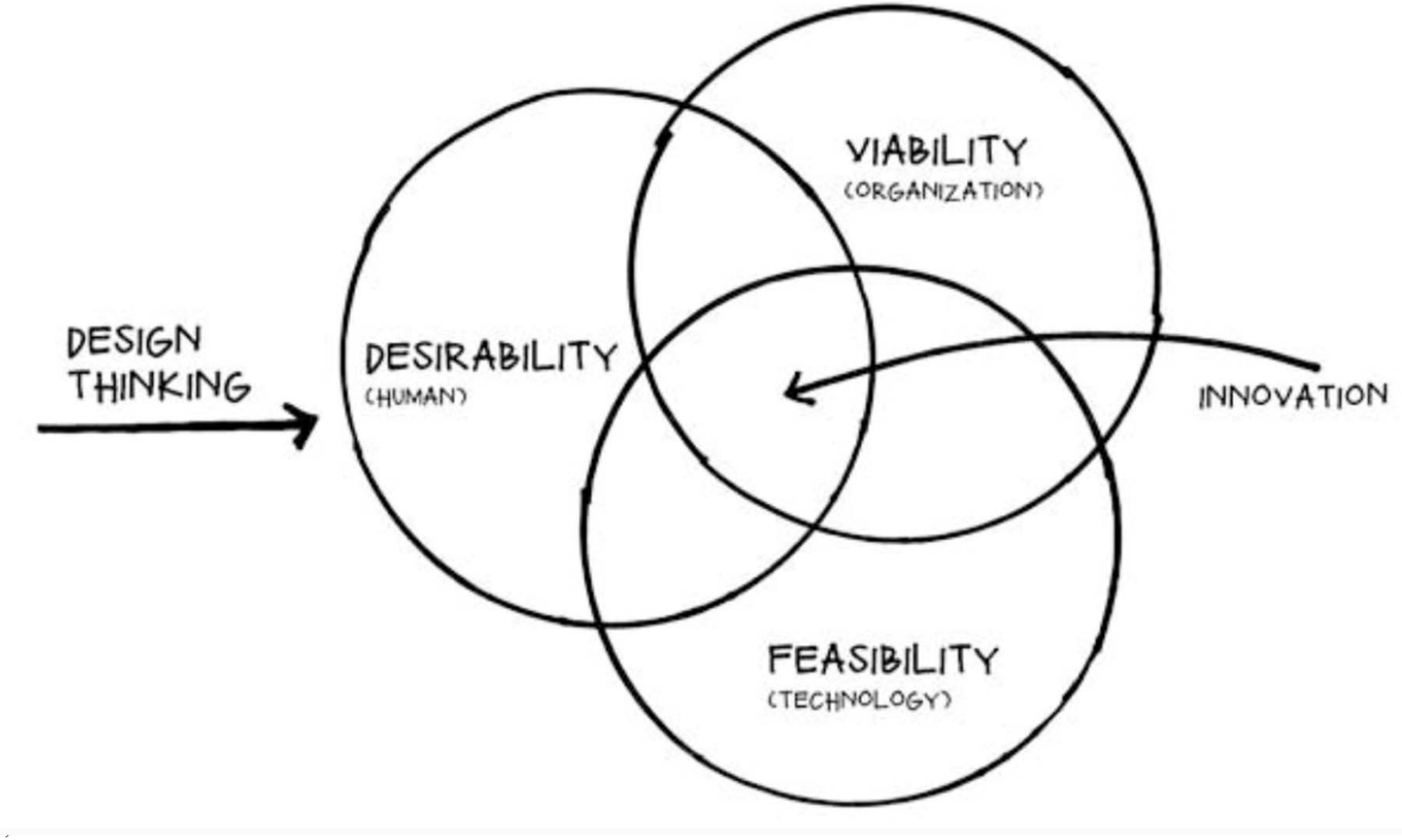
Have you ever attended a workshop, been inspired by ideas you heard, and when you got back home, did nothing?

Tried to implement change, were unsuccessful?

DESIGN THINKING

- Not an aesthetic
- Not an event
- Not a product
- Not an experience
- Process!

APPLYING A DESIGN THINKING LENS



DESIGN THINKING PROCESS

- Deeply understand the people you are wanting to serve.
- Dream up many ideas.
- Create innovate solutions that are rooted in people’s actual needs.

NOT A LINEAR PROCESS

- Inspiration
- Ideation
- Implementation

INSPIRATION - UNDERSTANDING THE PROBLEM

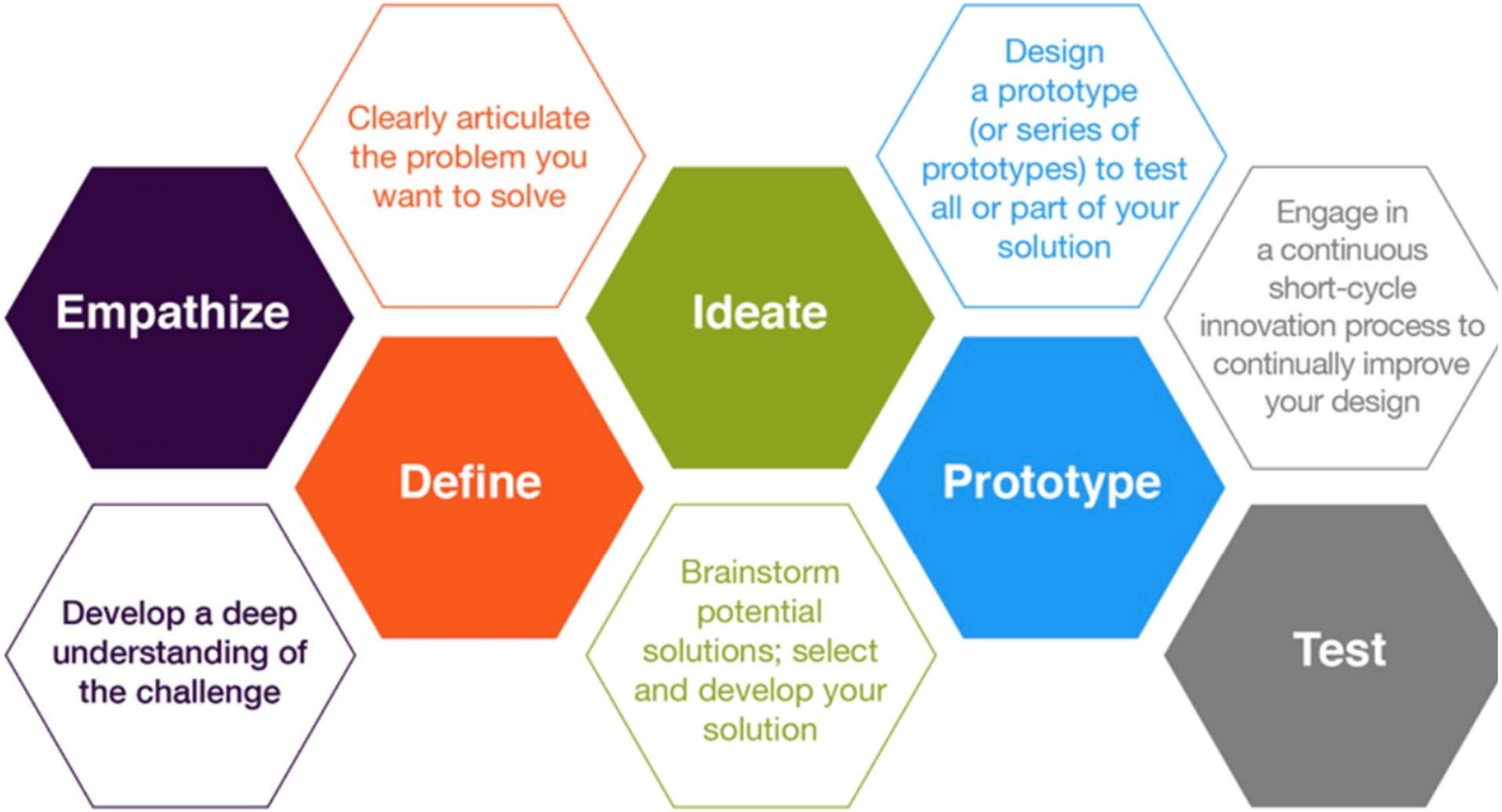
- Stakeholders
- Scanning literature
- Individual and group interviews
- Observing
- Visually listening
- Shadowing

IDEATION

- Brainstorm
- Keep some ideas, discard others.
- Build and test prototypes
- Story Board
- Role Model
- Shadowing
- Iterate and refine, iterate and refine ……..

IMPLEMENTATION

- Live prototype.
- Road Map
- Evaluate


Empathize
Develop a deep understanding of the challenge
Define
Clearly articulate the problem you want to solve
Ideate
Brainstorm potential solutions; select and develop your solution
Prototype
Design a prototype (or series of prototypes) to test all or part of your solution
Test
Engage in a continuous short-cycle innovation process to continually improve your design

PROCESSING ON MULTIPLE LEVELS

- Individual Strategies
- Organizational Strategies
- Systems Changes
- Designing for Optimal Solutions


Questions?