MIS 3506 / SECTION 2

User Experience Design:
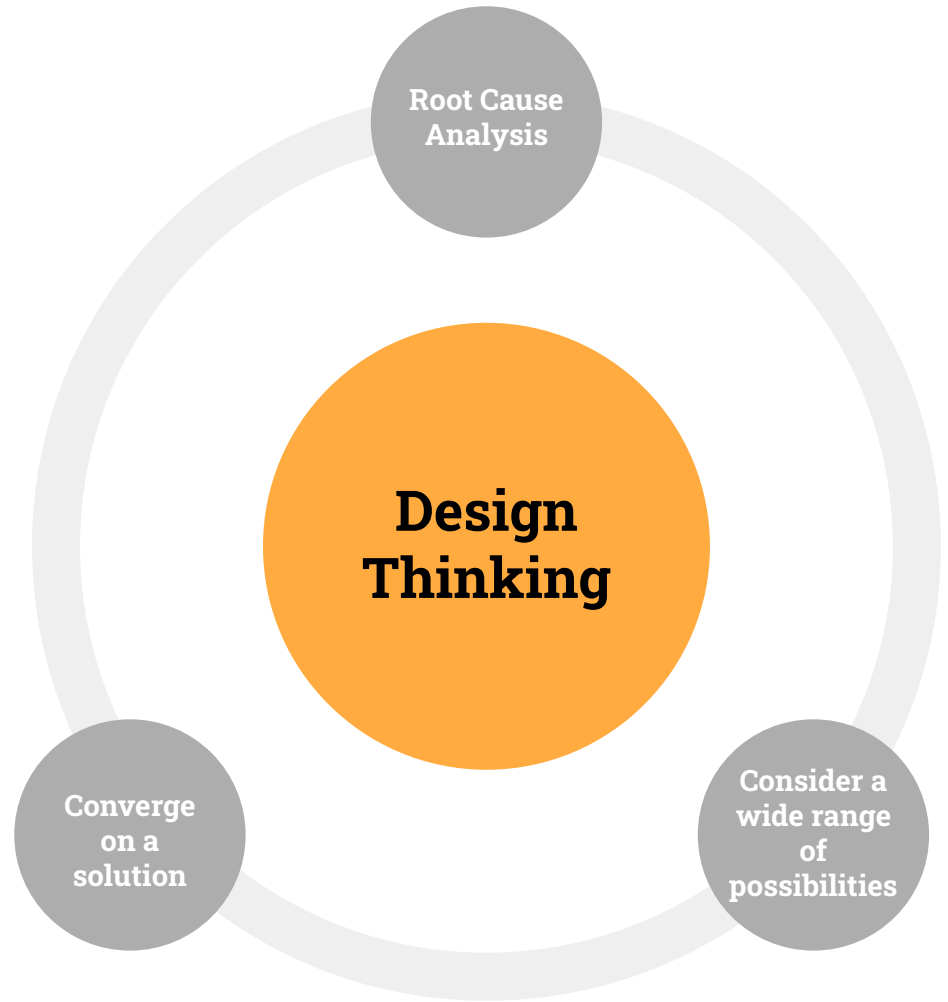# **Design Thinking**

Assignment 1 / Part 1

Presentations

Part 1

Design Thinking

"Good designers never start by trying to solve the problem given to them: they start by trying to understand what the real issues are." —Don Norman

Design Can be Driven by Many Factors...

Technology limitations

Competition

Aesthetics
(your own, your clients, your audiences)
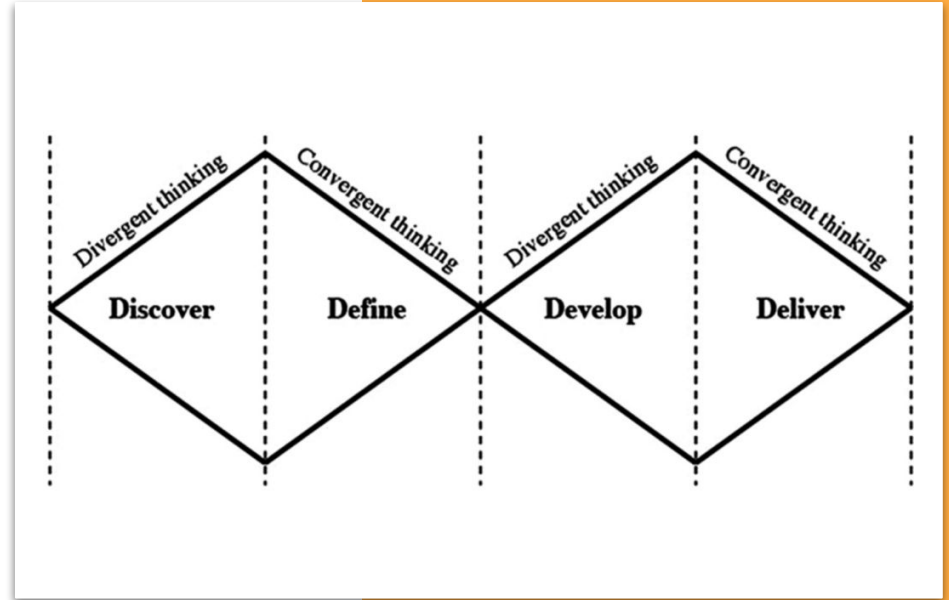
Product needs and features

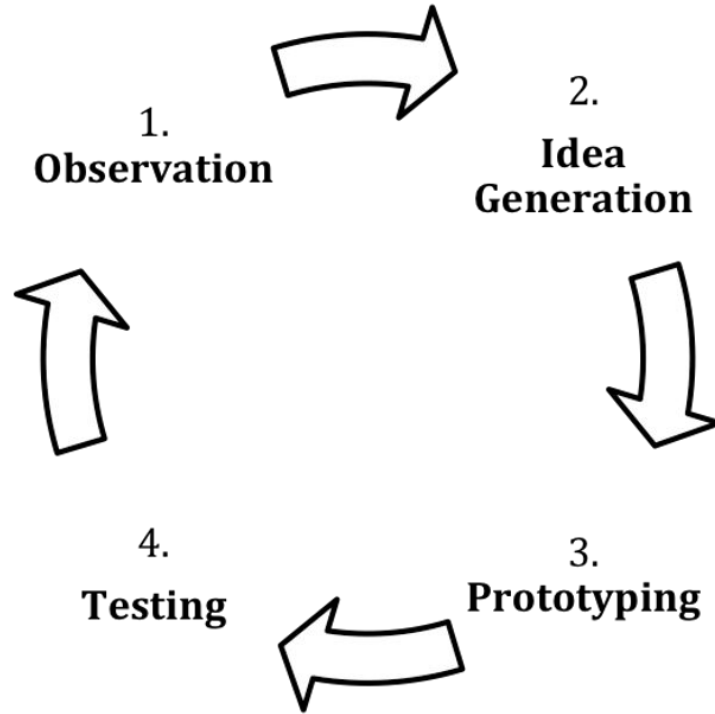**Can you think of any others?**

What is Human Centered Design?

➔ **The process of ensuring that peoples needs are met**

➔ **The resulting product is understandable and usable**

➔ **It accomplishes the desired task**

➔ **The experience is positive and enjoyable**

The Double Diamond Model of Design

Discover — Define — Develop — Deliver

Divergent thinking — Convergent thinking — Divergent thinking — Convergent thinking

Norman's
Human Centered
Design Module

1. Observation
2. Idea Generation
3. Prototyping
4. Testing

Observation

➔ **Research the people and how they use the system**

➔ **Understand interests, true needs, motivations**

➔ **It's always best to use a natural environment**

What were some of the ways we've learned to observe and collect data?

Two Other Types of Research

Design (UX/UI) Research

How people will use it and what they really need

VS

Market Research

What people will buy and how they make their purchasing decisions

EXAMPLE:
Market Research

Watch Video: https://youtu.be/mscIN52bPJ8

Idea Generation

➡ **Brainstorming and determine the requirements for design.**

➡ **Question everything, don't use restraints**

IDEO

Rules of Brainstorming

Defer Judgment

Encourage Wild Ideas

Build on the Ideas of Others

Stay Focused on the Topic

One Conversation at a Time

Be Visual

Go for Quantity

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Image source: https://www.ideou.com/blogs/inspiration/7-simple-rules-of-brainstorming

Prototyping

Test if an idea is reasonable by building a quick prototype and testing it.

EXAMPLE:
Prototyping

**Watch Video: https://youtu.be/dVcK4pYbNRg**

Testing

Gather a small group of people (5...remember that magic number from last week?) who correspond as closely as possible to the target population to test the prototype.
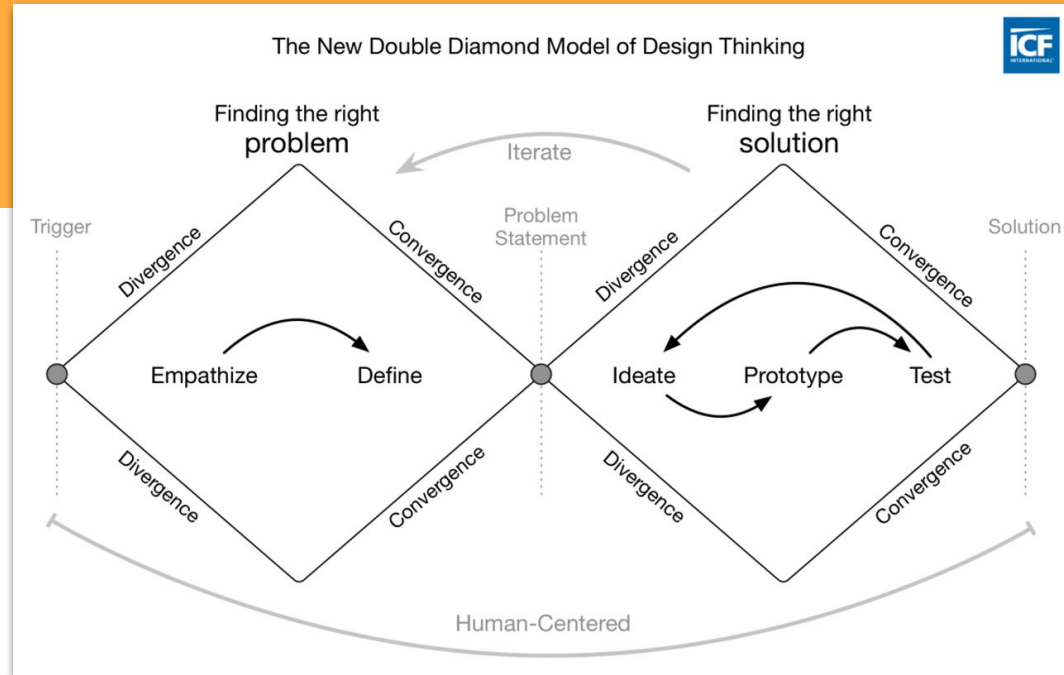

Image source: https://www.vivogroup.com.au/articles/how-to-validate-ux-with-user-testing

Iteration

- **Requirements are determined by watching people in their natural environments**
- **People can't always voice their needs**
- **Repeated study and testing!**
- **Each cycle removes the fog, gain more clarity**

When does it end? It depends!

1. Observation

2. Idea Generation

Iteration

4. Testing

3. Prototyping
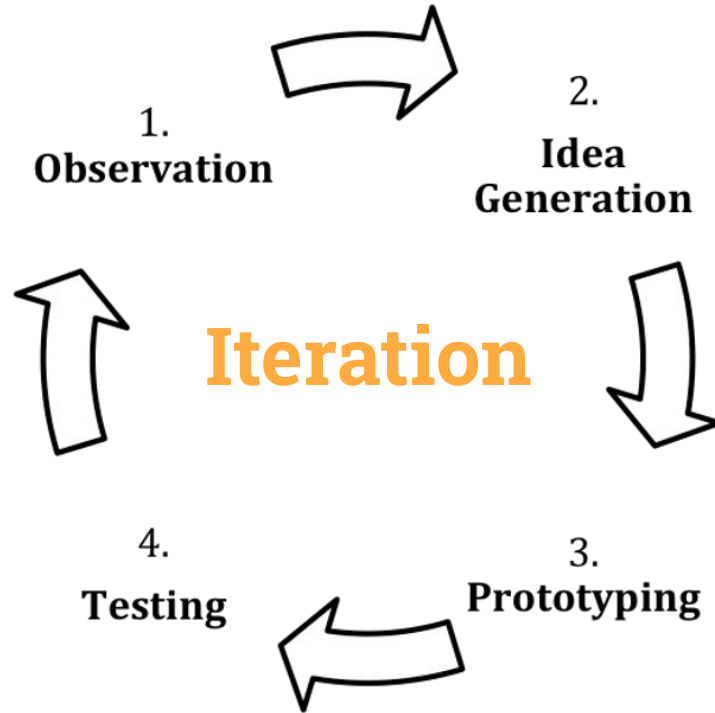
Let's look at the double diamond model paired with HCD

The New Double Diamond Model of Design Thinking

Challenges Designers Face…

Need vs. Want	Challenging clients
Balancing function vs. form	Insufficient Time
Insufficient Money	Standards

Can you think of any others?

BREAK

10 Minutes

In Class Exercise

Analyzing a Product

Break up into 4 groups of 5 each

Analyze the product

- ❏ Open the Miro board and find your product
- ❏ Spend time understanding the product
- ❏ Fill out all the blocks about the product regarding Norman's Design Principles and Human Centered Design Principles

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Present

- ❏ Each group will present the product to the class and the information that they came up with.

Due Next Week...

Reading (Due Wednesday for Class)

❏ **Book:** Norman, Chapter 2 (up to page 56, stop at "People As Storytellers"

Project - Part 2 (Due Sat., Oct 1 @ 11:59 p.m.)

❏ Keep working on all items in part 2 with your group