WELCOME TO DESIGN THINKING

BY

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COURSE: TECHNOLOGY, INNOVATION & STRATEGY

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STEPS TO DESIGN THINKING

1. **DEFINE** THE PROBLEM

2. **RESEARCH** THE PROBLEM

3. ANALYZE & REDEFINE THE PROBLEM

4. **IDEATE SOLUTIONS** [MANY SOLUTIONS!]

5. **PROTOTYPE** THE SOLUTIONS

6. REFINE THE SOLUTIONS

7. [REPEAT AS NEEDED]

8. CHOOSE THE SOLUTION

9. IMPLEMENT THE SOLUTION

DESIGN THINKING HAS THE ABILITY TO SOLVE WICKED PROBLEMS

1. How to get people to make healthy choices
2. How to save more rather than spend
3. How to harness the power of a community
4. How to change eating habits
5. How to make our roads safer
6. How to encourage throwing litter in bins

DESIGN THINKING

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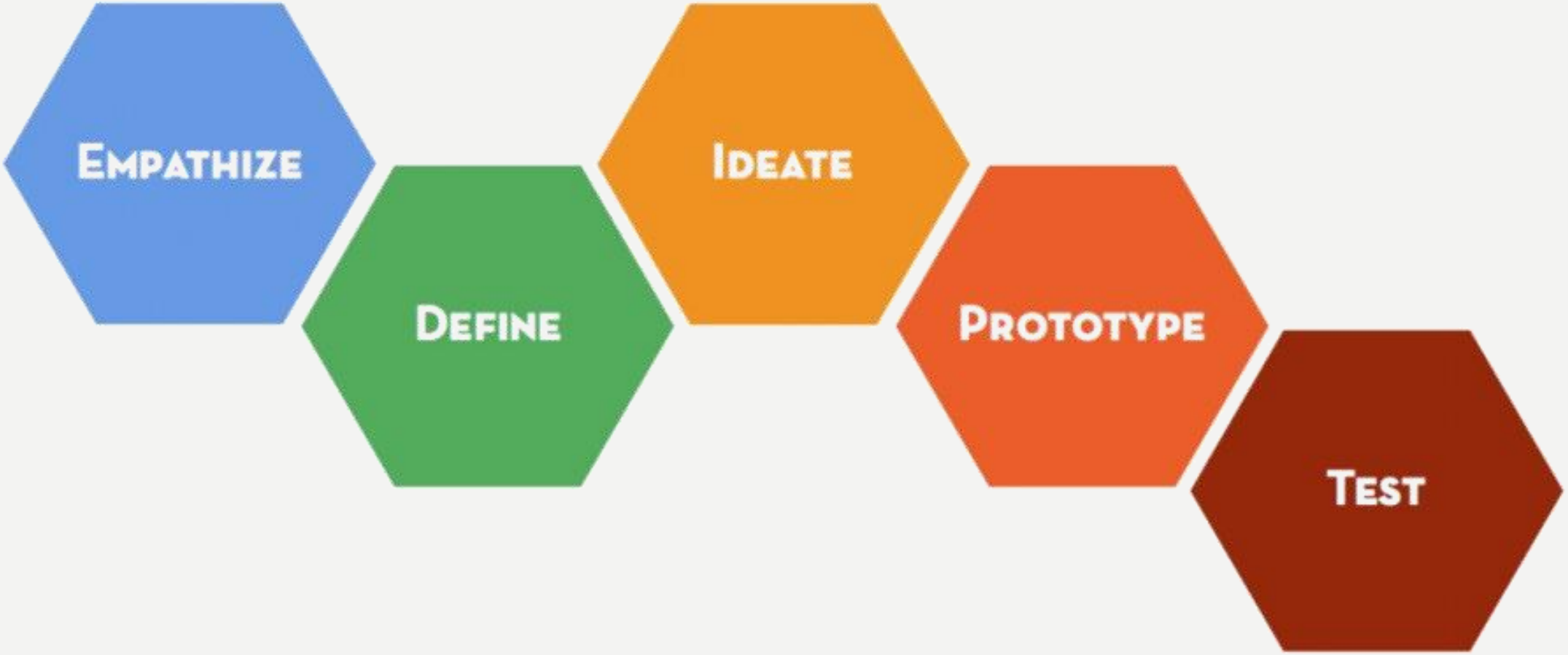


EMPATHIZE

- Empathizing is all about understanding the needs of the people that you design a product or service for.
- The idea of truly stepping into a user's shoes, really immersing yourself into your user's needs.
- For example: An IDEO employee who wanted to improve the experience of ER patients. The employee subsequently became an emergency room patient himself in order to experience things first hand.
- Its about observing users in real life, actively engaging with them and 'leaving the building'. For example, I spent an afternoon in a local Hyperstar supermarket just to observe people buying their groceries, looking at whether they were browsing, trying to spot if people were distracted at all, etc.
- The so-called Empathy Map is a great way to visually represent the stakeholder, his/her views or thoughts and actual behaviors

Business Model - The Empathy Map

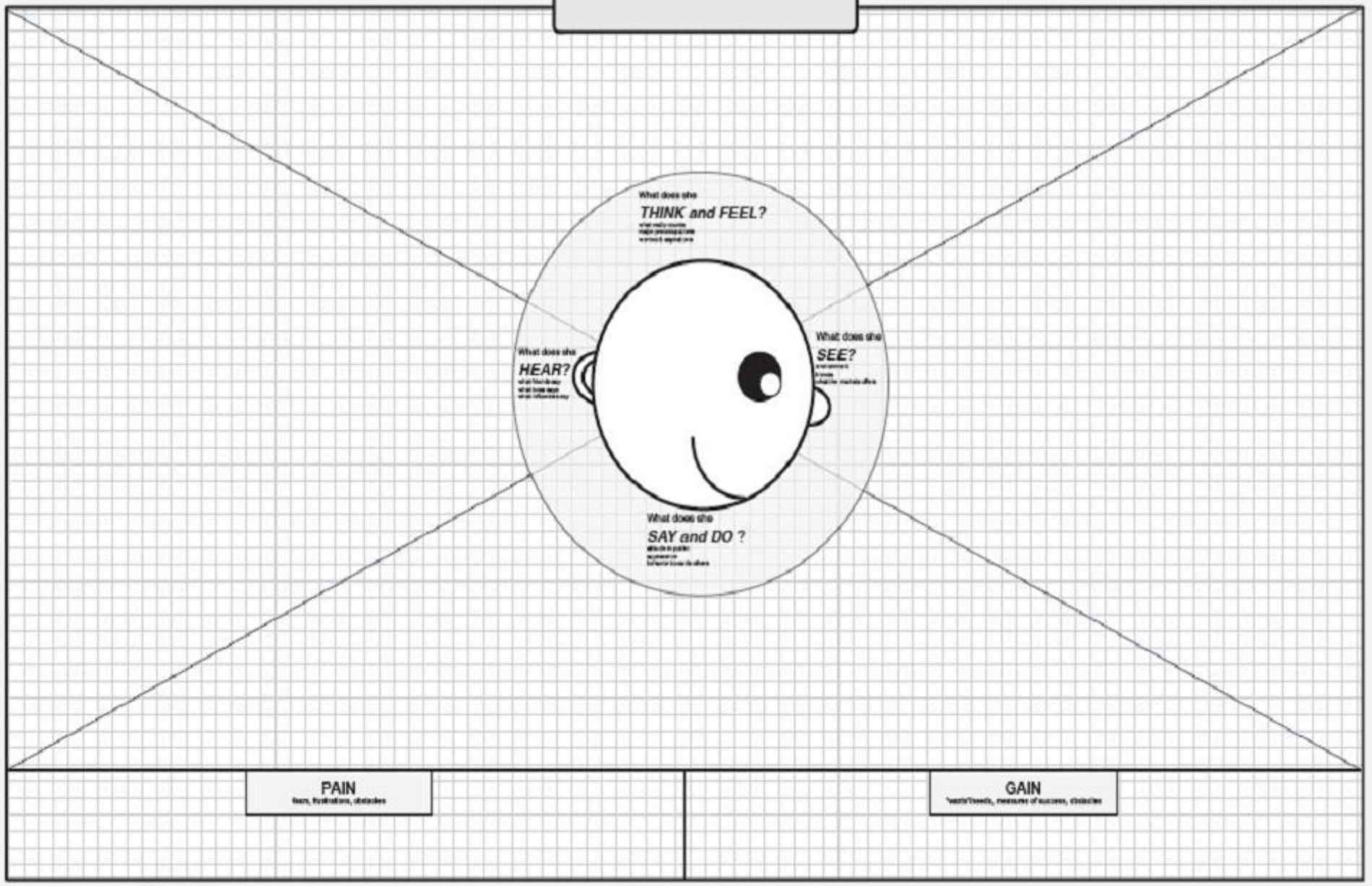
Designed for:

Designed by:

Date:

Interation:

Customer Perspective:



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DEFINE

- The main idea behind the "define" stage is to frame problems as opportunities for creative solutions.
- The focus throughout the design workshop is very much on creating a comprehensive problem statement outlining the key problem(s) to address (see next Figure).
- This stage is all about concentrating on the 'right' problem to solve and constantly asking the 'why' of a specific problem or need.
- One thing I realized is that it can be very tempting to already include a potential solution in your problem statement, but the trick is to refrain from that and to restrict oneself to the user problem instead.

DEFINE - FIGURE

Outline for formulating a problem statement

Standard formula:

- Stakeholder (describe person using empathetic language) NEEDS A WAY TO Need (needs are verbs) BECAUSE Insight (describe what you've learned about the stakeholder and his need)

A simple example:

- Richard,who loves to eat biscuits wants to find a way to eat at 5 biscuits a day without gaining weight as he's currently struggling to keep his weight under control.

IDEATE

- After formulating a problem statement, then it's time to think of solutions.
- The purpose of the "ideate" stage is to generate as many potential solutions as possible, without worrying too much about feasibility.
- Once you've got a good number of solutions on paper, you can then start refining this list by taking into account relevant constraints, potential commercial or user benefits, business goals, etc.
- A way to filter ideas is by starting off with the 'ideal scenario' (i.e. no constraints of any kind) and then start working backwards to determine those solutions that are actually – commercially or technically – viable.

PROTOTYPE

- Prototype to Test: building low fidelity prototypes to test your solutions as well as to test your understanding of the problem with actual users.
- It was good to be reminded of the importance of testing prototypes, doing it quickly and in low fidelity.
- In my view, getting user reactions on your prototypes quickly is what matters most – not to deliver picture perfect or super detailed prototypes (see next Figure).

PROTOTYPE - FIGURE

- *Fig. 4 – Some suggestions for "Prototyping to Test" by Stanford Design School*
- **Start building** – Even if you aren't sure what you're doing, the act of picking up some materials (paper, tape, and found objects are a good way to start!) will be enough to get you going.
- **Don't spend too long on one prototype –** Move on before you find yourself getting too emotionally attached to any one prototype.
- **Build with the user in mind –** What do you hope to test with the user? What sorts of behavior do you expect? Answering these questions will help focus your prototyping and help you receive meaningful feedback in the testing phase.
- **ID a variable** – Identify what's being tested with each prototype. A prototype should answer a particular question when tested.

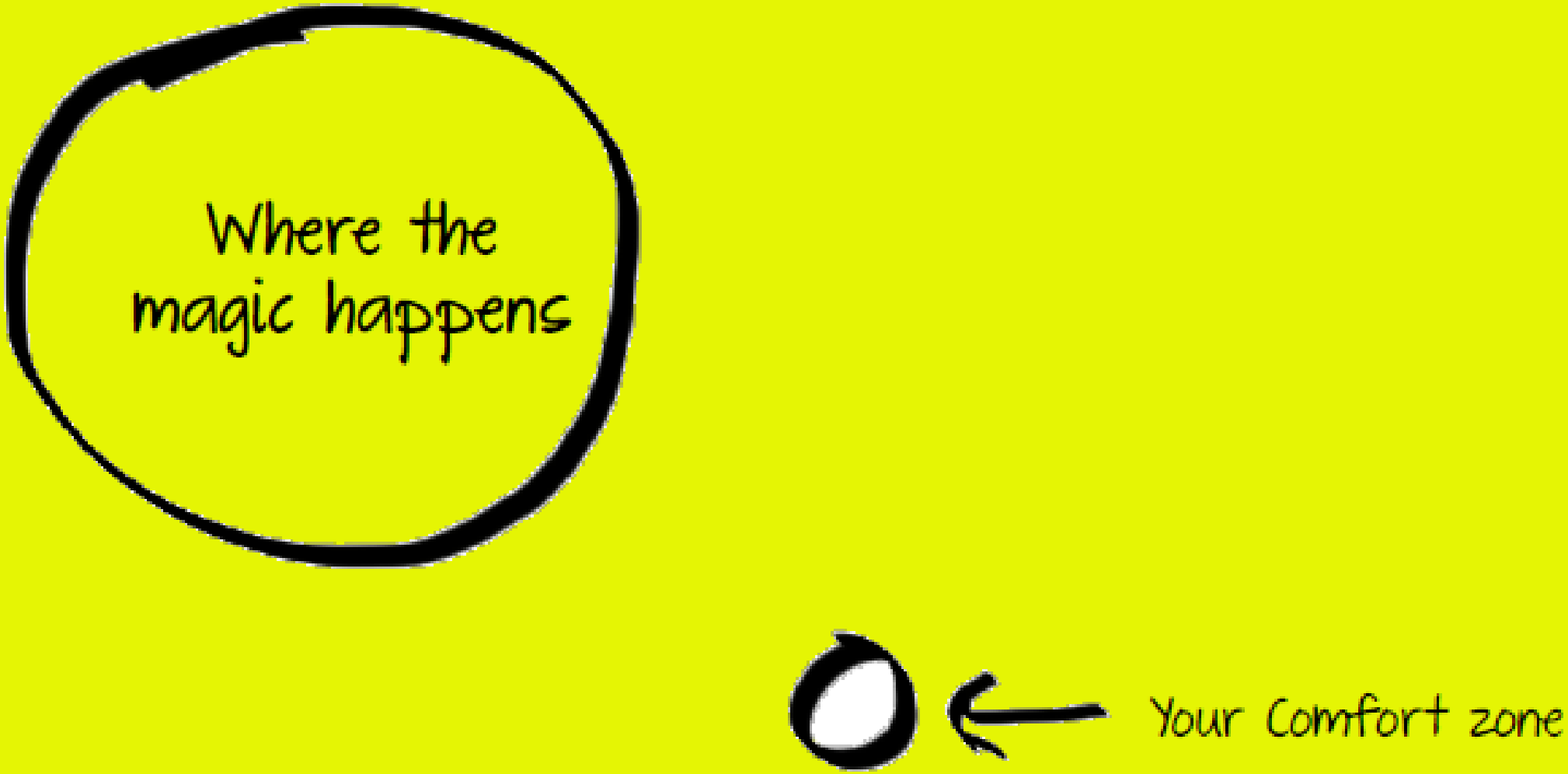
TEST

- The "testing" stage is all about learning what works and what doesn't in order to improve solutions.
- One can establish whether something 'works' by looking at three criteria:
  - (1) somebody wants it,
  - (2) we can create and deliver it, and
  - (3) doing so has the potential to produce the outcomes that we want as a business.

- Based on the outcomes of testing, you can revisit some of your solutions or decide on a single prototype to develop further.

MAIN LEARNING POINT

- Individually, the different stages that form "Design Thinking" aren't that revolutionary in my opinion.
- Things like ideating and prototyping are already well ingrained into most design and development practices.
- However, Design Thinking as a whole provides a great framework for innovation and for working through creative ideas.
- If I had to highlight one aspect which I found most valuable in the design course, I'd choose the "define" stage.
- Particularly from a product manager perspective, I learned more about the value of spending a good amount of time defining and validating problems, which I believe is crucial if you want to generate insights and build the 'right' product to meet user and business needs.


Where the
magic happens
Your Comfort zone