

Week 4

MIS 3506 / SECTION 2

User Experience Design: Design Thinking

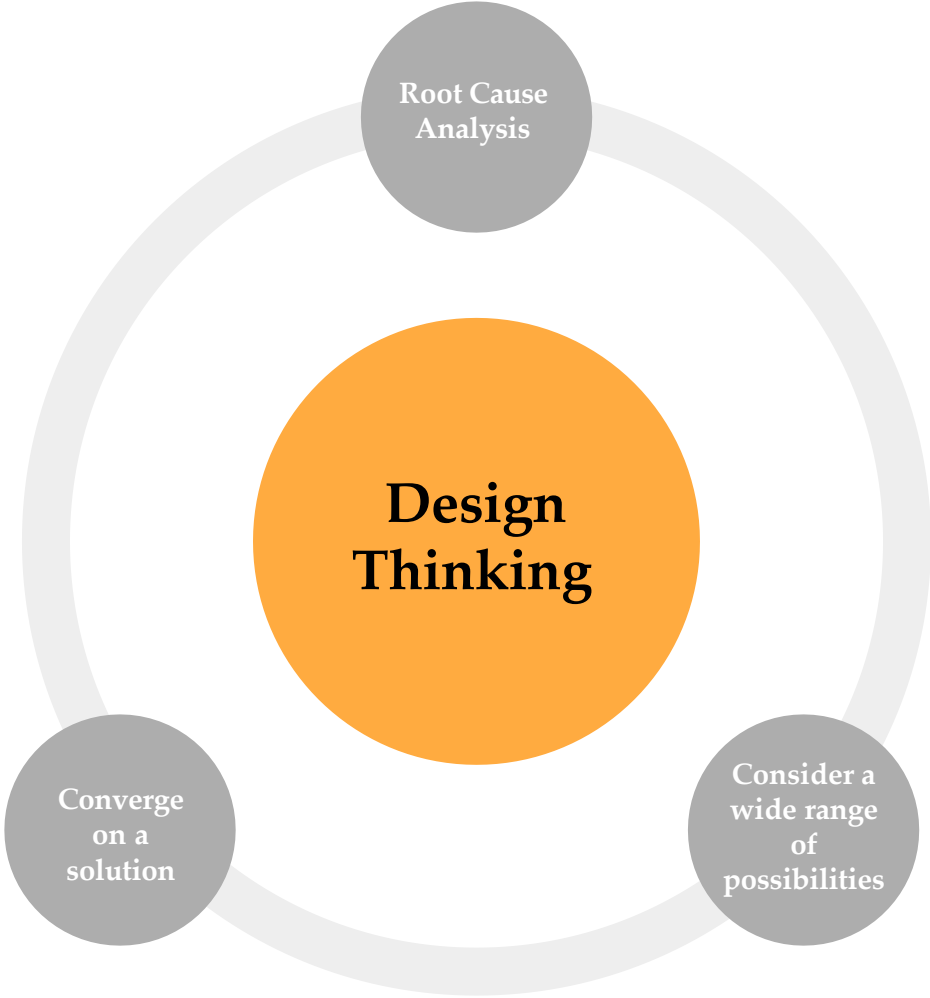
Part 1

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 Thinking Process



Design Can be Driven by Many Factors...

Technology
limitations

Competition

Aesthetics
(your own, your clients,
your audiences)

Product needs
and features

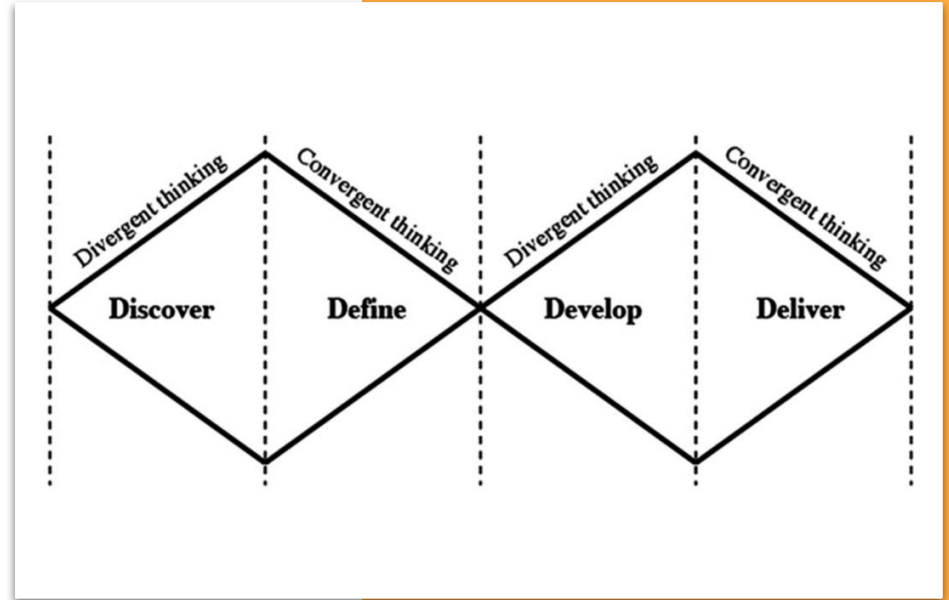
Can you think of any others?

What is Human Centered Design?

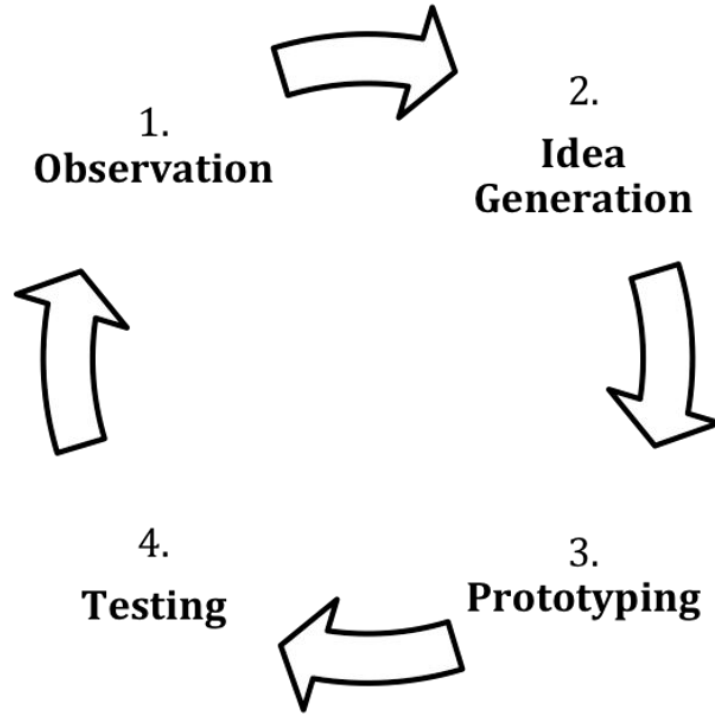
- The process of ensuring that peoples needs are met
- The resulting product is understandable and usable
- It accomplishes the desired task
- The experience is positive and enjoyable



The Double Diamond Model of Design



Norman's Human Centered Design Module



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**



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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Prototyping

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



EXAMPLE:

Prototyping



How software is made:

MAKING A PAPER PROTOTYPE

Watch Video: <https://youtu.be/dVcK4pYbNRg>

Testing

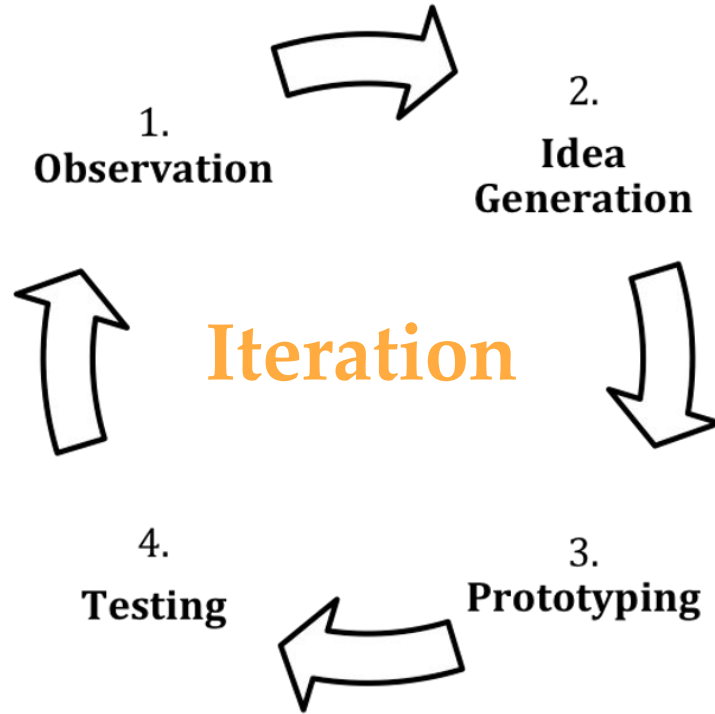
Gather a small group of people (5...remember that magic number from last week?) who correspond as closely as possible to the target population to test the prototype.



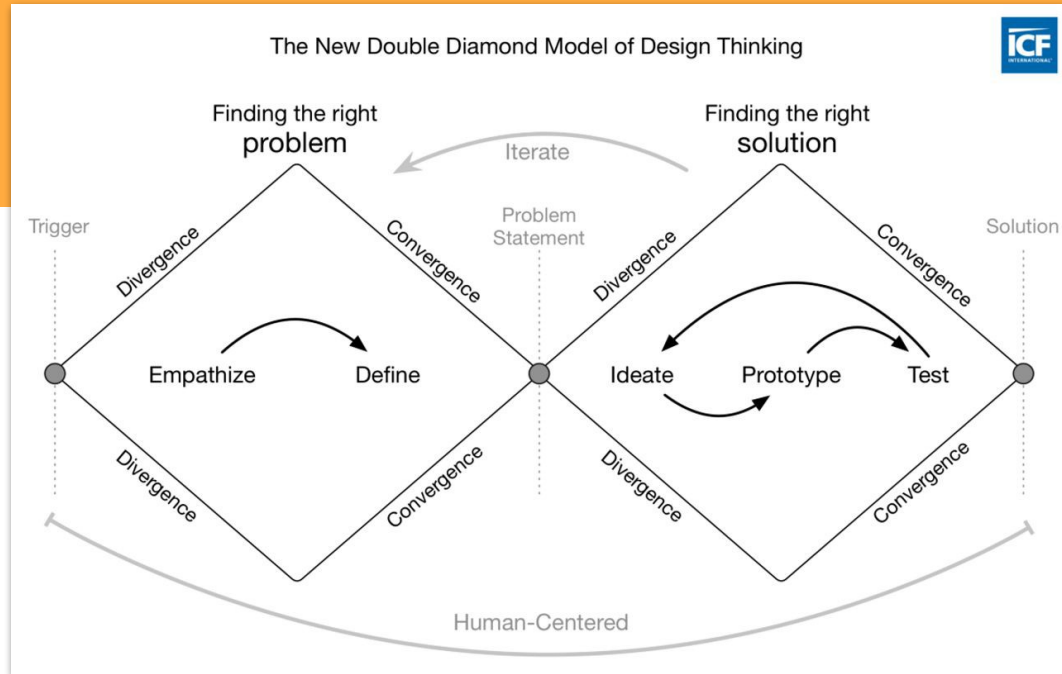
Iteration

- 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!



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



Challenges Designers Face...

Need vs. Want

Challenging clients

Balancing
function vs. form

Insufficient Time

Insufficient Money

Standards

Can you think of any others?

Assignment 1 / Part 1

Presentations