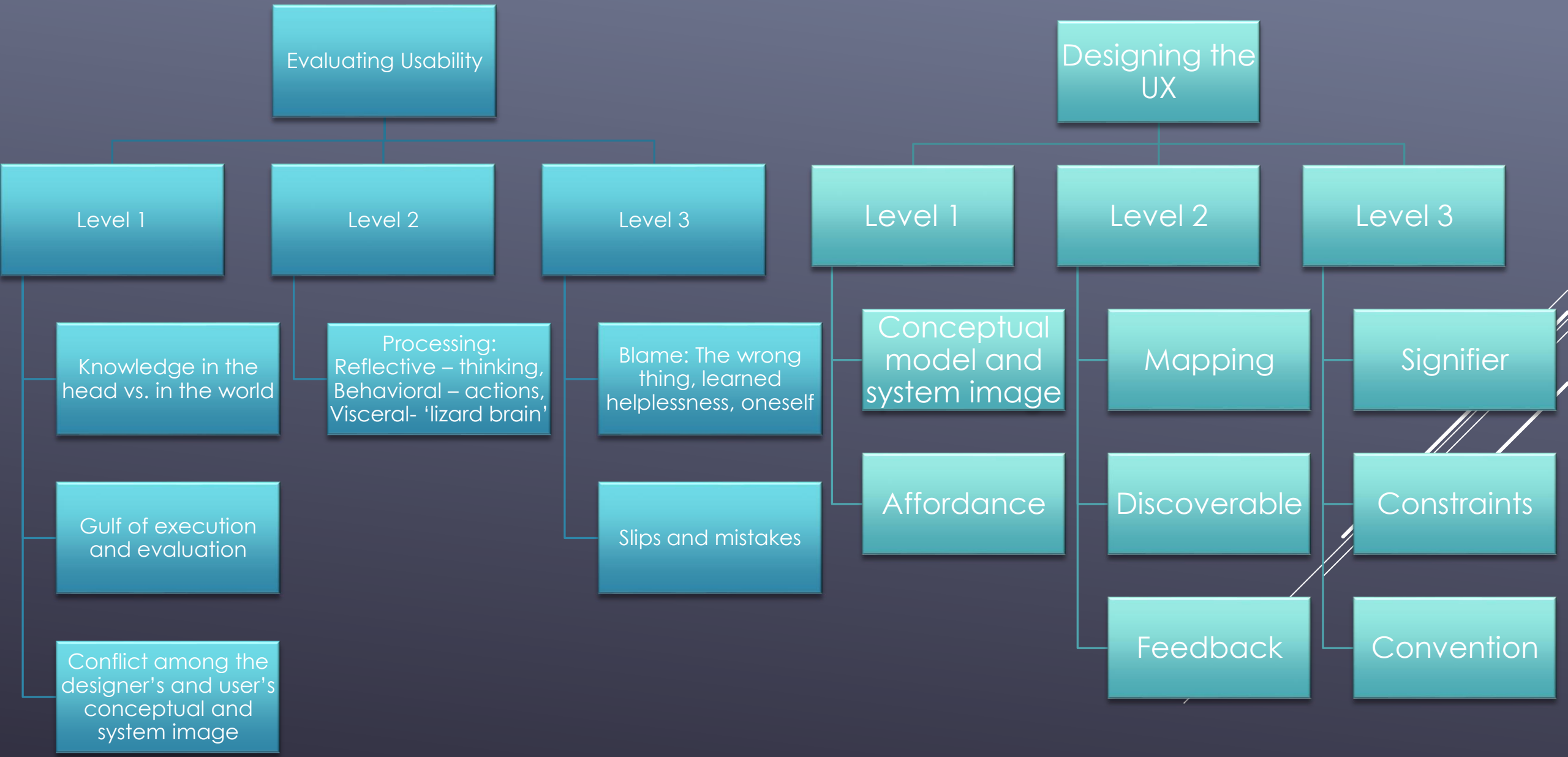
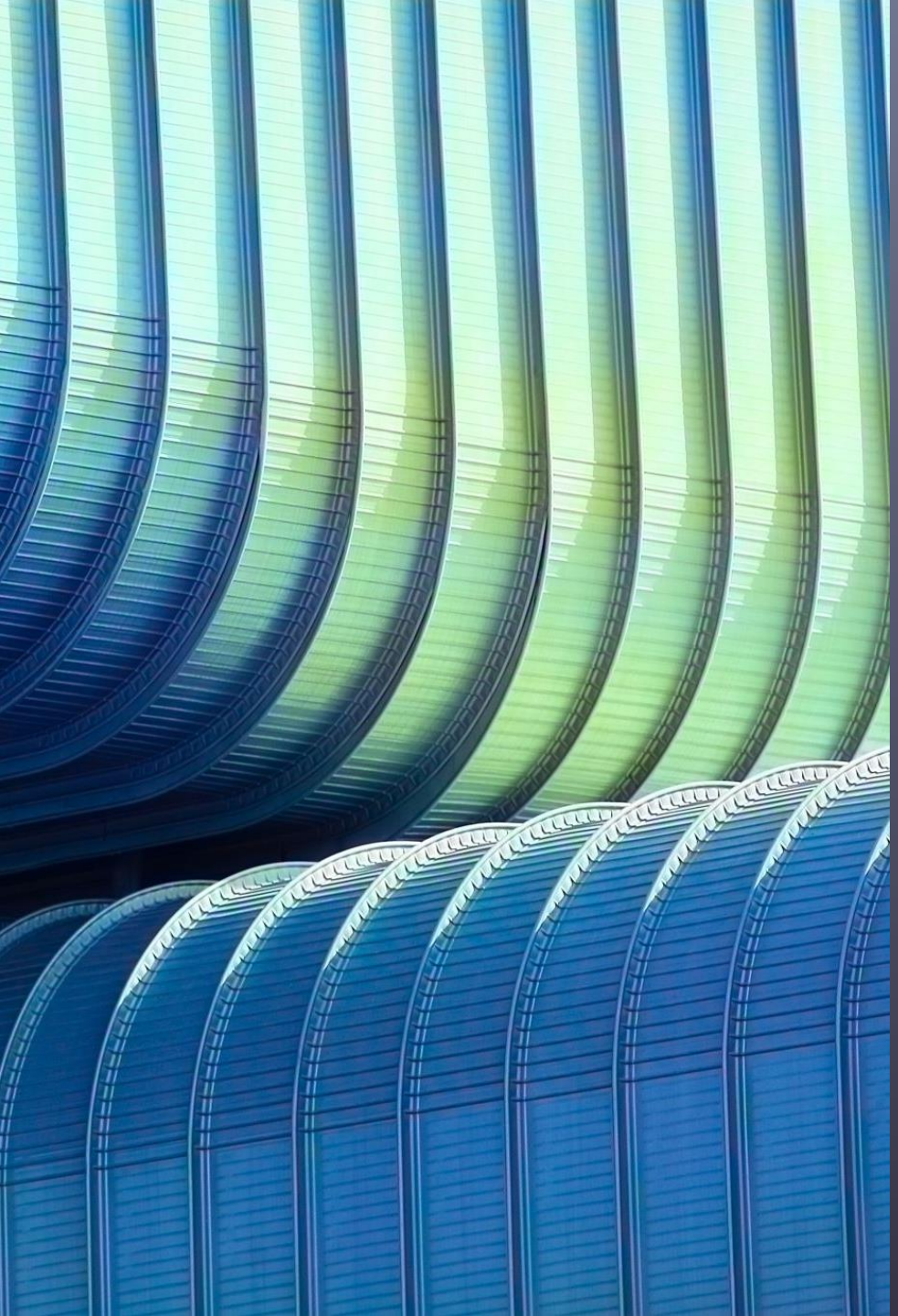
2. PROJECT RESEARCH & PROBLEM/OPPORTUNITY IDENTIFICATION

MIS3506 * Lavin * Spring 2024


Evaluating Usability
Level 1
Level 2
Level 3
Knowledge in the head vs. in the world
Gulf of execution and evaluation
Conflict among the designer's and user's conceptual and system image
Processing: Reflective – thinking, Behavioral – actions, Visceral- 'lizard brain'
Blame: The wrong thing, learned helplessness, oneself
Slips and mistakes
Designing the UX
Level 1
Level 2
Level 3
Conceptual model and system image
Affordance
Mapping
Discoverable
Feedback
Signifier
Constraints
Convention



THE WORLD ACCORDING TO NORMAN

Discoverability

Affordance

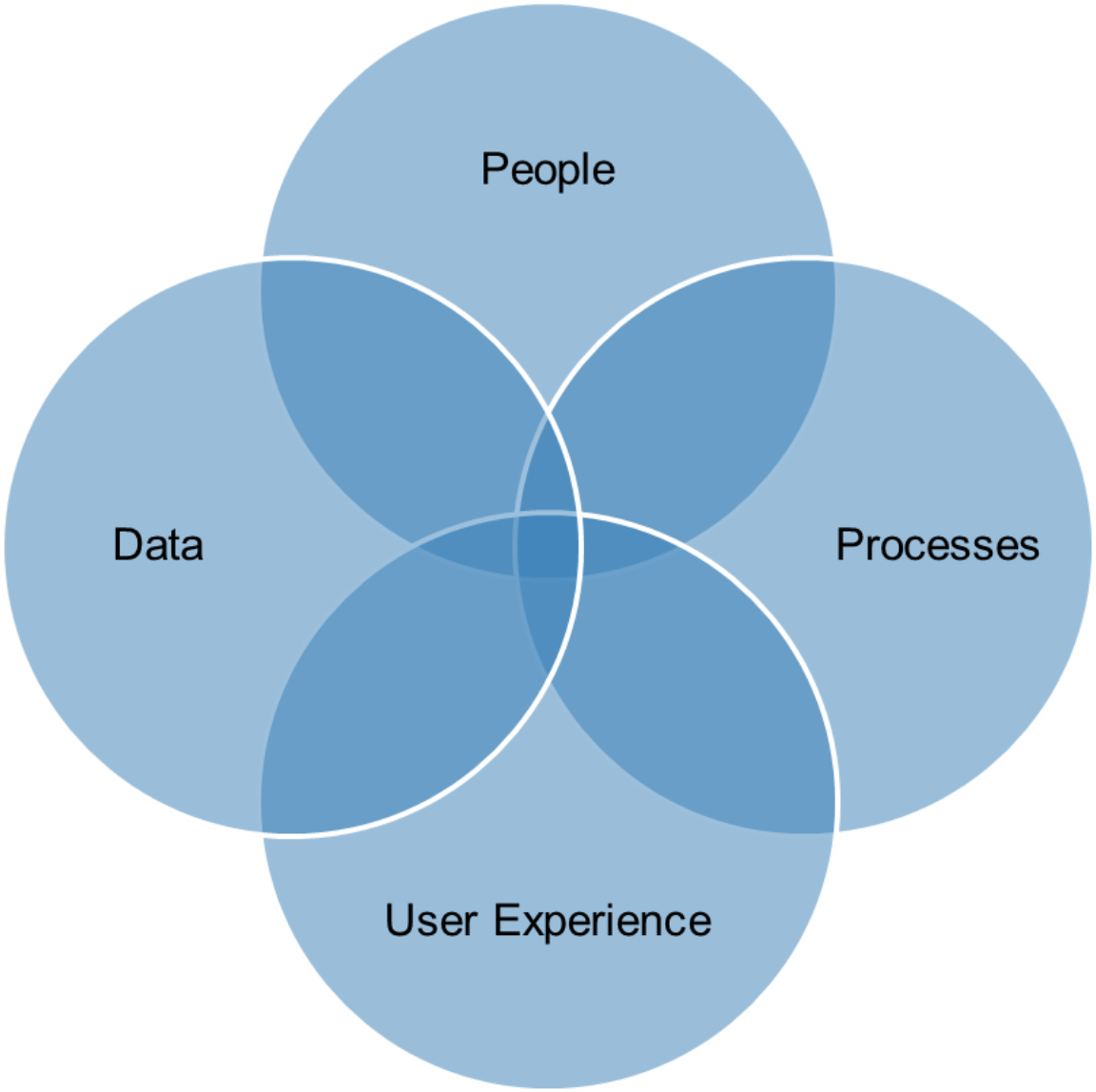
Signifiers

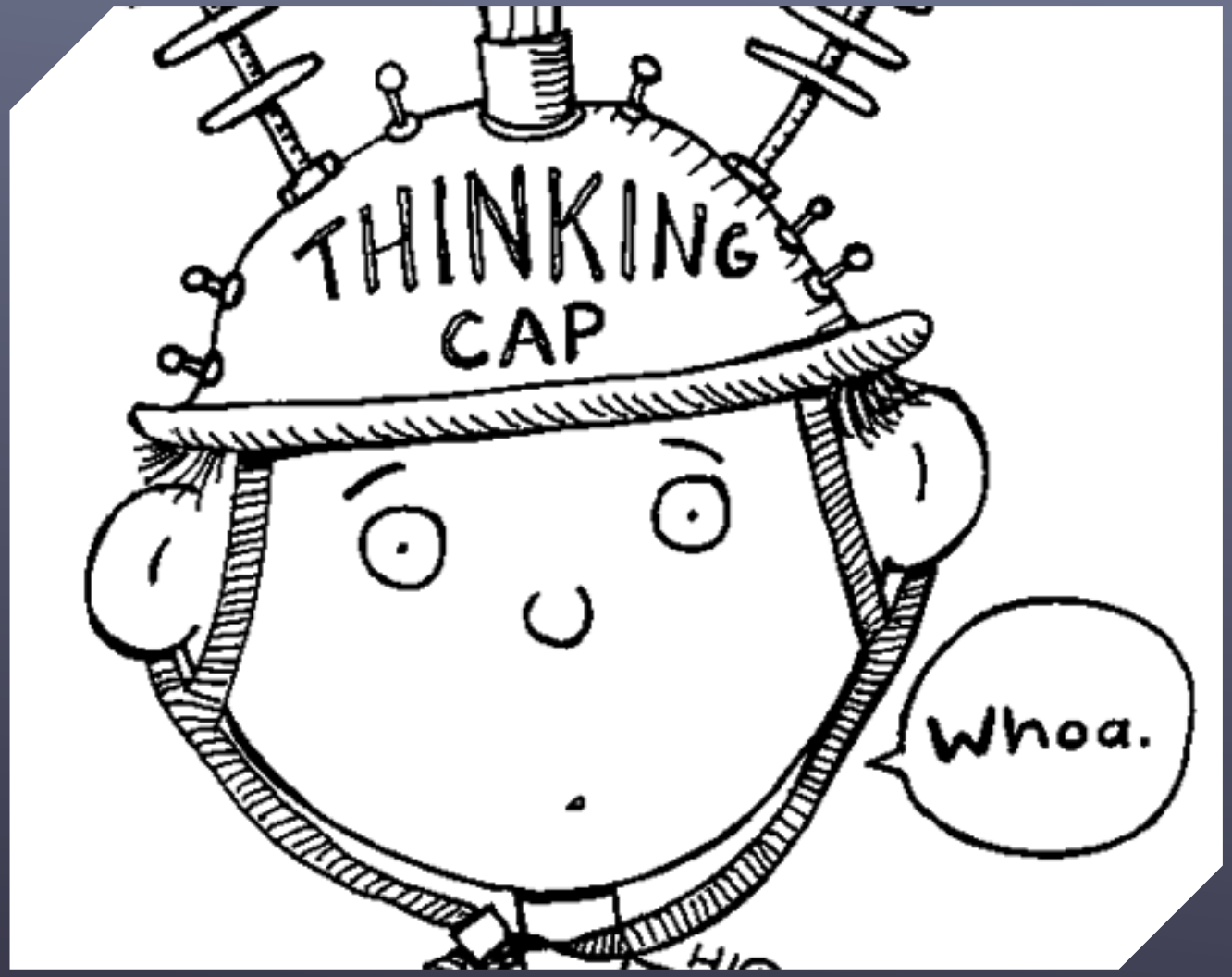
Mapping

Feedback

Conceptual model

System image


People
Data
Processes
User Experience



PROJECT RESEARCH

- Project research requires several key steps – sometimes you have a lot of information – sometimes not much at all!

- For example…

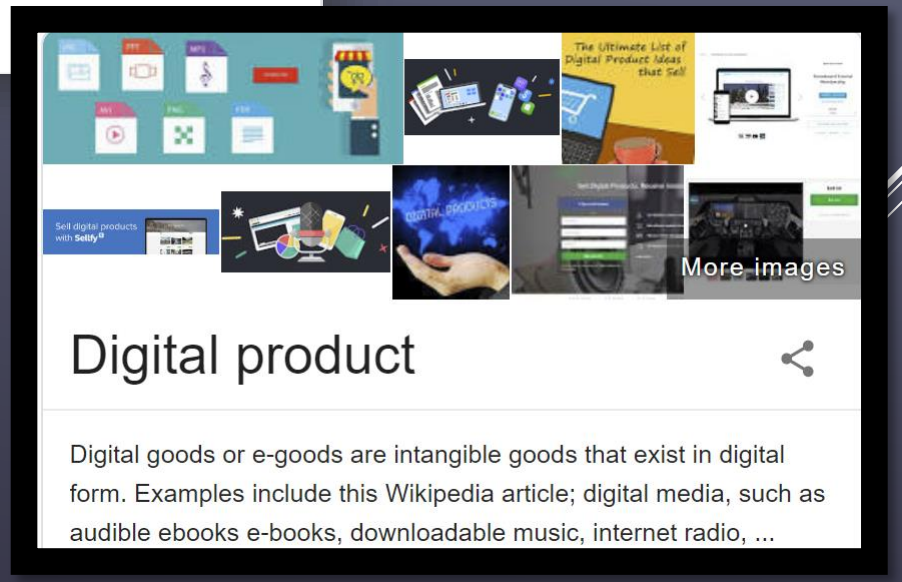
What is a product? What is a project?

prod·uct

/ˈprädəkt/

noun

1. an article or substance that is manufactured or refined for sale.
   "food products"
2. a thing or person that is the result of an action or process.
   "his daughter, the product of his first marriage"
   synonyms: result, consequence, outcome, effect, upshot, fruit, byproduct, spin-off, legacy, issue
   "her fear was a product of her emotional insecurity"



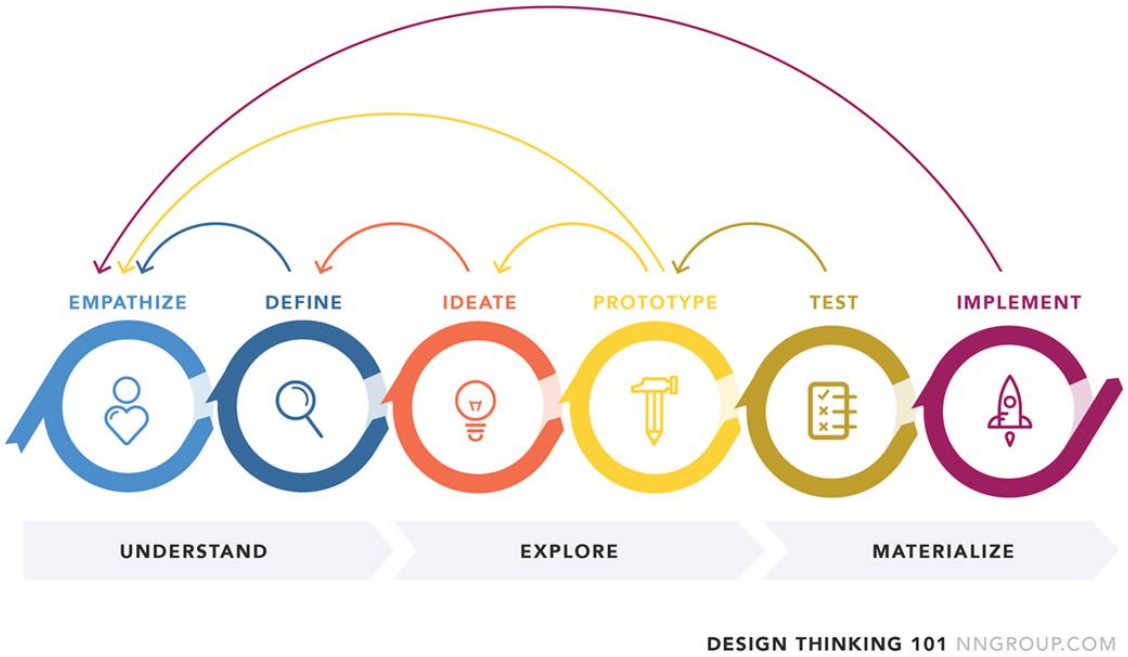
PROBLEM

An issue that is preventing the achievement of goals and objectives.

VS

OPPORTUNITY

Initiatives that will assist in reaching goals and objectives if implemented appropriately.



DESIGN PROCESS:

IS IT A PROBLEM?

IS IT AN OPPORTUNITY?

- Ask the following questions to understand the problem or opportunity:

- **Who** are our intended users?
- **What** do they want? Do they need?
- **Why** do they want?
- **Where** can they get the information?
- **How** do they want to work?
- **When** do they want it?

PROBLEM/OPPORTUNITY IDENTIFICATION: EMPATHY

Answering those questions enables us to

- Understand the problem/opportunity
- Understand the user better
- Enable productivity
- Provide a pleasurable experience

Analyzing Problems and Opportunities

A problem or opportunity statement is a concise description of user issues or unmet needs that need to be addressed.

Source: https://www.ibm.com/garage/method/practices/discover/business-opportunity-statement/

Analyzing Problems and Opportunities

A problem or opportunity statement is a concise description of user issues or unmet needs that need to be addressed.

Business Opportunity Statement

We will improve the experience of	Getting the right income tax forms from the Federal Government.
for	Non tax savvy individuals looking to file their personal tax returns.
The user struggles today because	Finding the right form requires you to understand tax-code terminology and form numbers. Getting simple to understand answers to simply stated questions is near impossible.
Solving this will be good for our business because	Our department's mandate is to make it as easy as possible for people to correctly file their taxes. The easier answers are to find,the fewer people need to call our call center, meaning lower wait times. People accurately filing their taxes means lower auditing costs for the government.

IBM Garage

IBM

Source: https://www.ibm.com/garage/method/practices/discover/business-opportunity-statement/

In Class Exercise

Create a Business Opportunity Statement

Brainstorm

- Choose a problem or opportunity that you can identify that could make Temple University better.

Analyze

- Use the steps in the BOS to outline how you would address this problem or opportunity.

Present

- We'll discuss together as a group.

Business Opportunity Statement

We will improve the experience of	What problem needs solving or improvements?
for	Which person is most effected by this?
The user struggles today because	What are some of the pain points?
Solving this will be good for our business because	What is motivating the company to solve this problem?

IBM Garage

IBM

Project Research

How do we learn about problems/opportunities?

- Leadership
- Social Media
- Customer Service
- Market Research
- …What else?

Listen/Look for statements like…

- I can't complete…
- This is so easy!
- This product sucks!
- Where can I find?
- How do I?
- …What else?

Project Research

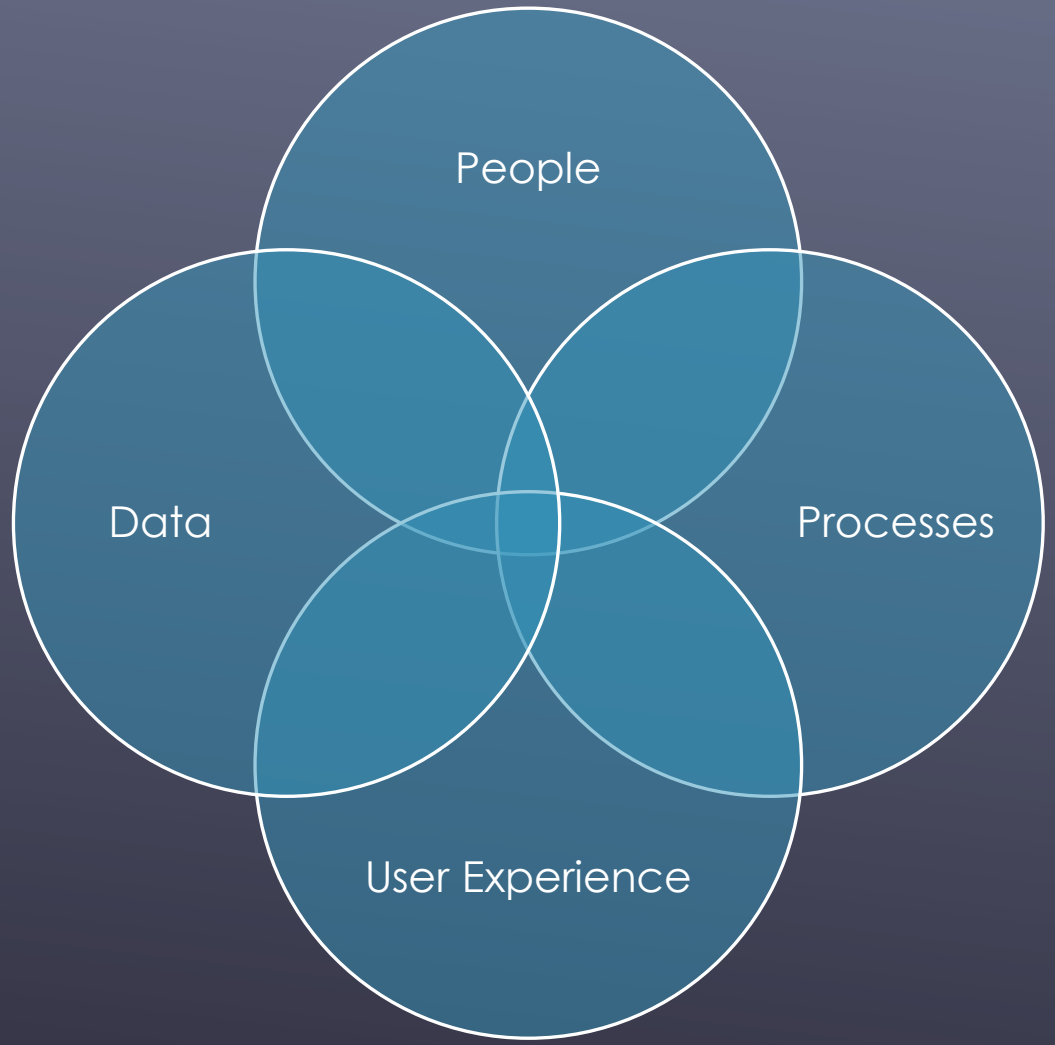
How can we perform this research?

- Interviews
- Usability Studies
- Internet Research
- Data Analysis
- …What else?

What tools can we use?

- Google Analytics
- Websites
- User Stories
- Interviews
- …What else?

Project Research – Gathering Requirements



Intended Users – “People”

People

Why is it important to learn about the people involved? What can be learned from these groups?

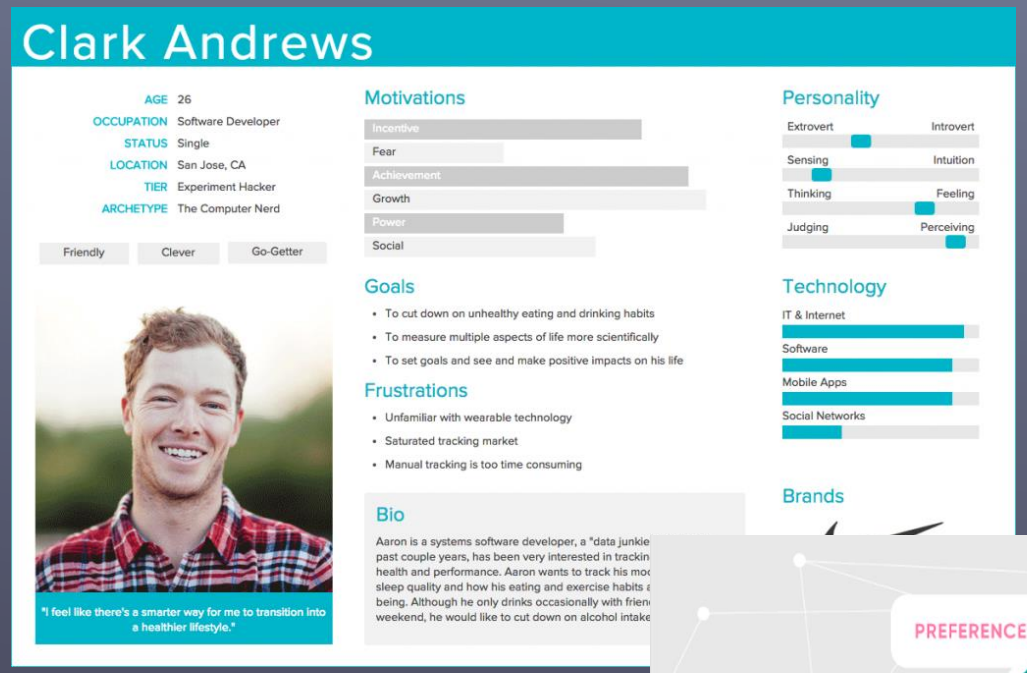
- Leadership
- Customers
- Competition

Intended Users – “People”

How do we obtain knowledge about the people involved?

- Interviews
- Observations
- Secondary Research
- LinkedIn, Social Media Channels

How do you develop a persona for your users?



People

Developing a Persona:

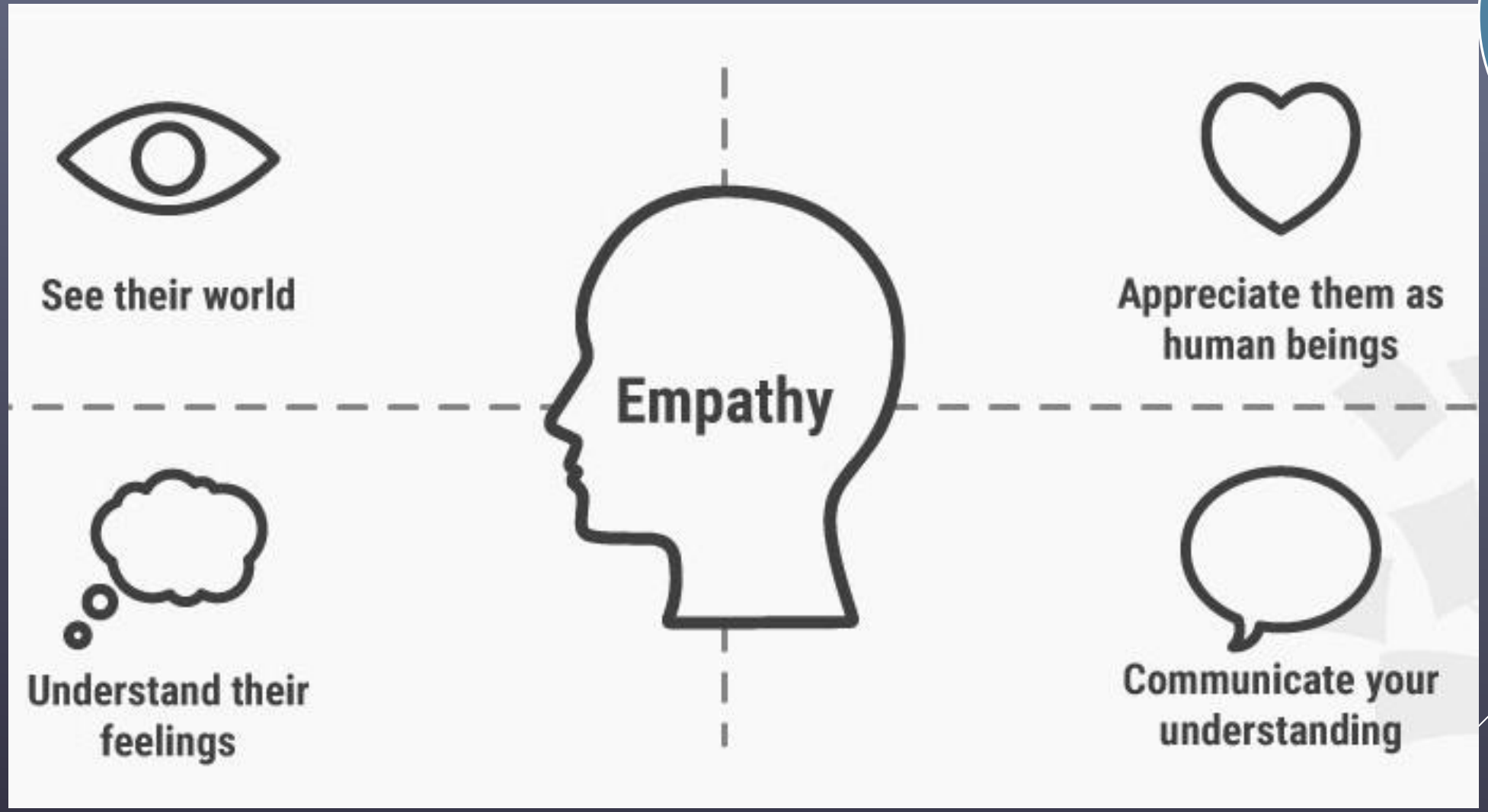
Why?
What should be included?
Comfort with technology?

PERSONAS

- Use what you know, clearly define – prioritize features
- Provides focus for the prototype
  - Novice v Expert users, just in case users, product streamline
  - Assumption personas – data you have, assumptions about your base
    - Validate later, through usability testing
- Describe actual users and behaviors, task oriented
- Personable & Believable
- Design Implications
- Goals – Speed & Efficiency? Visibility? Needs and Desires?

Empathize with Users

People



Source: https://www.interaction-design.org/literature/article/stage-1-in-the-design-thinking-process-empathise-with-your-users

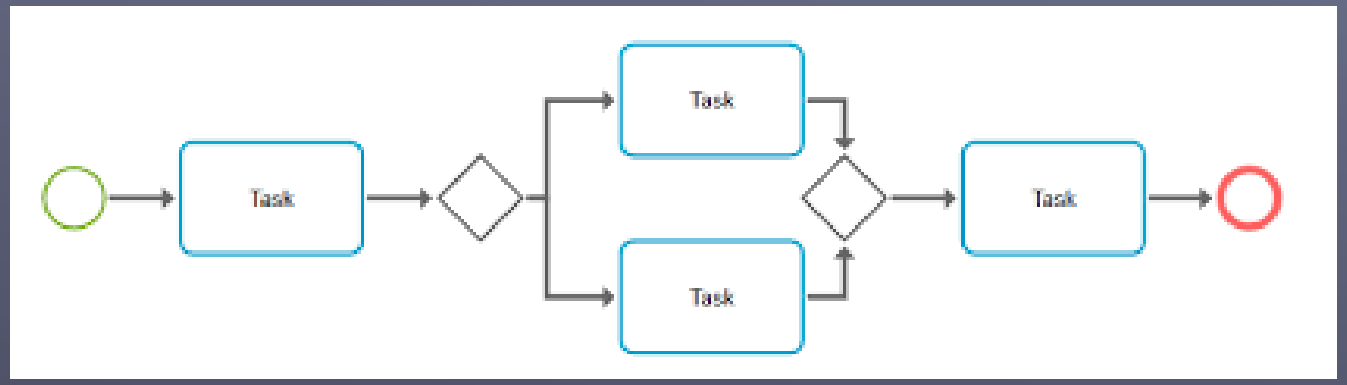
Processes

How do we learn about processes?

- Primary Research
- Secondary Research
- Observation
- Interviews

Do I need to keep all this research in my head?

Processes



Data

Data

How do we gather information about data?

- Go to the site or app – what is being collected
- Sign up for the mailing list – what information is generated
- Think of the processes – what data might be needed to complete them

Compiling the details…

- Make a list of critical findings
- Persona map
- Data requirements documented in an ERD structure
- Visuals
- Collaboration tools

No one wants to read a long report!

Project Research

Gathering Requirements and getting the big picture is critical to understanding your goals!

IN-CLASS ACTIVITY

Researching your project

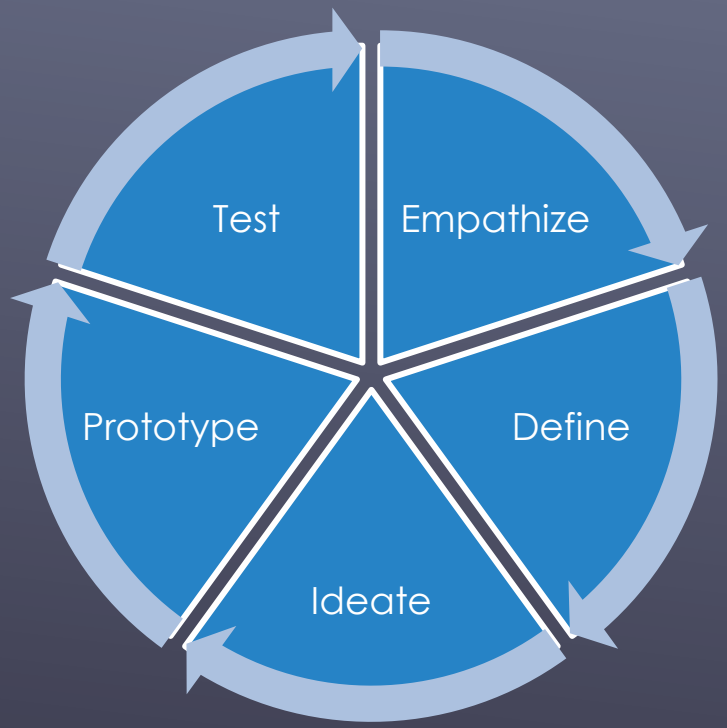
Breakout – In Class Activity

Pick a Company

Be able to answer the following questions:

- Provide basic company information
- What is the goal of your company?
- Who is the target market/user?
- Why is this company attractive?
- Who are your main competitors?
- What goals should users accomplish?
- Why would users pick your company?
- What would a persona of your typical user look like?

- **Prepare a 3 minute – 3 slide presentation of your findings**


Test
Empathize
Prototype
Define
Ideate