



PMDE PROGRAM

MODULE 4: DESIGN THINKING - IDENTIFYING PRODUCT OPPORTUNITIES

CLASS: PMDE BATCH , MODULE 4

SESSION-1, 2, 5

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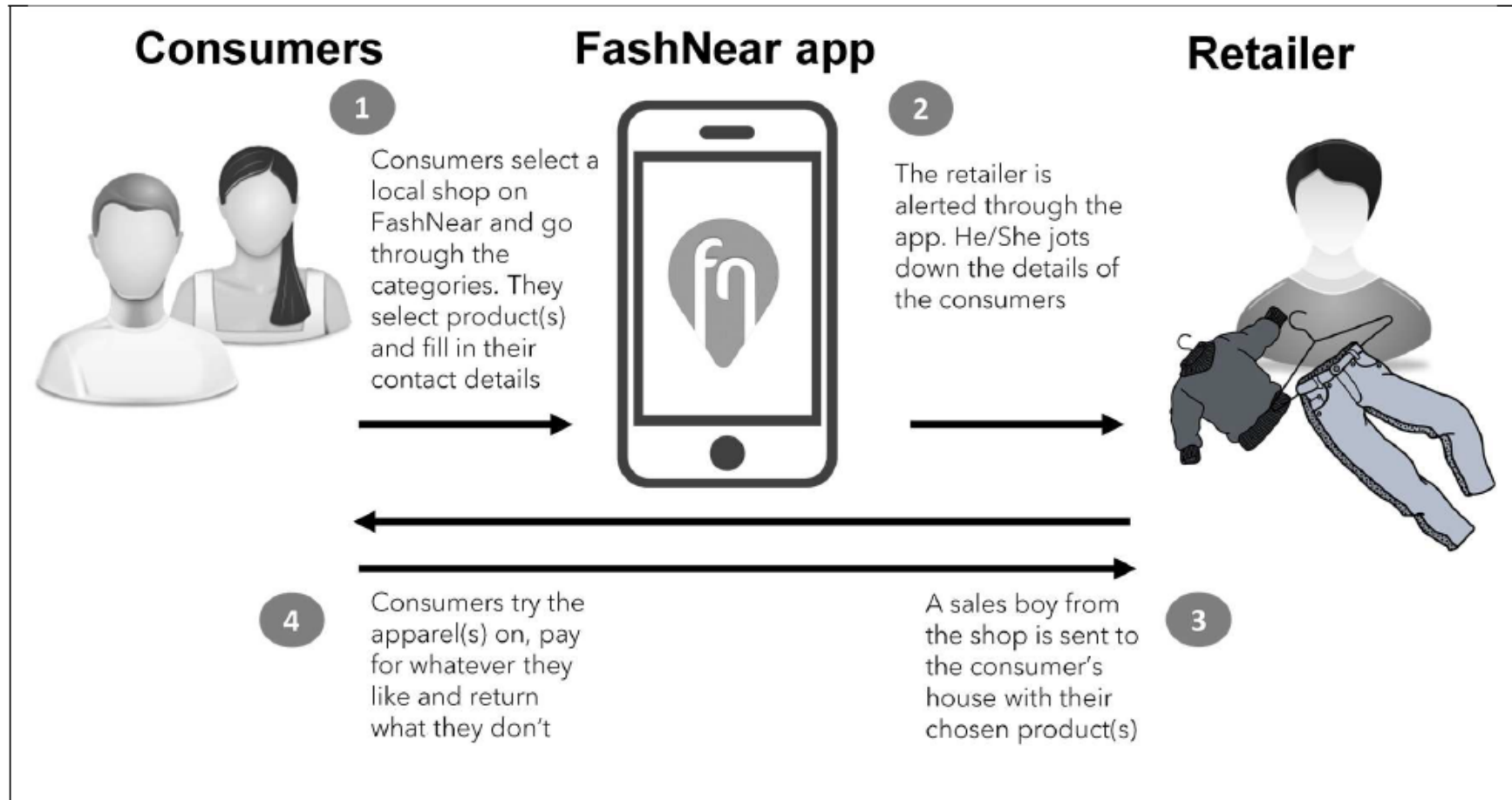
MINI CASE : FASHNEAR

MINI-CASE:

- What was the business idea? How did the founders derive this idea?
- Hyperlocal business and hyperlocal delivery model
 - Product acquired locally, from neighbourhood establishments and delivered to the customer in the same geographic area
 - Unique value proposition – delivery of products and services in a short time
 - Many categories of retail sector going hyperlocal – e.g., food, groceries, pharma, fashion
- Market research by founders

MINI-CASE (CONTD.)

- ‘Interesting’ idea of the founders
- Problem addressed ? For whom?
 - For neighbourhood fashion apparel stores mostly retailing unbranded apparel
 - Problem – no easy pathway for such local stores to participate in online commerce
 - For shoppers ?
- Built a fashion app to buy online from any neighbourhood store – FashNear
 - Connecting consumers with neighbourhood stores



The model didn't work! Poor revenues even in the sale season, though there were limited early users

MIN-CASE (CONTD.)

- Why limited takers?
- Which path to take? Give what the customers really want, or 'change' the customers and chase a new problem?

PERSONAS

- Sellers and buyers
 - Sellers – small local fashion apparel businesses (likely without an online presence on major ecommerce sites)
 - Buyers – tech savvy urban men and women looking to buy apparel from local shops
- Corrections
 - Personas away from case facts! Stick to case facts
 - Stereotypical personas
 - Personas to be built based on user research !
 - Having many personas is fine, which among these were prioritized by Fashnear?

BUSINESS MODEL CANVAS

- Key partnerships
- Key activities – vendor onboarding
- Value propositions
- Customer relationships
- Customer segments
- Cost structure
- Revenue streams?
- **Corrections**
 - BM away from case facts! Stick to case facts

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THE DIGITAL PRODUCTS & THEIR SUCCESS?

Why do products fail?

- Most products fail because they do *not meet customer needs in a way that is better than other alternatives –problem-solution fit*
- Simply put, products fail when they do not get to the *product-market fit*
- Products also fail when they do not help achieve your organizational goals or do not align with your strategy

PROBLEM-SOLUTION FIT

- The first stage of the lean startup process - validating the problem/solution fit
- Is this problem worth solving?
 - **Problem first**, rather than creating solutions first
 - Who are the **target customers**?
 - Do the **customers acknowledge** that this is a problem? – ‘interesting’ is not enough
 - Are the customers **willing to pay** to solve the problem?
- Problem-solution fit – needs evidence that the proposed product or service addresses important customer problem(s)/need(s)
 - Problem for a critical mass of people, not a select few!

TEMPLATE: PROBLEM DISCOVERY

1. Establish the need for a solution

1.1 What is the basic need?

1.2 What is the desired outcome?

1.3 Who stands to benefit and why?

2. Justify the need

2.1 Is the effort aligned with our strategy?

2.2 What are the desired benefits for the company, and how will we measure them?

2.3 How will we ensure that a solution is implemented?

3. Contextualize the problem

3.1 What approaches have we tried?

3.2 What have others tried?

3.3 What are the internal and external constraints on implementing a solution?

4. Write the problem statement

4.1 Is the problem actually many problems?

4.2 What requirements must a solution meet?

4.3 Which problem solvers should we engage?

4.4 What information and language should the problem statement include?

4.5 What do solvers need to submit?

4.6 What incentives do solvers need?

4.7 How will solutions be evaluated and success measured?

THE PRODUCT-MARKET FIT

- A product-fit means being in a good market with a product that can satisfy that market
- **Many interpretations**
 - you have built a product that creates significant customer value
 - you can successfully monetize your product
 - having a cost-effective customer acquisition model
- Most product companies aim for growth after achieving product-market fit

A framework to understand product-market fit ..the Product-Market pyramid

THE PRODUCT-MARKET PYRAMID

- Hierarchical components
- Each component is a testable hypothesis with a logical sequence

Product:

The real-world manifestation of software products that customers see and use

UX

A product's functionality consists of multiple features each built to meet a customer need

Feature Set

The set of needs that the product aspires to meet forms the value proposition.

Value Proposition

Product-Market Fit

Market:

Customers choose different products to meet their needs

Underserved Needs

The market consists of all existing and potential customers

Target Customer

ASSESSING PRODUCT-MARKET FIT

- Follow the process, ***develop hypothesis to be tested***, across different components of the product-market pyramid, to achieve a close fit between product-market
- Some metrics to measure product-market fit
 - Net promotor score (asking respondents a single question – the likelihood that they would recommend a product or a service to a friend or colleague or any other user)
 - On a scale of 0 to 10
 - $NPS = [(\% \text{ of promoters}) - (\% \text{ of detractors})]$
 $= [\% \text{ with (score of 9 or 10)} - \% \text{ with (score of 0 to 6)}]$



- Some metrics to measure product-market fit (contd.)

- Customer survey, with curated questionnaire
- Customer experience index
- Quantitative measures as applicable to the context: number of views, downloads, time of usage, nature of usage – analytics driven customer insights of continued use and usage patterns
- Develop key performance indicators (KPIs) to understand product-market fit– used a lot in B2B space as well

- **Success metrics and vanity metrics**

- **Success metric** key to the success of your product – must be linked to the value proposition of the product (this is what customers care for too)

E.g. for an ecommerce site – inventory of every item, loading speed of the website, % of items arriving within the promised delivery time, etc

- Lower than expected values for success metrics, or patterns in highs and lows can yield an opportunity hypothesis

- **Vanity metrics** might lead to insights which may or may not be useful for opportunity hypothesis

e.g., page views, no. of installs, monthly active users (MAU), daily active users (DAU)

WRAP-UP

- Problems solution fit
 - More conceptual, do not have a product, only a proposed solution to the identified problem
- Product-market fit
 - There is a tangible product or services that the customer can use (beyond the MVPs)
 - Demand and profit potential
 - Traction comes from the early majority adopters who are difficult to convince and more demanding
- Problem-solution fit does not imply product-market fit
- Product-market fit does not imply profitability
 - A viable business model is essential, which may involve refining the problem and product further

HOW TO ENSURE PROBLEM SOLUTION FIT & PRODUCT-MARKET FIT ?

- How to address this?
 - Need to follow thorough *problem discovery & customer discovery* processes

TEMPLATE: PROBLEM DISCOVERY (REVISITED)

1. Establish the need for a solution

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CUSTOMER DISCOVERY

- Estimating the market size
- Segmenting - *covered*
- Understand your users! - interviews, observations, metrics
- User persona(s) – a hypothetical representation of your user(s)

ESTIMATING THE MARKET SIZE

- How big is the market? Total addressable market – industry level estimate
- Best target market segment for your product ? Total available market
- Market share expected – a share of the total available market
- Revenue potential – estimated using expected market share and per user spend

CUSTOMER SEGMENTATION

- **Demographic segmentation** – based on quantifiable statistics – age, gender, marital status, income, education level
- **Psychographic segmentation** – according to psychological variables such as attitudes, opinions, values, interests
- **Behavioral segmentation** – based on whether or not someone takes a particular action & how frequently they do
 - E.g., target market – youth in the age group of 20-40 years who post at least 4 pictures per week on Instagram/ social media
- **Needs-based segmentation** – dividing market into customer segments each with distinct needs

Customer/user sampling

- Sampling strategy is important to have reliable results about user needs and pain points
- Sample must be **representative of population** – i.e., your target customer segment – personas are helpful here
- **Grouping** by demographics and other parameters as relevant to your product's value proposition



Customer segmentation – if your target customer is firms

Segmentation of firms ? (e.g., for B2B products)

- Industry codes, can be used

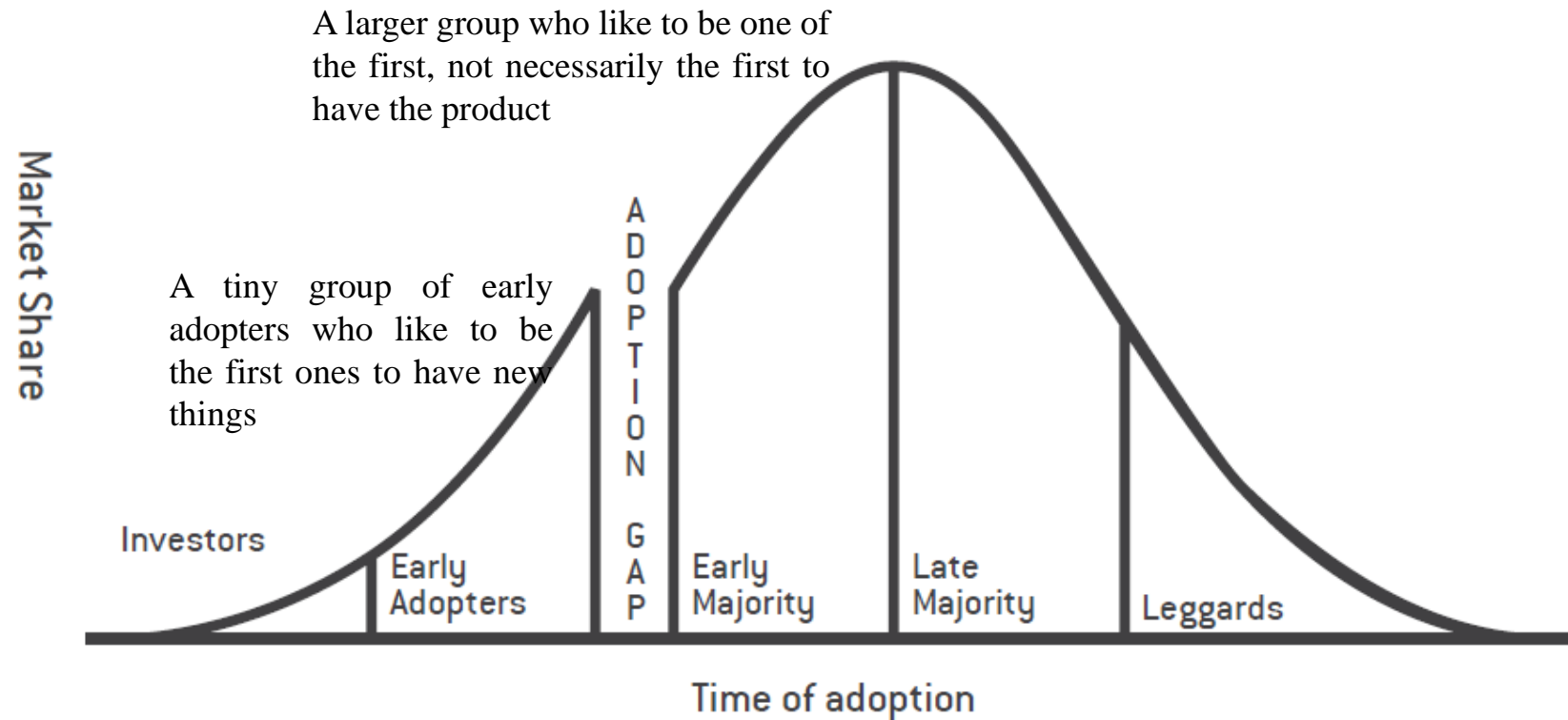
TEMPLATE: PERSONA (ROMAN'S PERSONA TEMPLATE)

Jobs to be done
what problem is a persona trying to solve, what does she do to solve it, and what happens as a result?

PICTURE AND NAME	DETAILS	GOAL
<ul style="list-style-type: none">Type of persona	<ul style="list-style-type: none">Relevant characteristics and behavioursDemographicsLifestyleBehavioural attributesUsage patterns	<ul style="list-style-type: none">Why would the persona want to use or buy the product?Benefits that the persona wants to achieveProblems that the persona wants to solve (with the product)

ADOPTION OF INNOVATIONS

- Considering where the personas fit in the curve will help understand when they are likely to adopt the product, and help prioritize features

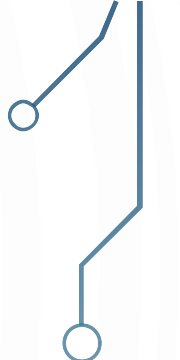
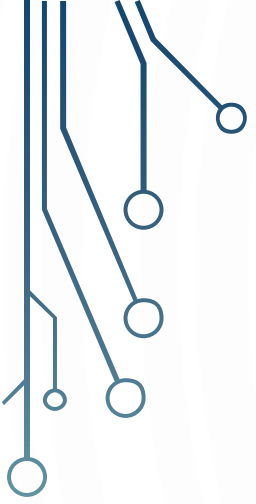


USER PERSONA CONSIDERATIONS

- What is/are the user persona(s)?
- Possible refinement of personas?
- Other extensions to user personas? Other contexts? Other target customer segments?



DESIGN THINKING



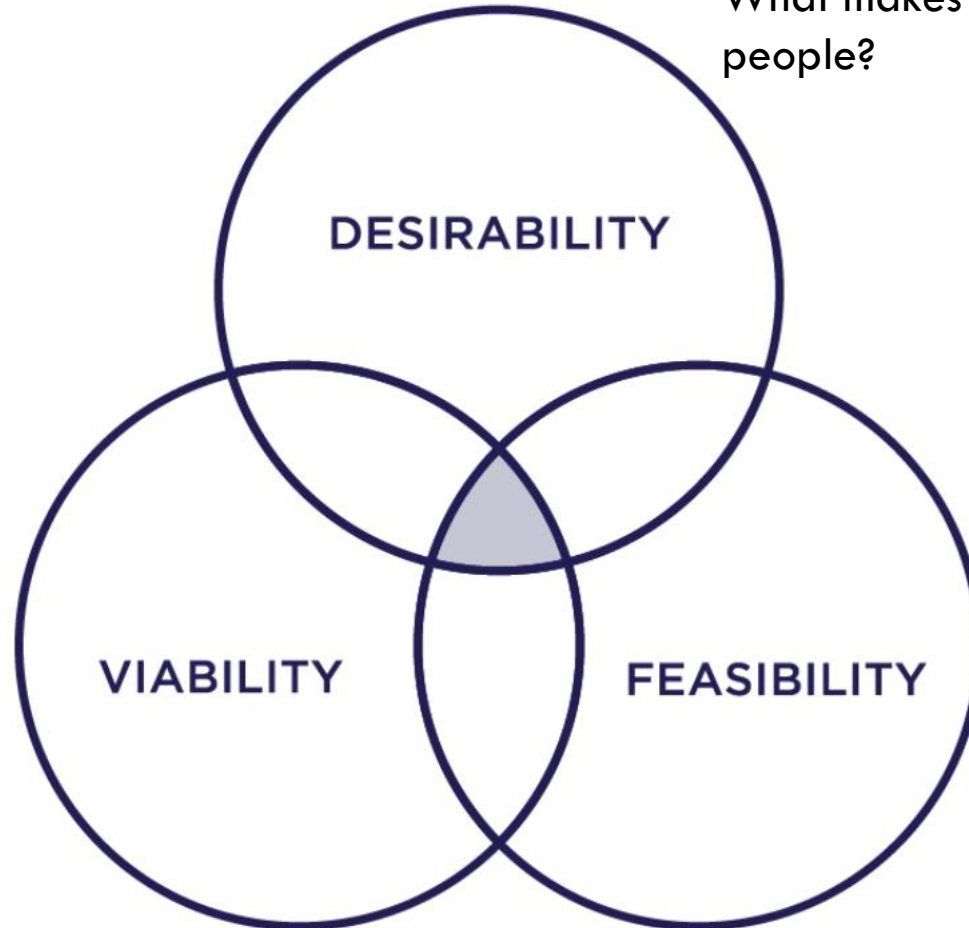
Design thinking is a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success.

—TIM BROWN, EXECUTIVE CHAIR OF IDEO

<https://www.youtube.com/watch?v=QWdgcpAHRIM&t=114s>

IDEO'S FRAMEWORK

What is likely to become part of a sustainable business model?



What makes sense to people and for people?

What is technically possible within the foreseeable future?

Credits: IDEO



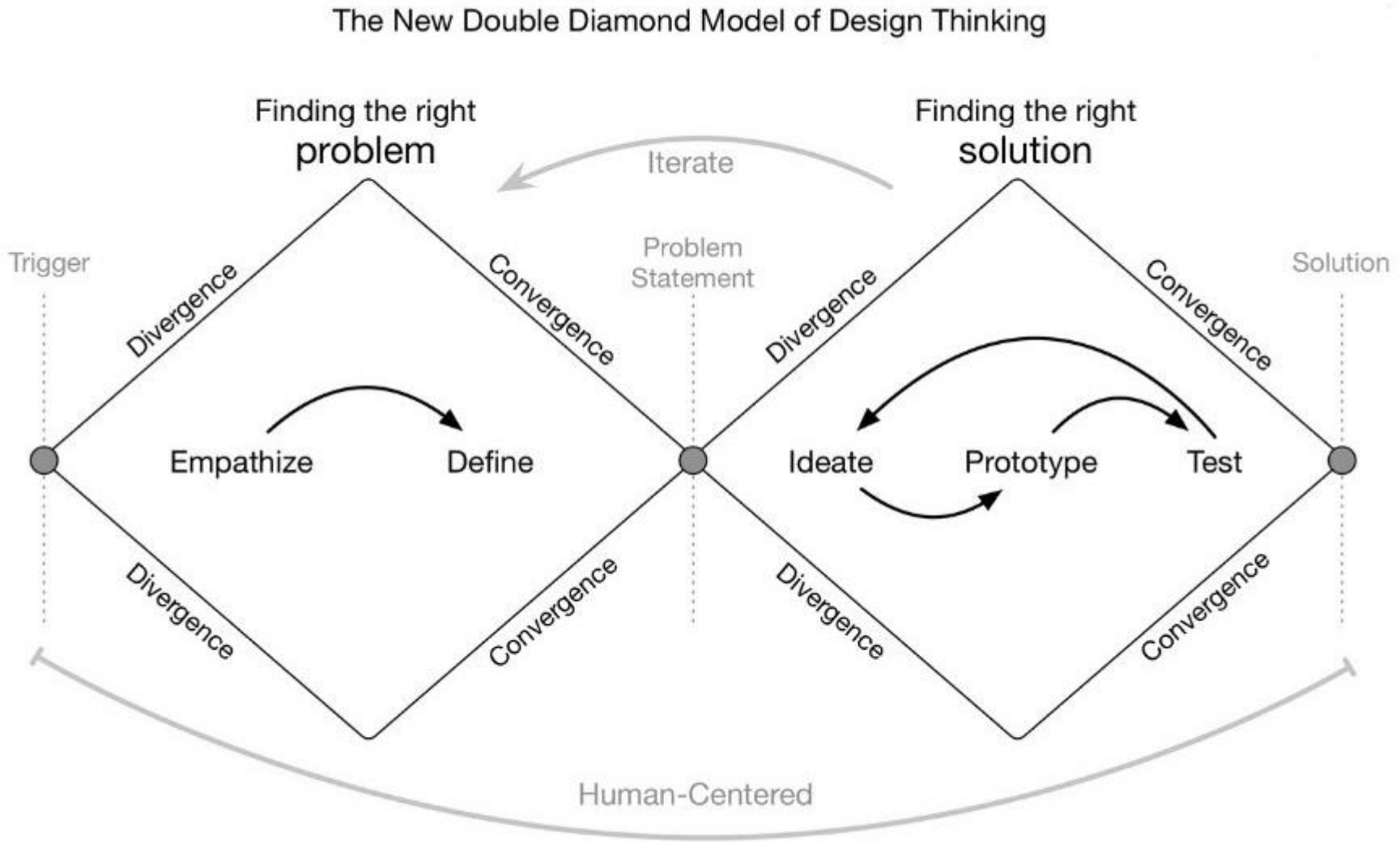
DESIGN THINKING (DT)

- DT – a thought process that promotes divergent thinking, customer centricity and empathy building
- Helps in both problem and customer discovery
- Widely applicable for innovating processes, products and services

DESIGN THINKING (DT) STEPS FOR PRODUCTS

- Steps in DT
 - **Empathize** – with the users
 - **Define** – the users' needs, their problems, and your insights
 - **Ideate** – by challenging assumptions and creating ideas for innovative solutions
 - **Prototype** – to start creating solutions
 - **Test** – solutions with the users

DESIGN THINKING

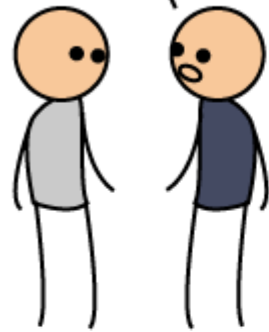


HOW TO DEVELOP EMPATHY?

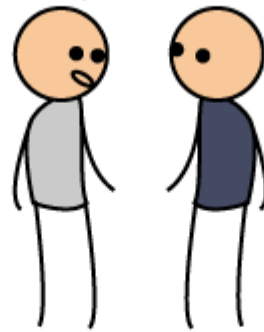
Empathy

- The ability to understand other people's emotions from their point of view rather than one's own
- How to empathize?
 - Observe
 - Engage &
 - Immerse
- <https://www.sproutel.com/explore?wchannelid=02268j6fb4&wmediaid=3ryo6m70gk>

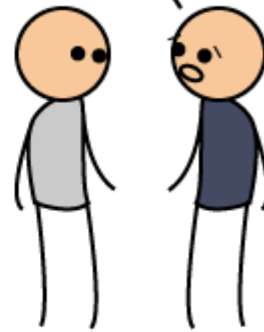
Then my cat died.



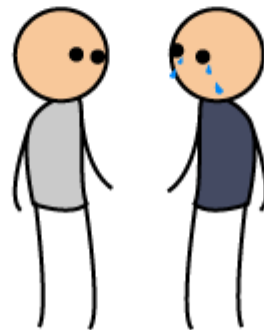
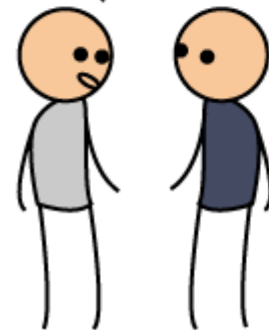
Can you tell me a little more?



Idk Its been a rough year for me.



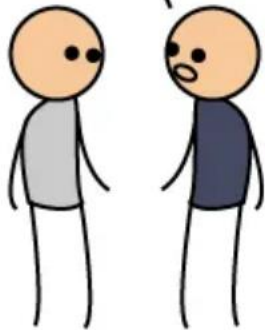
Tell me a little more about that.



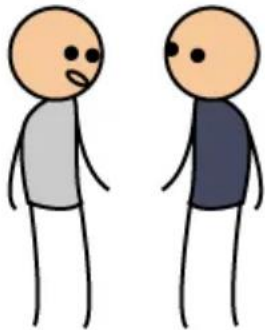
Thanks... and sorry. Here's a card.



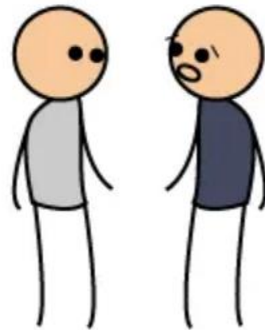
Then my cat died.



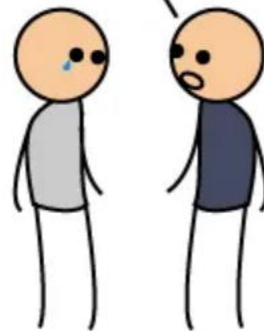
That sucks bro. I had a cat that died.



Let's hug it out.



Damn Daniel. Thanks, I really needed that.



STARTING THE RESEARCH PROCESS

- Qualitative customer research

- First step (a common-sense step) - open research

- Get a feel of the context of potential customers – do trend research, collect statistical data, gather inputs about competitors in the market;

sources : megatrend maps, statistical data, infographics; find industry-wide trends, technologies, thought leaders and conferences

ETHNOGRAPHIC STUDIES

- **Behavioural studies** – what people do, how they use a product or service, how they create solutions for themselves if something is not working according to their needs.
 - Best with observational field studies
- **Attitudinal studies** – focus on what people say, what their sentiment is towards something and what choices they have made in the past
 - Best with interviews

WHOM TO ADDRESS TO BUILD EMPATHY?

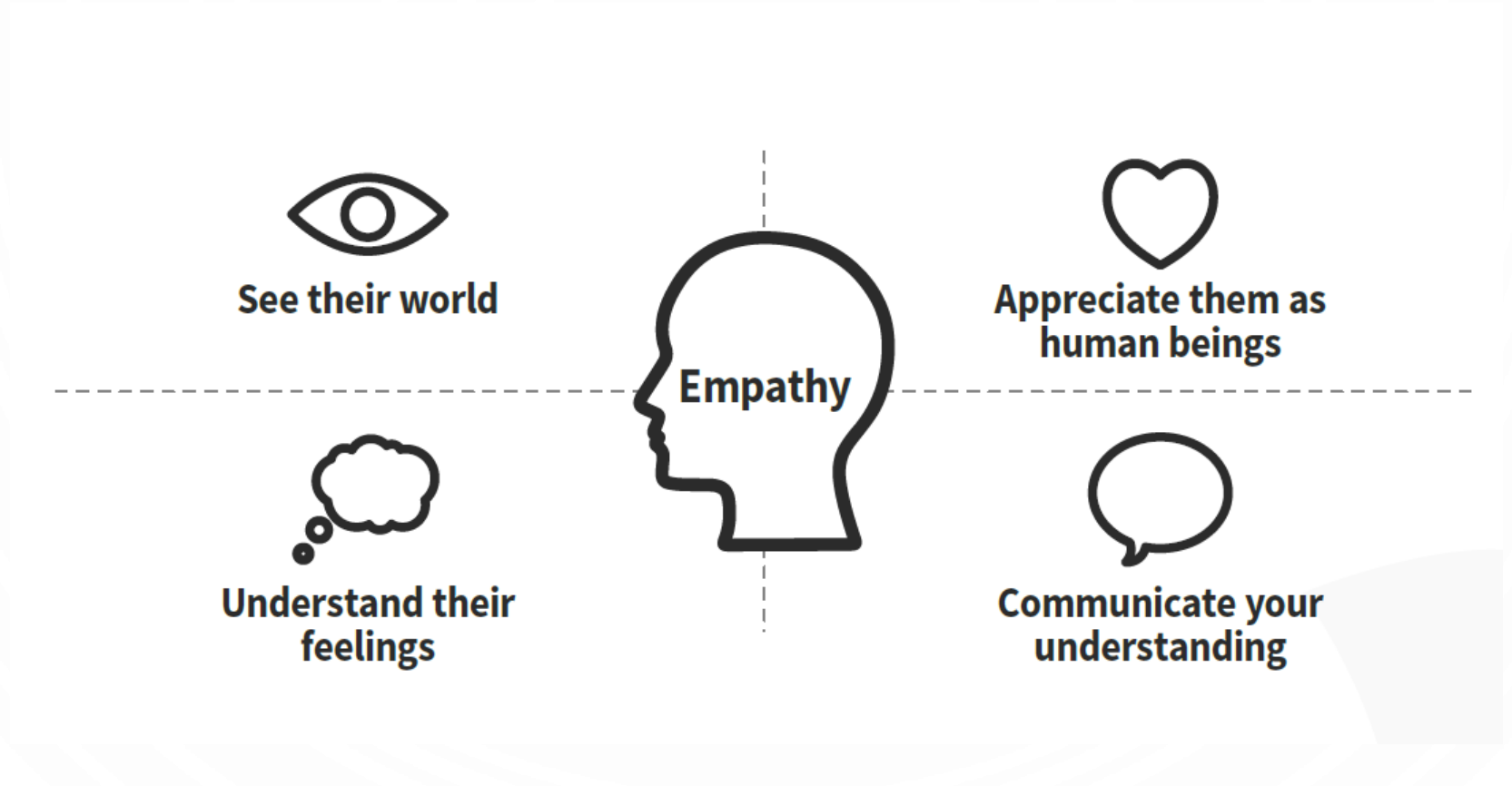
- The typical customer you envision
- Your early adopters – i.e., people who will take a chance at your product before anyone else
- Critical partners for distribution, fulfilment or other parts of your business

Best practices for interviews

- Interview one person at a time
- Listening
- Avoid confirmation bias (do not try to confirm your assumptions)
- Get interviewees to tell a story or give real-life examples

SYNTHESIZING RESEARCH DATA WITH DT TOOLS

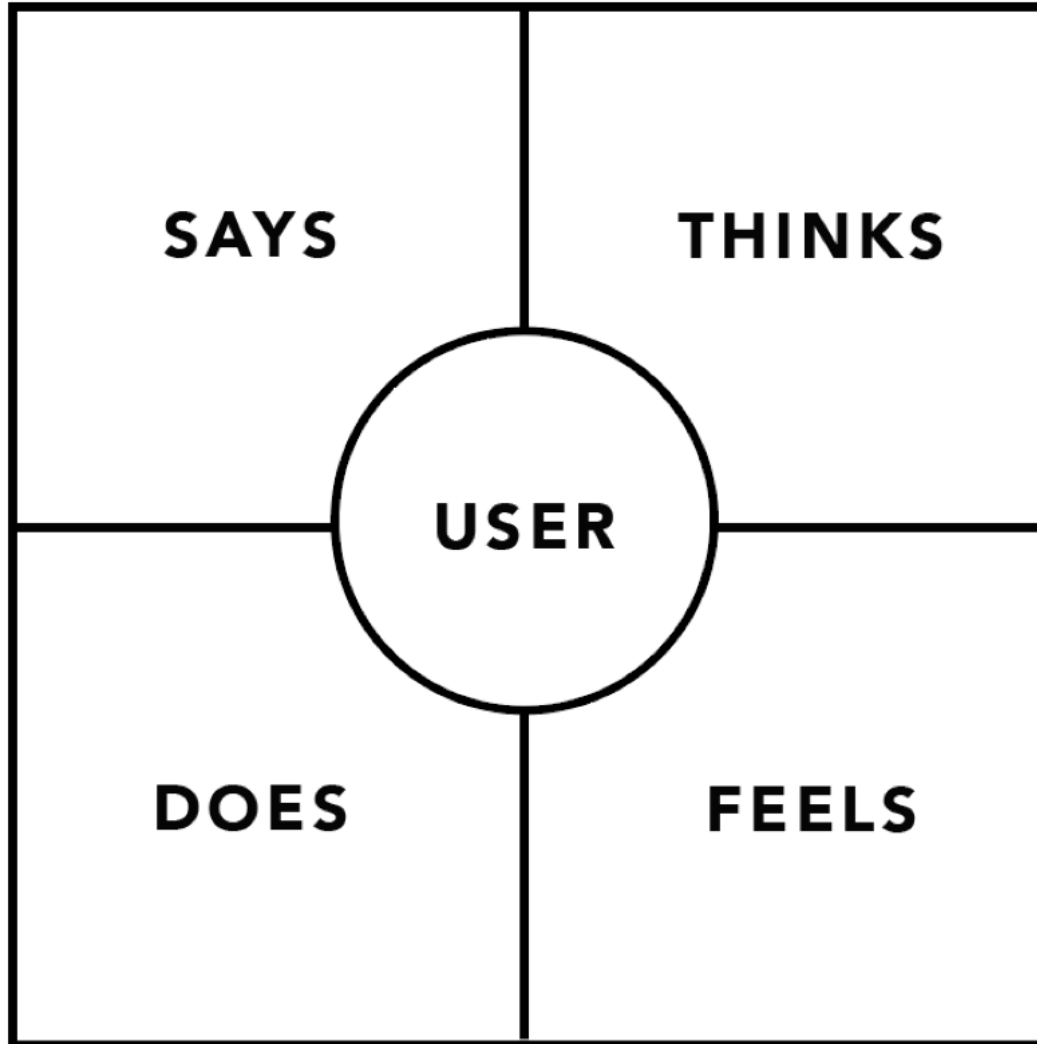
- Personas
- A day in the life
- Empathy map – about users
- Mapping out the customer journey



EMPATHY MAP

What the user says aloud in an interview or a study?
What are some quotes and defining words your user said?

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



What actions and behaviors did you notice?

What emotions might your subject be feeling?



EXAMPLE

Excerpt from a user interview – a woman's perceptions about her safety

“One thing that I've learned from my elders or my brothers is that even if the cab driver doesn't do anything to you, just be safe, just do it in front of him—click a picture of him, click a picture of the cab, and say that I'm sending it to my brother or wherever I'm going, so that they have a track of it. He'll at least be sure everybody at least knows who he is, so he better not do anything.”



HOW TO USE EMPATHY MAP?

Says

- Verbatim quotes from users

Thinks

- Unsaid/unexpressed thoughts

Does

- Actions

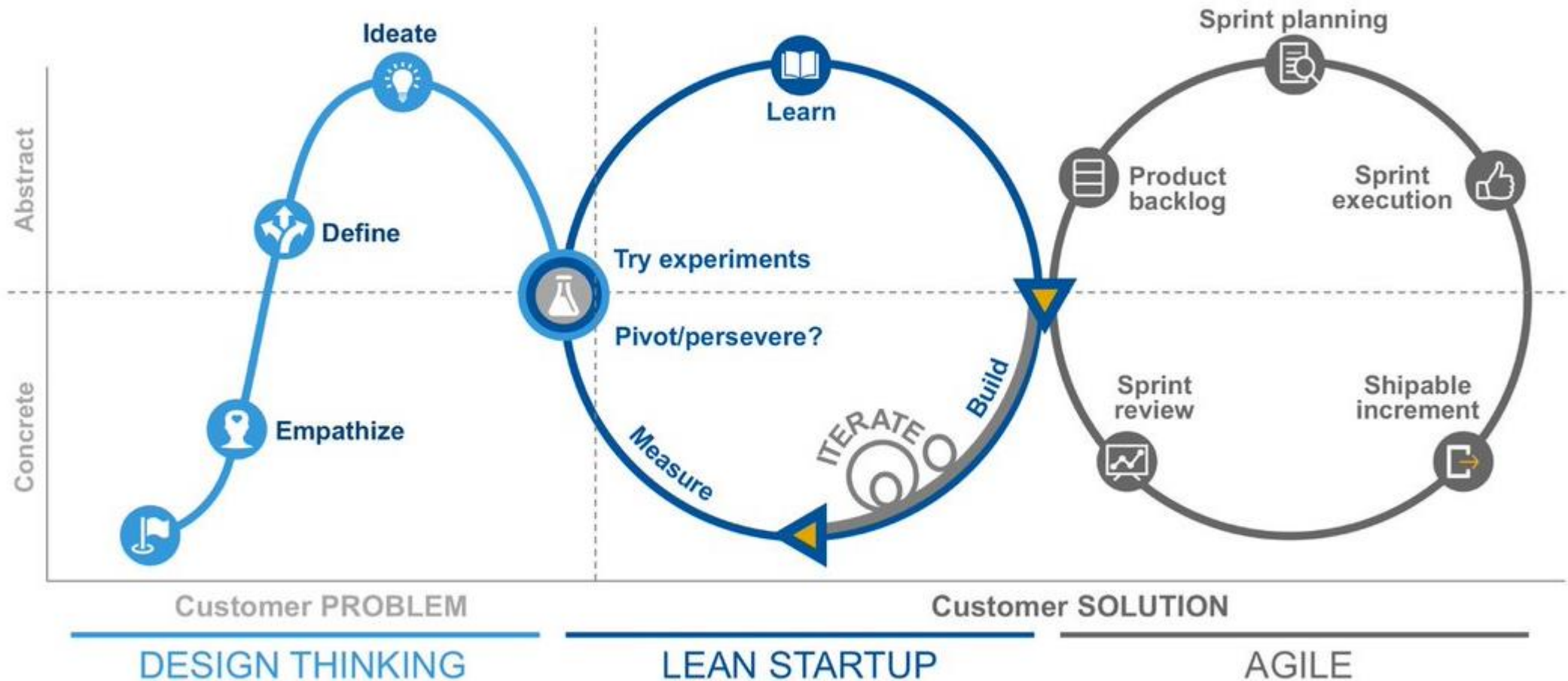
Feels

- Emotions

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HOW DOES DESIGN THINKING FIT INTO PRODUCT DEVELOPMENT?

Combine Design Thinking, Lean Startup and Agile



#GartnerSYM

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Gartner.

THE LEAN CYCLE

2 pillars of lean: respect for people and continuous improvement

Build
experiments

Learn
Pivot
/preserve

Measure
metrics

THE LEAN APPROACH TO DIGITAL PRODUCTS ALSO INCLUDES

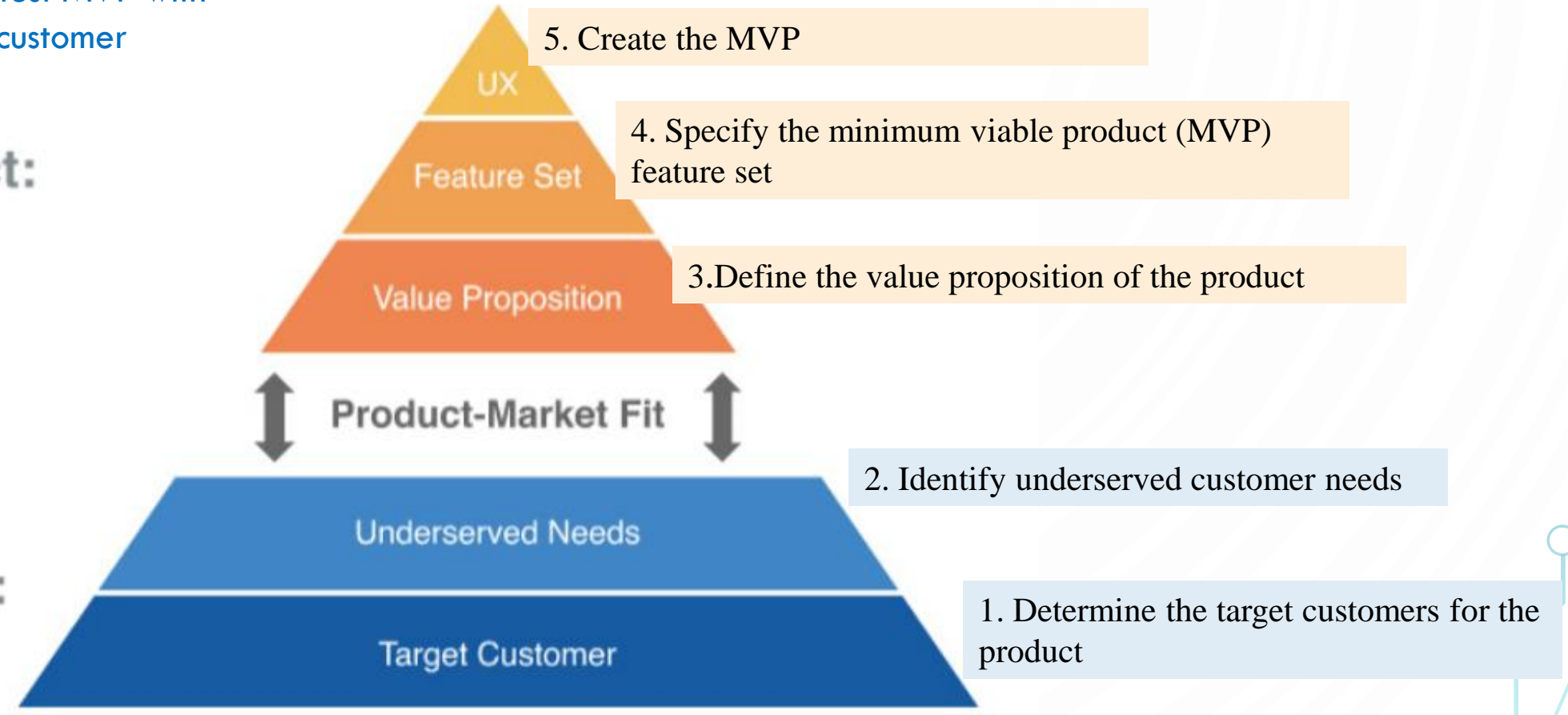
- 3 characteristics
 - Using platforms enabled by open source and free software (also, Amazon EC2, RightScale)
 - Using Agile development methods to reduce waste and enhance creativity in product development
 - Following rapid iterations that are customer-centric

LEAN PROCESS FOR PRODUCTS TO ACHIEVE P-M FIT

Test MVP with customer

Product:

Market:



Adapted from Olsen (2015)