

Design Thinking



Approach to Problem Solving

Designers! Your help is needed!



User: Who needs your help?

1. Rural Farmers
2. Angry Old Men
3. Mothers
4. Athletes
5. Robots
6. Rockstars
7. Best Friends
8. Witches
9. Firefighters
10. Bus Drivers

Challenge: What do they need help with?

1. A way to keep their heads warm
2. A way to show gratitude
3. A way to clean their teeth
4. A way to exercise while working
5. A way to spread ideas
6. A way to eat on the go
7. A way to live dangerously
8. A way to settle disputes
9. A way to interact over the internet
10. A way to tell someone you care

Constraint: It needs to be...?

1. Unbreakable
2. Lighter than a brick
3. Glow in the dark
4. Something your mother would hate
5. inflatable
6. Trendy
7. As soft as a feather
8. Minty fresh
9. Solar powered
10. Covered in mushrooms

Design Team **ACTIVATE!**

Define your challenge

Brainstorm solutions

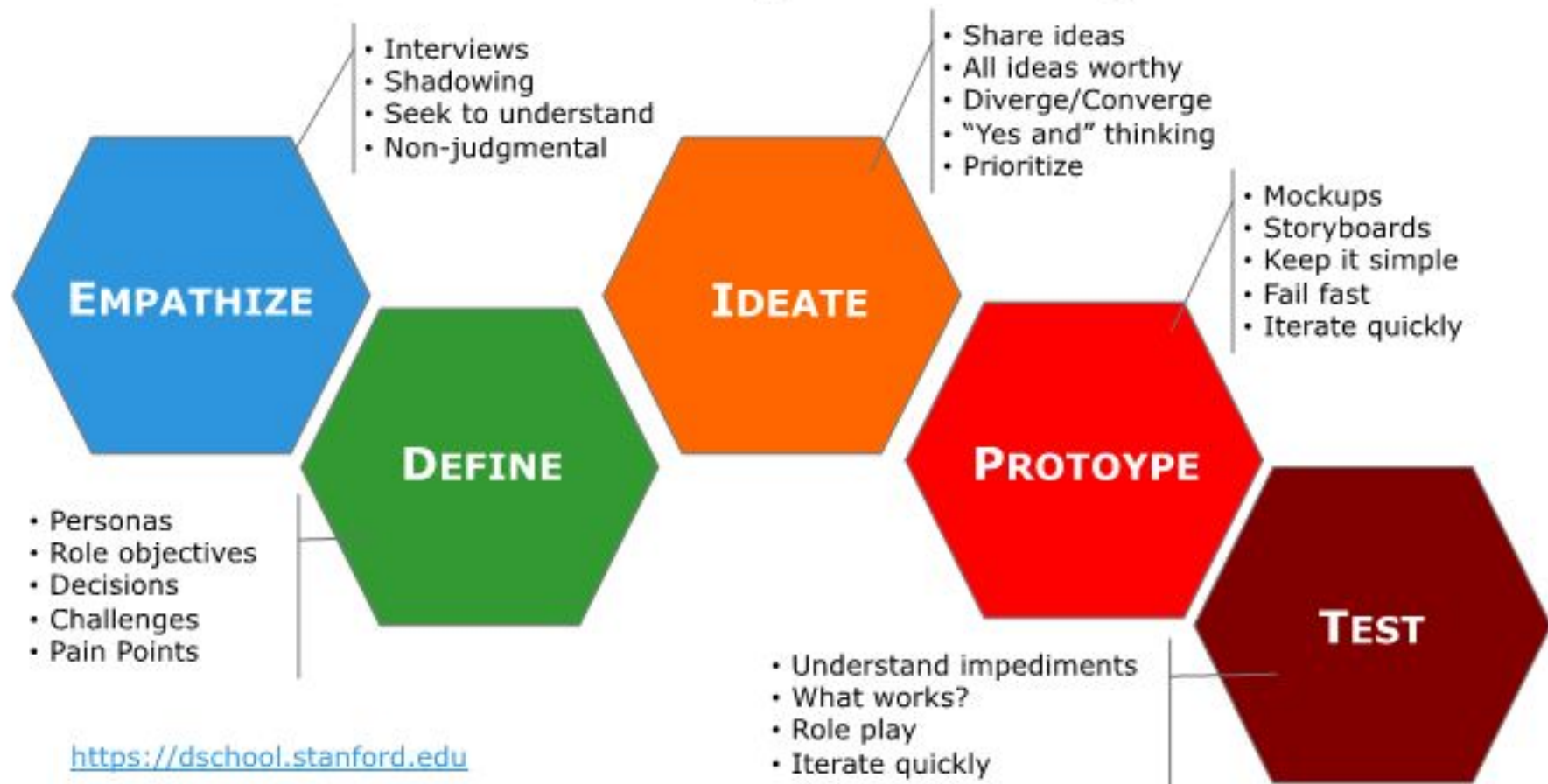
Choose the **BEST** solution

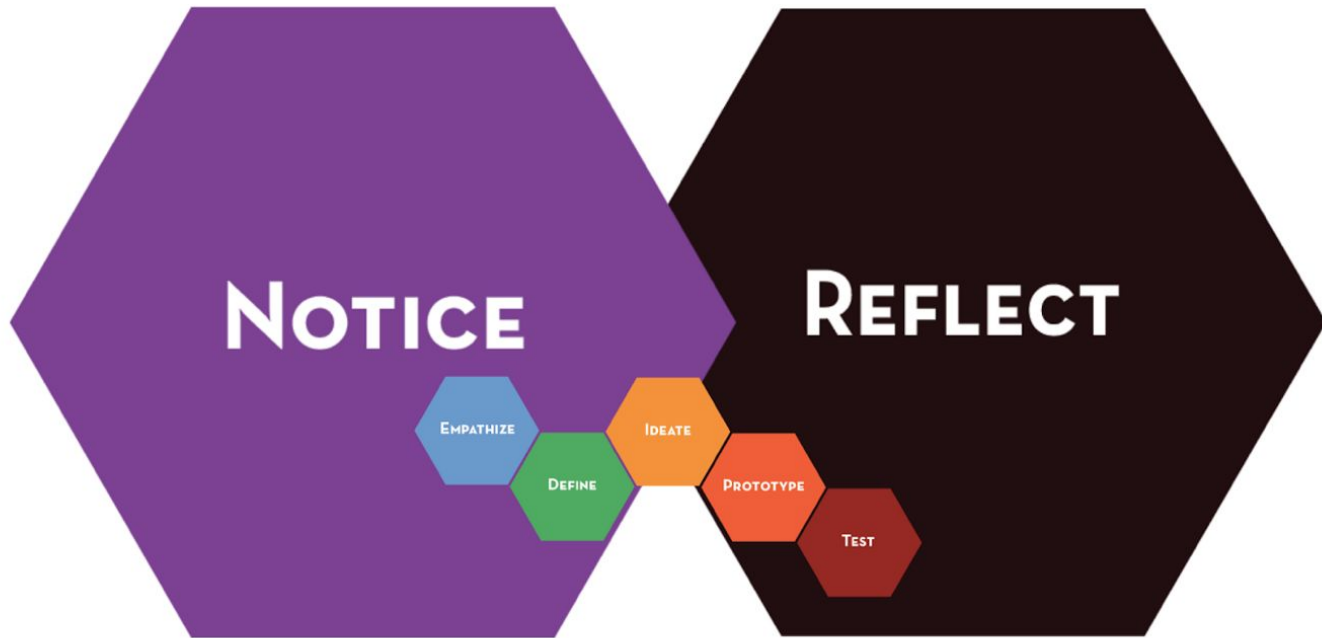
Create a Lo-Fi prototype

Design Thinking Process



Stanford d.school Design Thinking Process





Liberatory Design

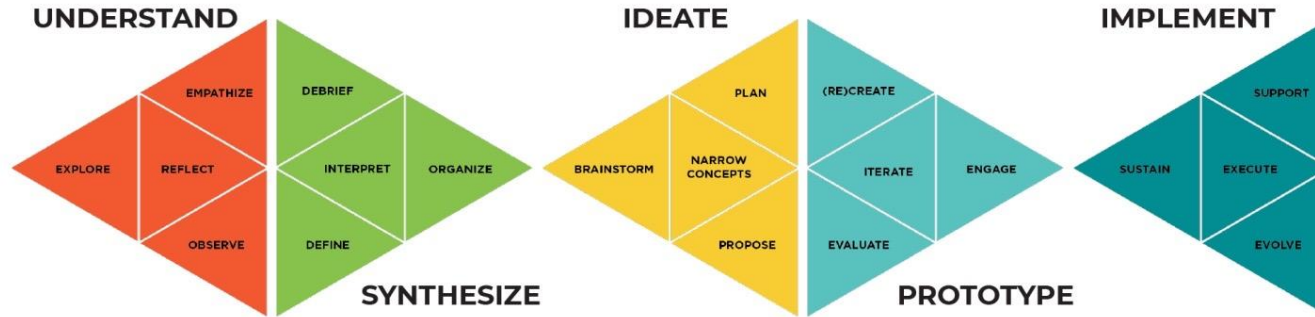
Liberatory Design was created by **Tania Anaissie, Victor Cary, David Clifford, Tom Malarkey and Susie Wise** during a collaboration in 2016/17 with the National Equity Project and The K12 Lab at the Stanford d.school.



An emphasis on noticing and reflecting modes.

Siebel Center for Design Taxonomy

An approach to design thinking: The five taxonomy spaces identified (Lawrence, L., Shehab, S., & Tissenbaum, M.).



Sample STEM Challenge from 2018-19

Improving healthcare outcomes depends on scientific research & development of patient treatments. Takeda is committed to a patient-centric approach intended to improve the lives of those in need of healthcare treatment. To successfully make improvements in this area, it is important to look at a patient's journey from beginning to end, and to understand all of the factors that have an impact on the success of medical care.

How can you, through the lens of a selected Takeda disease state, address and improve a challenge encountered by a patient in their treatment journey? Research and explore to better understand symptoms, diagnosis, treatment options, and the quality of life that patients face.

Problem Statement:

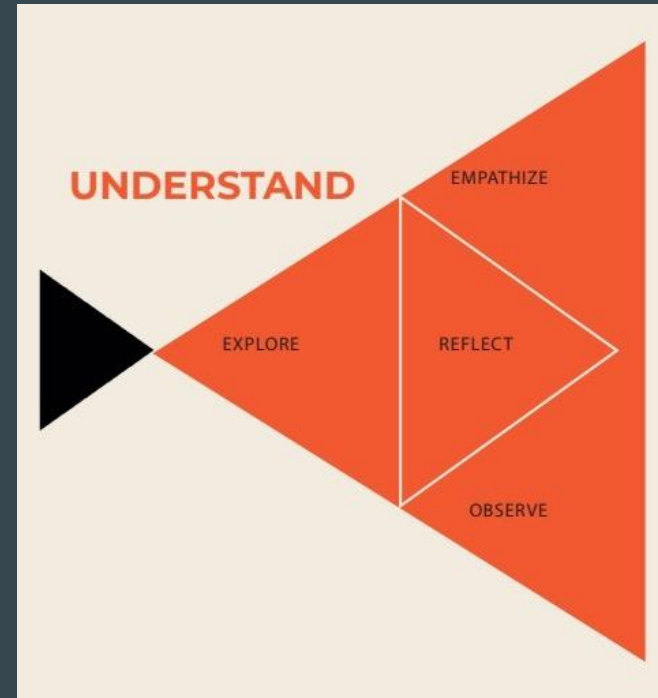
How can we understand the challenges faced by patients associated with a specific Takeda disease state such as breast cancer and develop a solution that improves one of the challenges and then present that solution to Takeda Pharmaceuticals and other healthcare stakeholders?

Empathize/Understand

Problem Statement:

How can we understand the challenges faced by patients associated with a specific Takeda disease state such as breast cancer and develop a solution that improves one of the challenges and then present that solution to Takeda Pharmaceuticals and other healthcare stakeholders?

What questions would you ask?

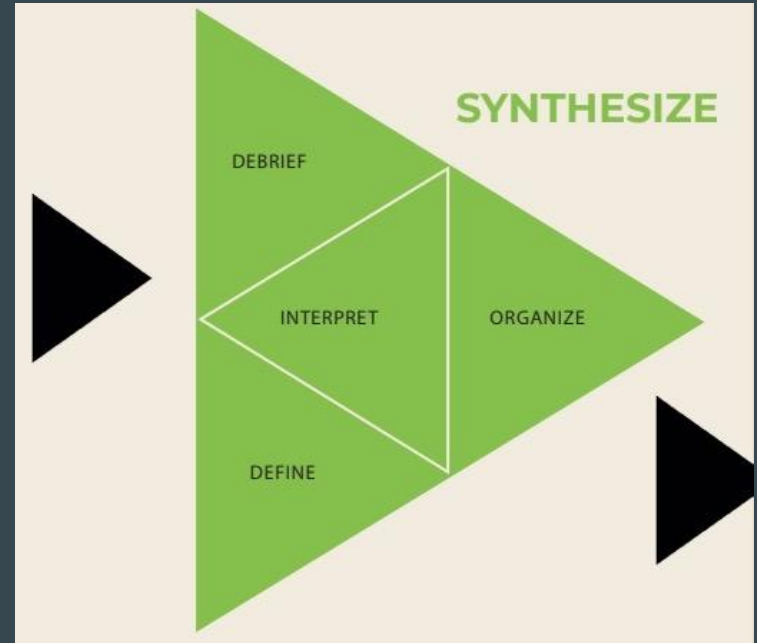


Define/Synthesize

Problem Statement:

How can we understand the challenges faced by patients associated with a specific Takeda disease state such as breast cancer and develop a solution that improves one of the challenges and then present that solution to Takeda Pharmaceuticals and other healthcare stakeholders?

What is the pain point that you want to address?

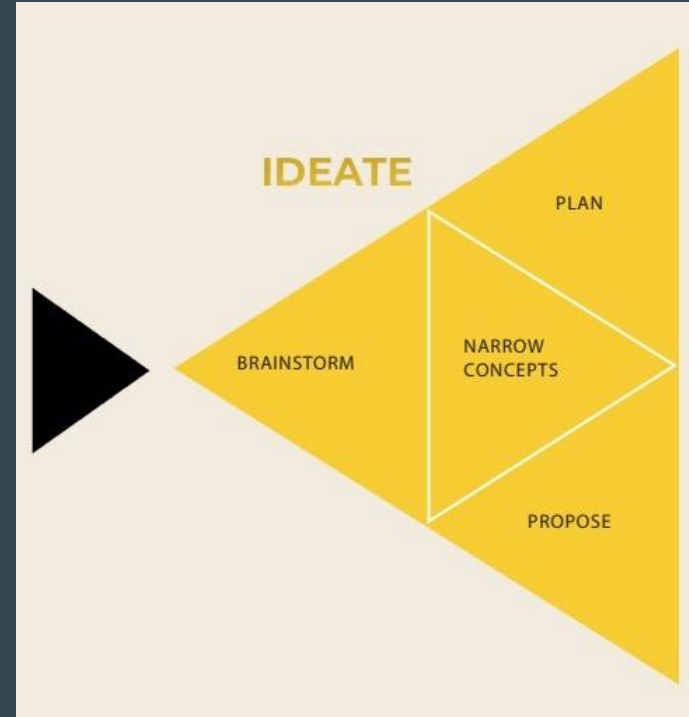


Ideate

Problem Statement:

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What are ALL of the possible solutions?

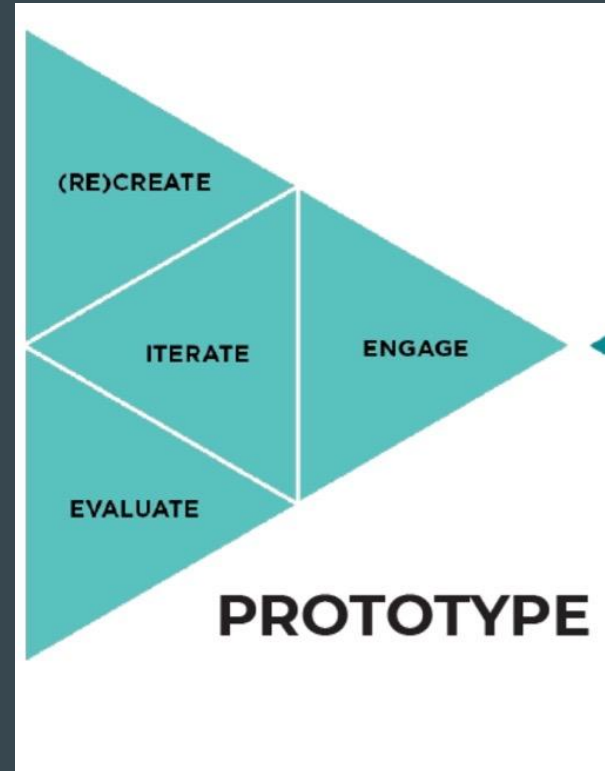


Prototype

Problem Statement:

How can we understand the challenges faced by patients associated with a specific Takeda disease state such as breast cancer and develop a solution that improves one of the challenges and then present that solution to Takeda Pharmaceuticals and other healthcare stakeholders?

How can you communicate your idea?

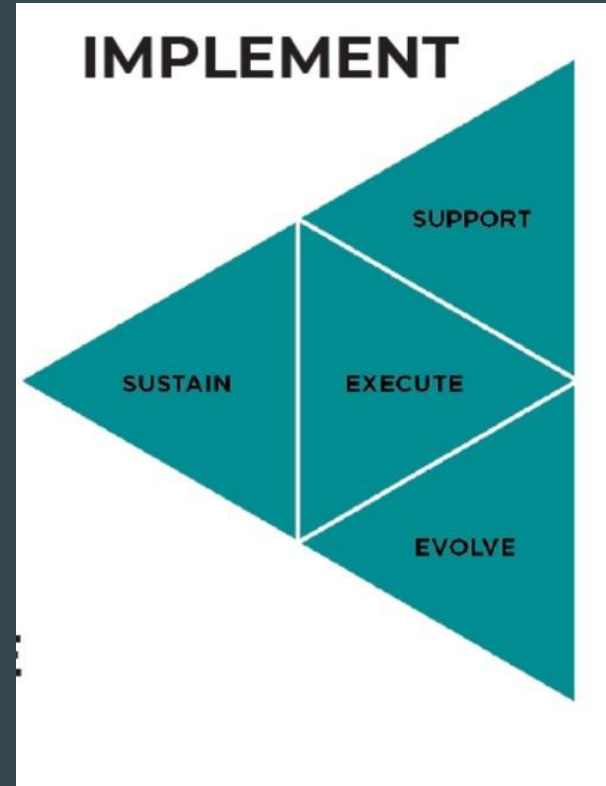


Test/Iterate/Share

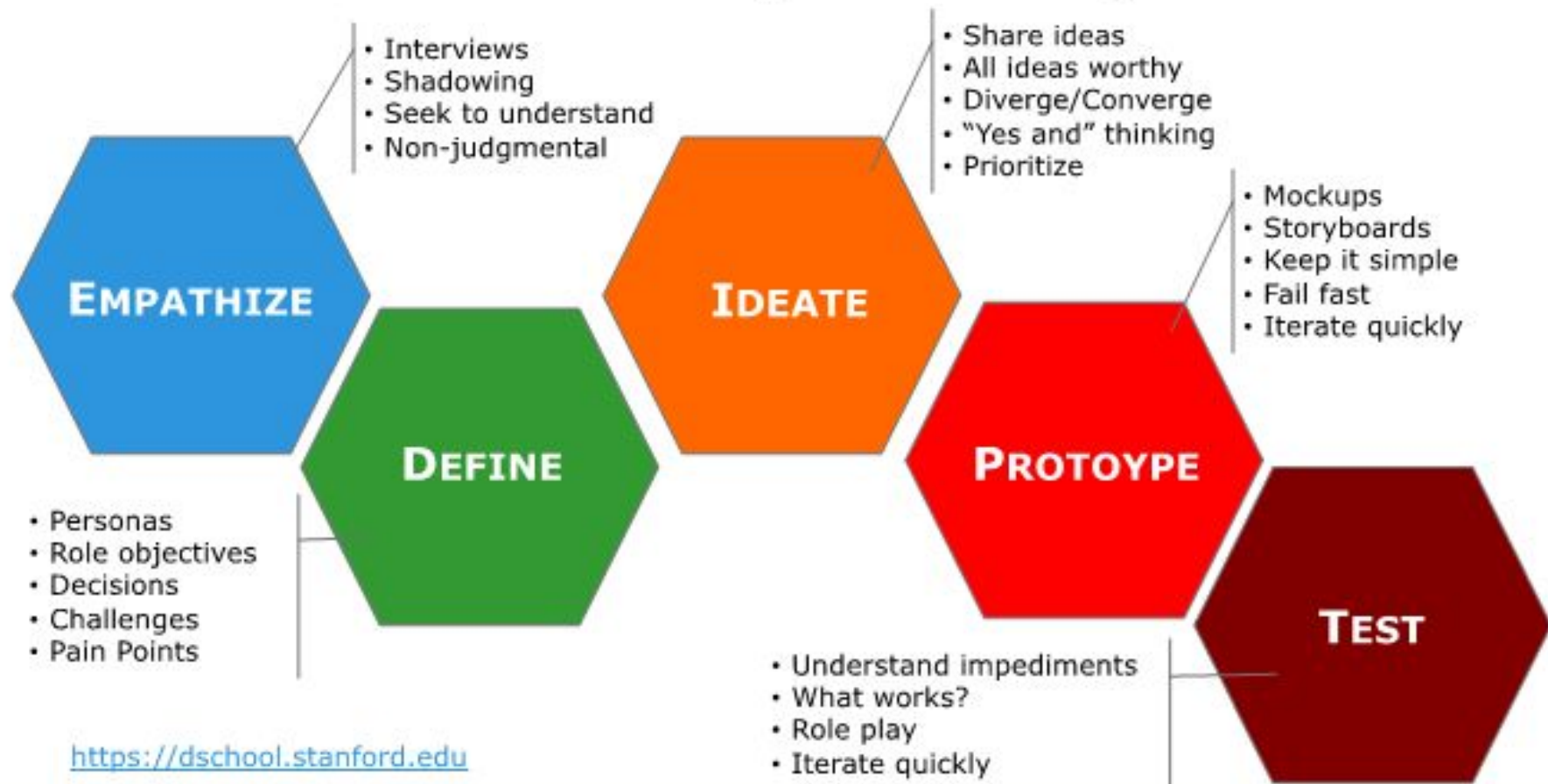
Problem Statement:

How can we understand the challenges faced by patients associated with a specific Takeda disease state such as breast cancer and develop a solution that improves one of the challenges and then present that solution to Takeda Pharmaceuticals and other healthcare stakeholders?

How can you improve your idea?



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Discussion