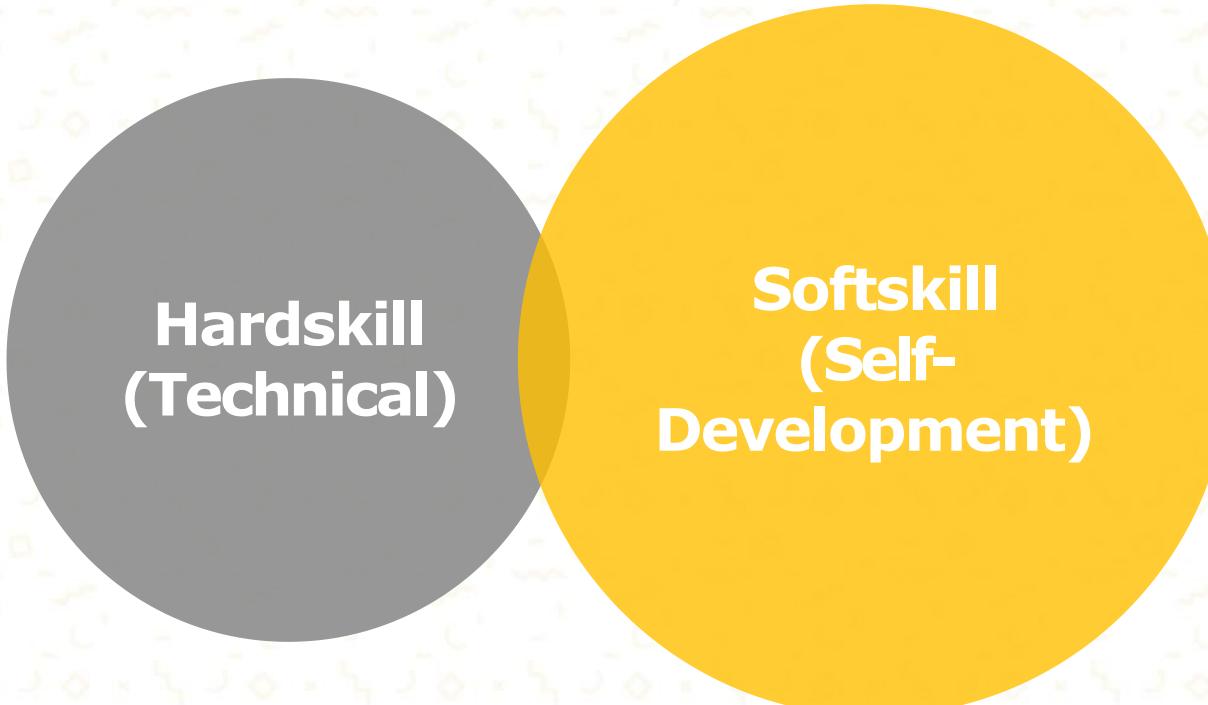


Analytical & Critical Thinking



**Hardskill
(Technical)**

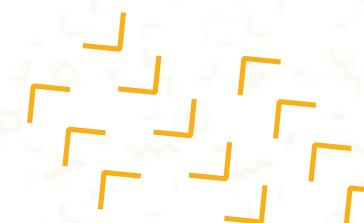
**Softskill
(Self-
Development)**



Problem Solving Skills

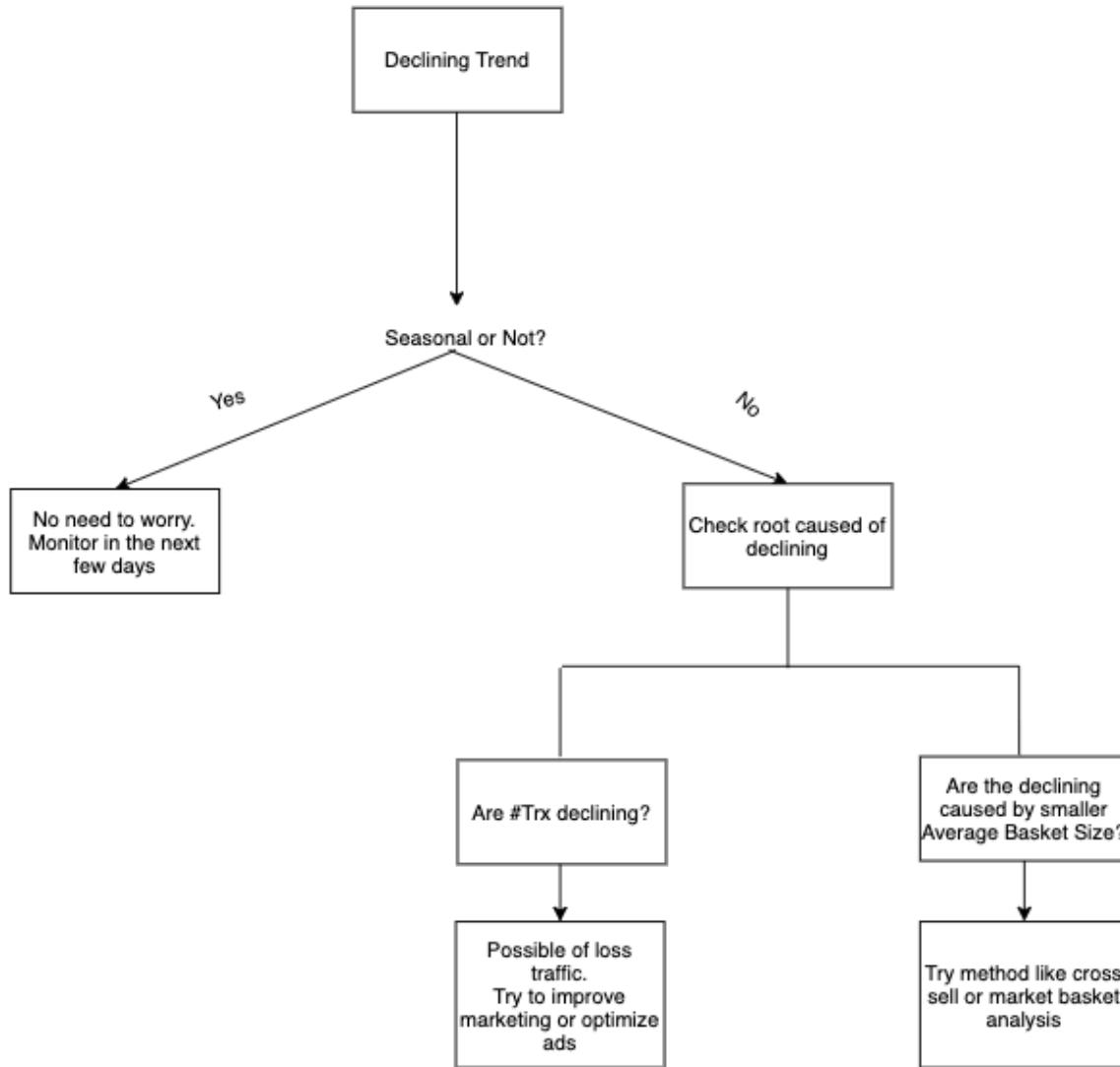
Example of Question :

1. As an Analyst, you see that our sales declining on 10-16 August 2020, what will you do?
2. How do we create a score ranking in Search Page based on Hotel Rating?





Example of Solving it



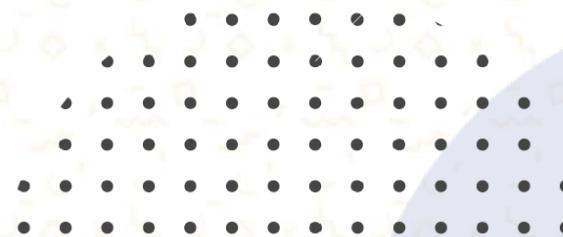
Design Thinking

What | How | Practice



Design Thinking is...

“a philosophy and a set of tools to help you solved problem **creatively.**”



Design Thinking

User-centered
Design Lens



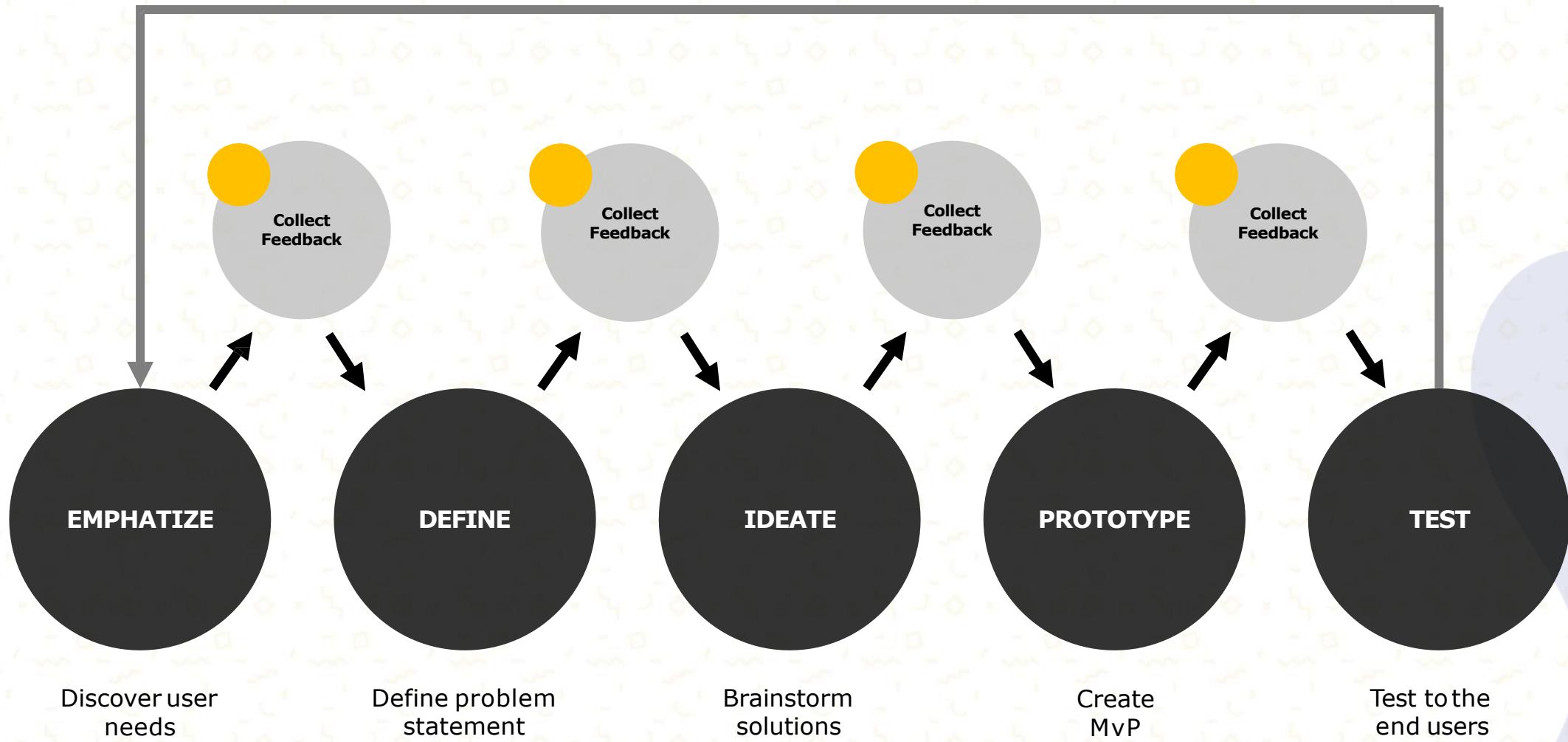


Design Thinking is Not...

“We have this technology,
what can we use it for?”

“Our competitors just
launched X, how can we
do X quickly?”

“We have this problem, let’s jump
in and get in a room and
brainstorm solutions!”





Emphasize



Research Your Users' Needs

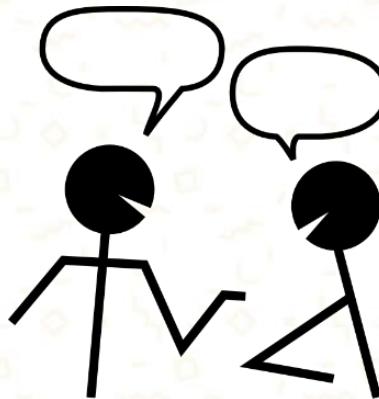
- Who am I making this for?
- What is their problem?
- What do these people do?



Listen



Engage



Observe



IKNOW THAT FEEL BRO





Define

State Your Users' Needs & Problems



- What are the users needs?
- What are their problems?
- What are their challenges?
- What are the insights I can use?





“How do you take everything you learned in the emphasized phase, and turn that into insights?”



Emphasize



Define

Ideate



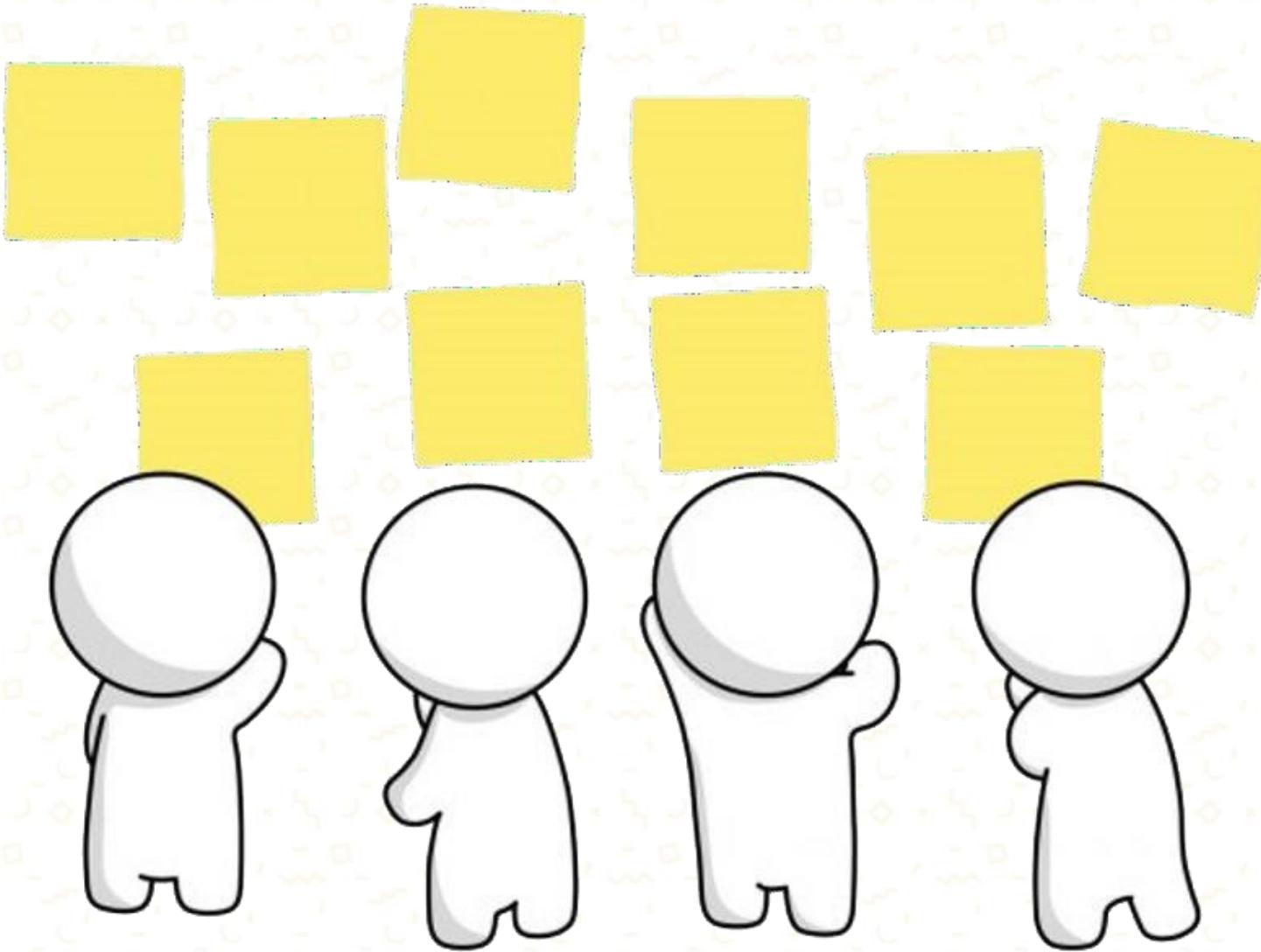


Challenge Assumption And Create Ideas



- Solutions.
- Ideas.
- Potential matches.





Brainstorm



Prototype

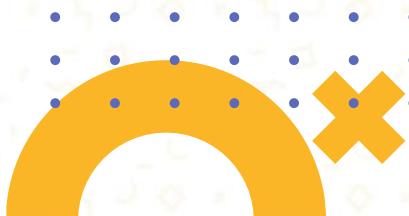


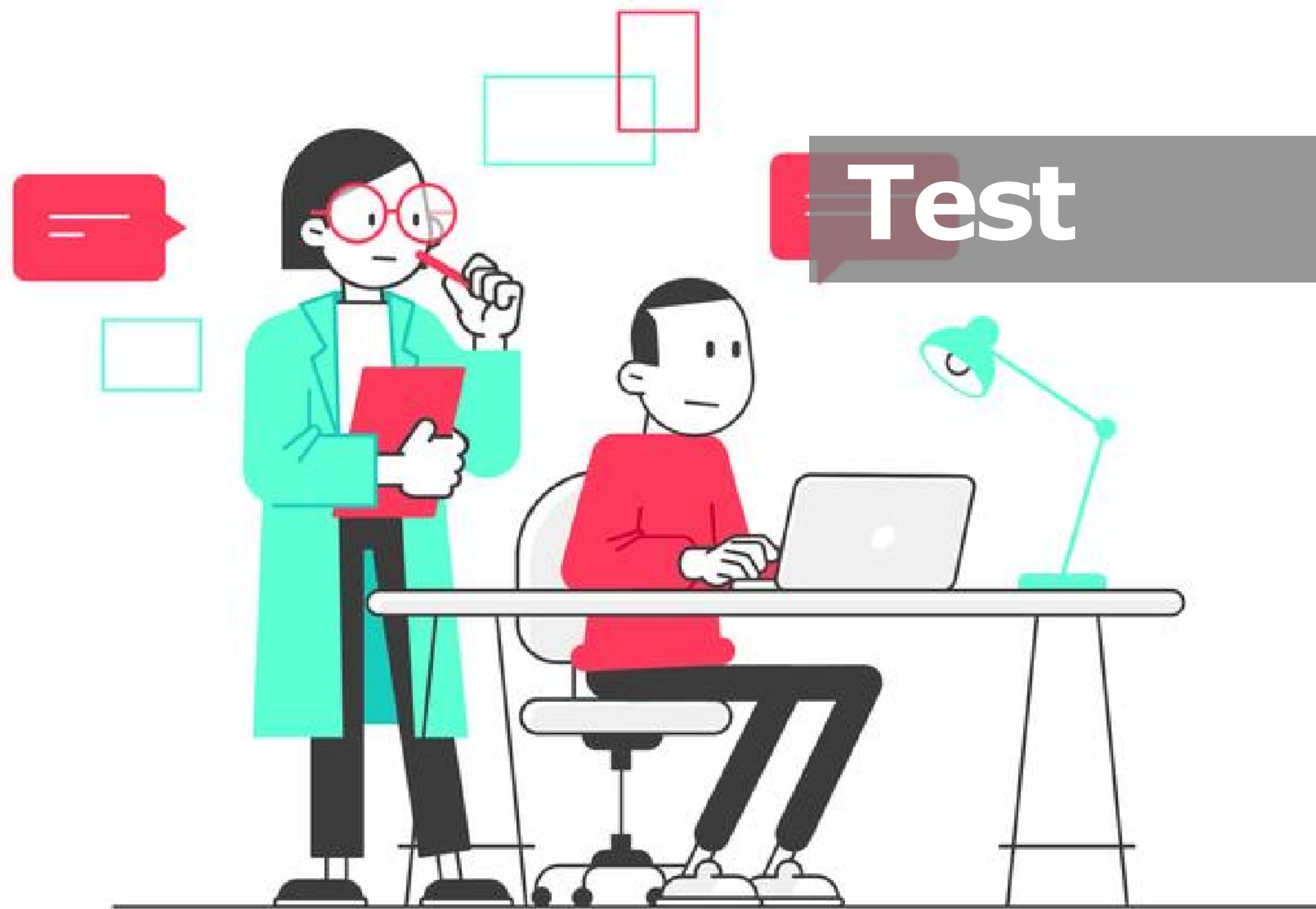


Start to Create Solutions

THERE ARE
3
Solutions

- Create Minimum Viable Product (MVP).
- Inexpensive.
- Scaled-down.



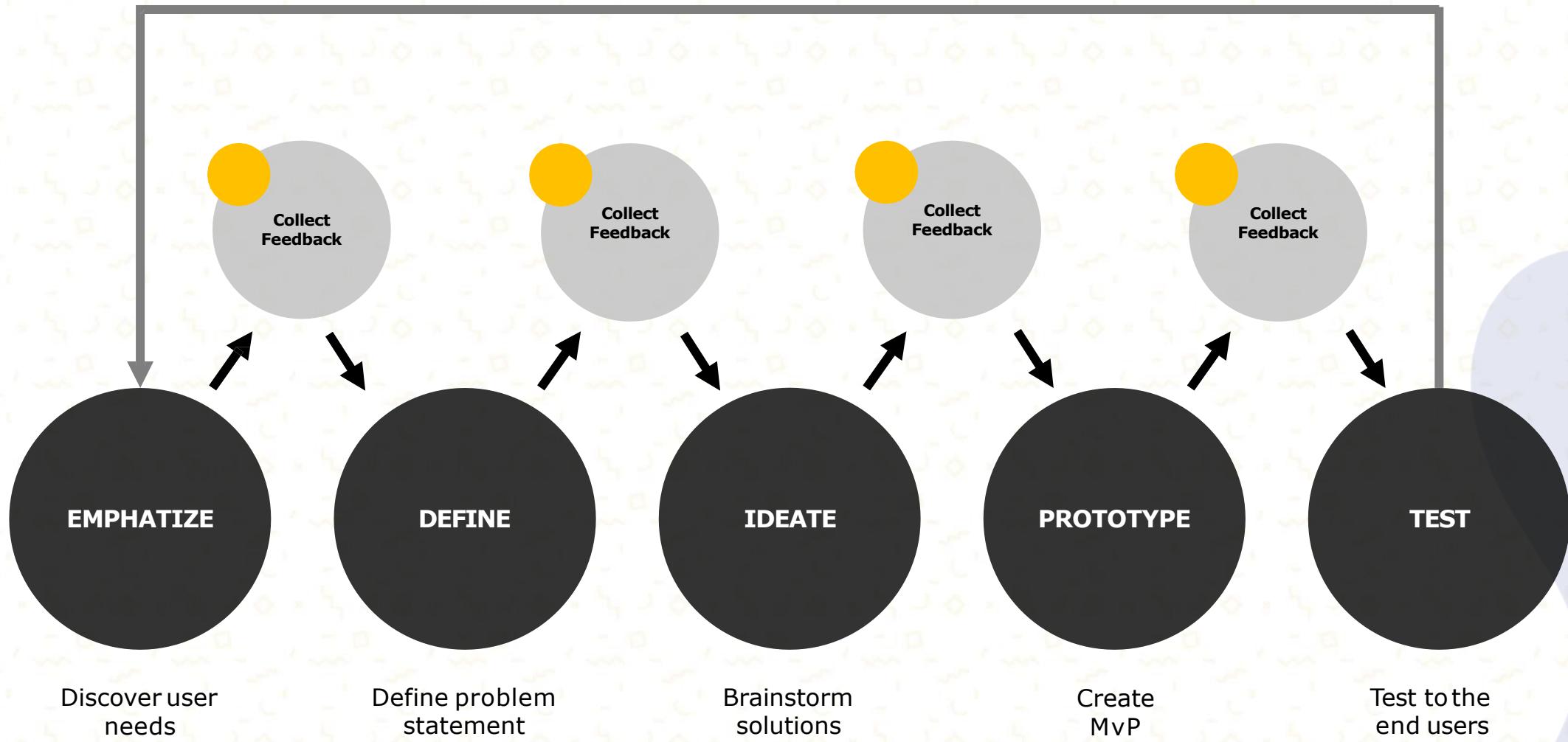




Try Your Solutions Out

- Test to the end-user.
- Expect feedback.
- Iterative.





Design Thinking

What | How | Practice



Emphasize Tools

You Can Use:

Assume a beginner's mindset.

Ask the 5 whys.

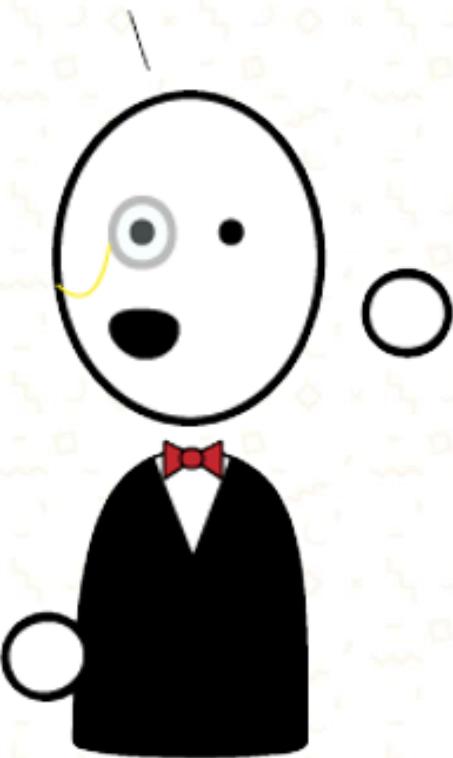
Empathy map.



Assume a Beginner Mindset

- Forget your assumptions and personal belief.
- Misconceptions or stereotypes limit the amount of real empathy you can build.
- A beginner's mindset allows you to put aside biases and approach, and design with "fresh eyes".
- What you should do:
 - Don't judge.
 - Question everything.
 - Be truly curious.
 - Find patterns.
 - Listen without thinking how you're going to respond.

I KNOW HOW
THIS WORKS!



VS.

I WONDER HOW
THIS WORKS?



Ask The 5 Why's

Repeating the Why question 5 times to identify the root cause of a problem.

Some useful rules:

- Write down the problem and make sure that all people understand it.
- Distinguish causes from symptoms.
- Pay attention to the logic of cause-and-effect relationship.
- Assess the process, not people.
- Never leave “human error”, “worker’s inattention”, “blame Adit” etc, as the root cause.
- When you form the answer for question “Why” – it should happen from the user’s point of view.





Empathy Map

- Say:** quotes from what users say during interview.
- Think:** what users seems to think.
- Do:** actions that the user takes during the experiment.
- Feel:** the user's emotional state.

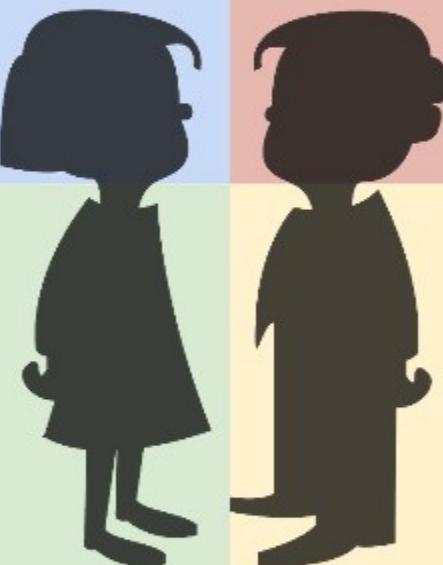
SAY

What are some quotes and defining words your user said?

Empathy Map

DO

What actions and behaviors did you notice?



THINK

What might your user be thinking? What does this tell you about his or her beliefs?

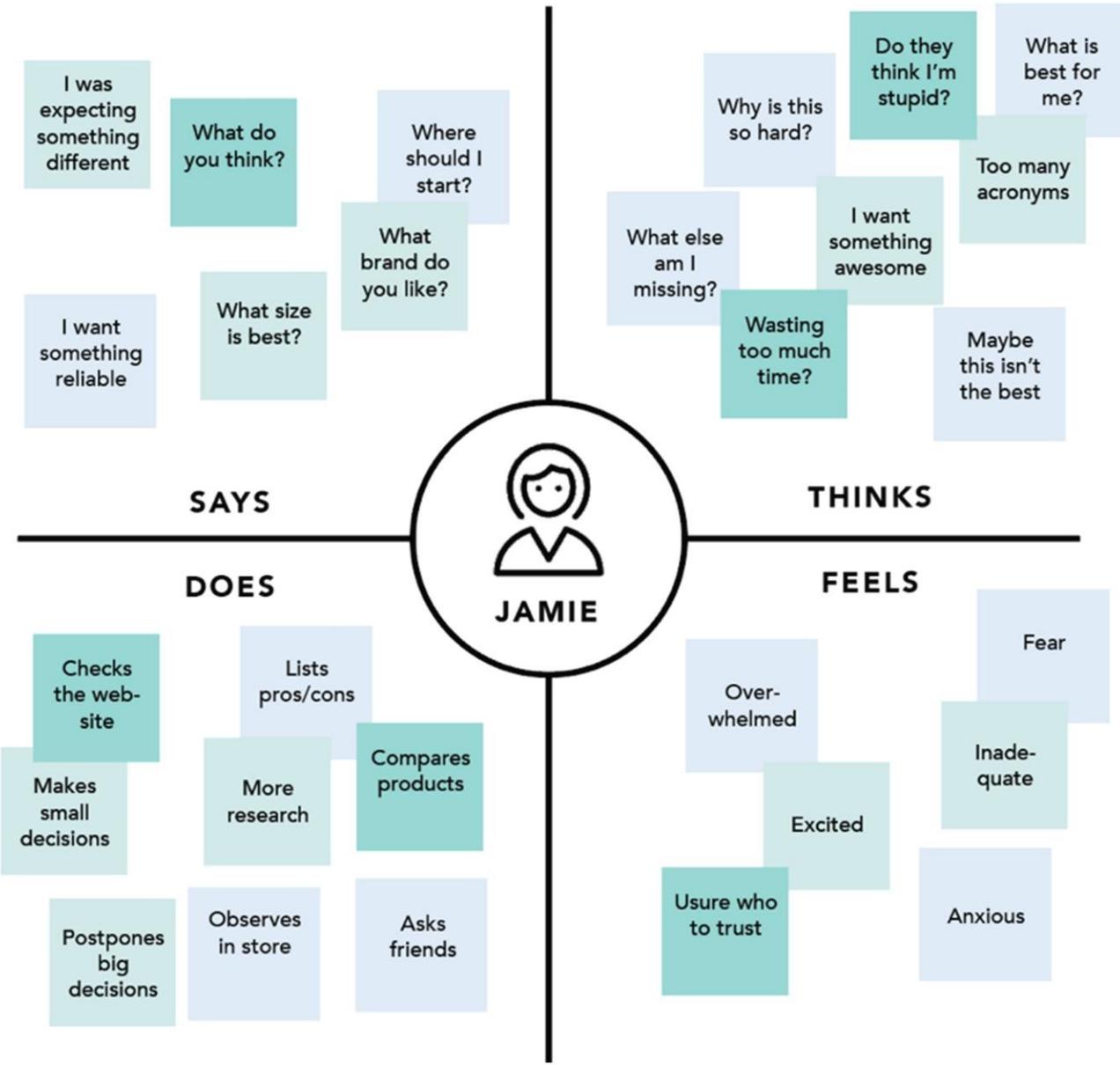
FEEL

What emotions might your subject be feeling?

Finally, find Needs and Insights of your user.

Created by @davidleeedtech
Info from IDEO (goo.gl/uJlQ8K)

EMPATHY MAP Example (Buying a TV)



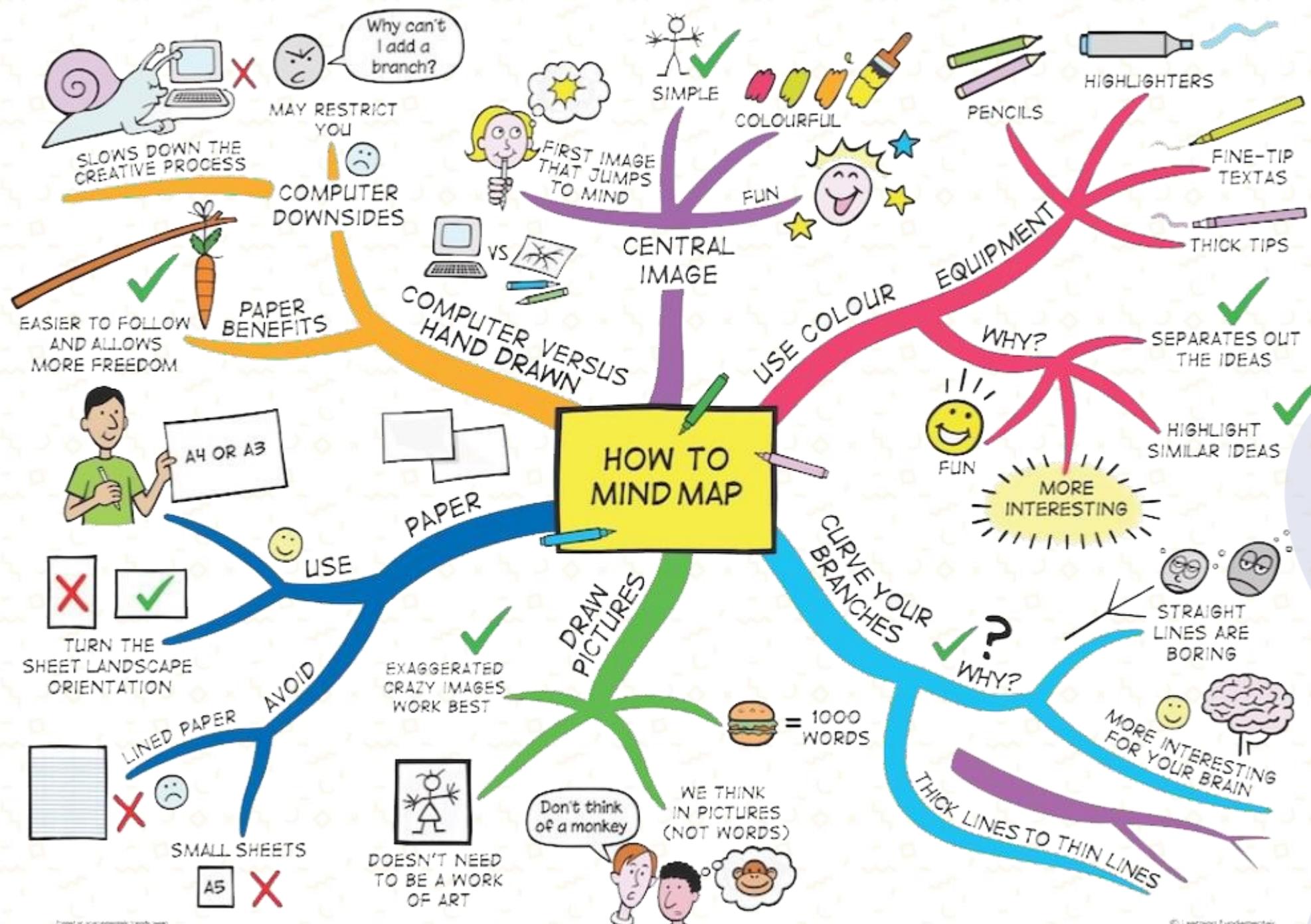
As a Data Scientist, you need to **understand your audience** even better than they understand themselves. But, the only way you'll get there is to develop a **deep empathy** for their habits, beliefs, quirks, workarounds, etc.



Ideate Tools

Mindmap:

- Begin with the main concept.
- Add branches to the main concept.
- Explore topics by adding more branches.
- Add images and colors (optional).



Design Thinking

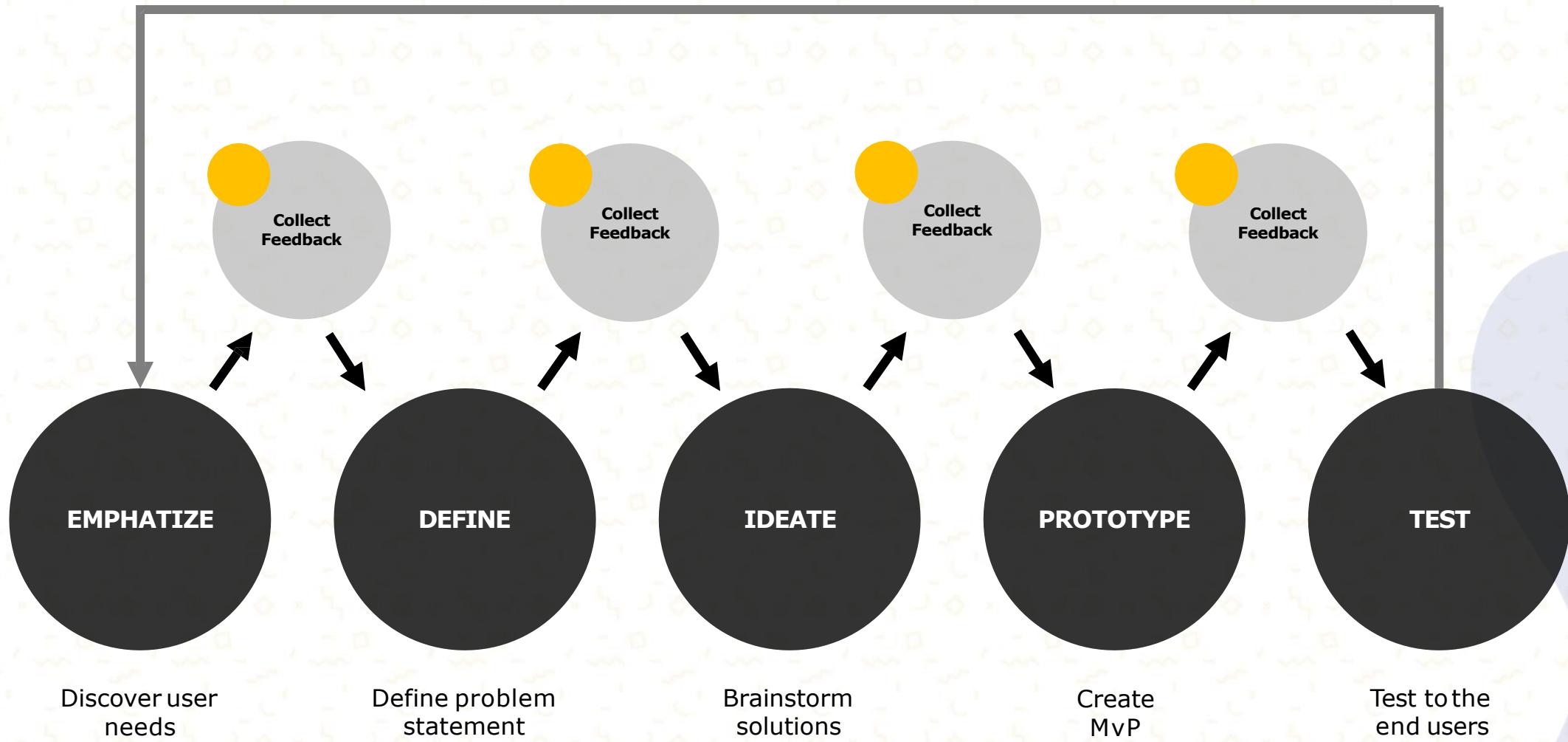
What | How | Practice

Design Thinking Implementation

As a Data Scientist:

HR Team are desperate to **measure individual and team performance**. There are so many HR metric, and the **data gathering process is painful** because there are so many tasks differences from each team.

1. Define what to do first.
2. Define that data we should gather to achieve the objectives.
3. Define how the data input and processing process.



**“Seek first to understand,
then to be understood”**





“Begin with the end in mind”

share
the story



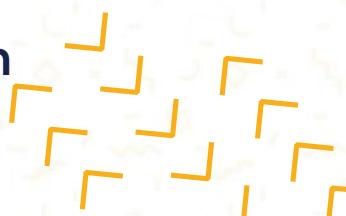
C Retention Rate

In marketing and product management, retention rate refers to the percentage of customers who continue paying for a product over a given timeframe. This is a critical success metric for subscription-based businesses.

In simple way, retention measures % of users return / repurchasing your product.

For example, in January you have 100k users. From those 100k users, 35k of them transacting again in February. From the same 100k users in January, 30k of them transacting again in March.

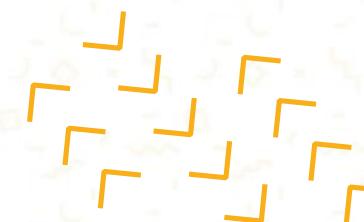
This means that your Retention Rate in February is 35% and your Retention Rate in March is 30%.



C Retention Rate

Why Retention Rate Important?

- Leads to outsize profits
- Tells you whether or not your product is continuing to solve your customer's problem
- Far more cost-effective than acquiring new customers



C Retention Rate

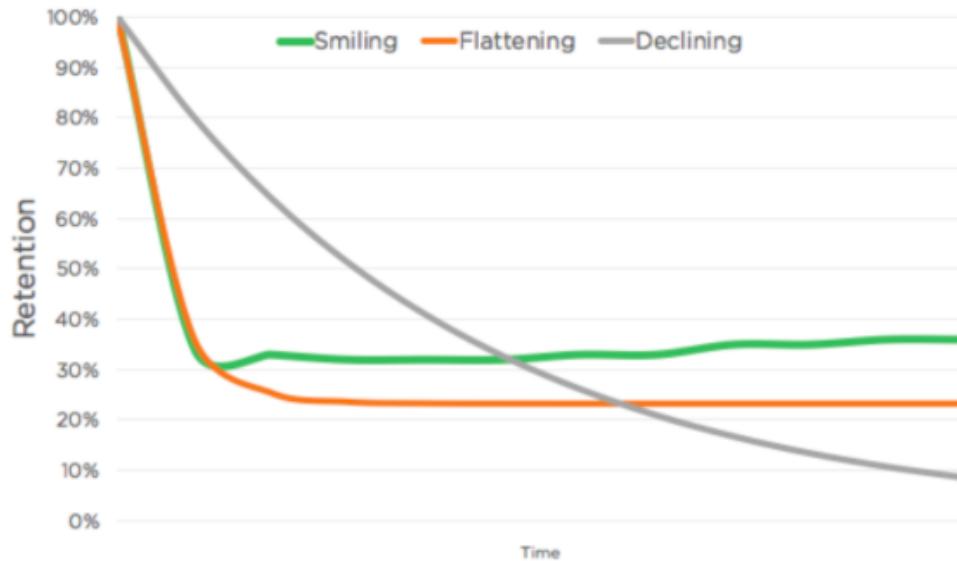


Figure 1

App Launched ↓ % Active users after App Launches →

Cohort	Users	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
Jan 25	1,098	100%	33.9%	23.5%	18.7%	15.9%	16.3%	14.2%	14.5%	Retention over user lifetime		12.1%
Jan 26	1,358	100%	31.1%	18.6%	14.3%	16.0%	14.9%	13.2%	12.9%			
Jan 27	1,257	100%	27.2%	19.6%	14.5%	12.9%	13.4%	13.0%	10.8%	11.4%		
Jan 28	1,587	100%	26.6%	17.9%	14.6%	14.8%	14.9%	13.7%	11.9%			
Jan 29	1,758	100%	26.2%	20.4%	16.9%	14.3%	12.7%	12.5%				
Jan 30	1,624	100%	26.4%	18.1%	13.7%	15.4%	11.8%					
Jan 31	1,541	100%	23.9%	19.6%	15.0%	14.8%						
Feb 01	868	100%	24.7%	16.9%	15.8%							
Feb 02	1,143	Retention over product lifetime		18.5%								
Feb 03	1,253	Retention over product lifetime										
All Users	13,487	100%	27.0%	19.2%	15.4%	14.9%	14.0%	13.3%	12.5%	13.1%	12.2%	12.1%

C Retention Rate

Source : <https://www.sequoiacap.com/article/retention>



Thank YOU