MANAGING DIGITAL PRODUCTS

CLASS: DTSL

SESSIONS-3&4

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 = [(% of promoters)– (% of detractors)

    = [% with (score of 9 or 10) - % with (score of 0 to 6)]

EXAMPLE: DIGILOCKER

- Target Customer: Individuals needing secure digital storage for important documents
- Underserved Needs: Difficulty in managing and accessing physical documents
- Value Proposition: Offering a secure platform for storing and accessing digital copies of documents and…?
- Feature Set?
- User Experience: Secure access, easy document retrieval, and integration with government services … leads to..?

- 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

WRAP-UP

- Problems-solution fit
  - More conceptual, need 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 addresses this?
  - Need to follow thorough ***problem discovery & customer discovery*** processes
  - Choose and implement a viable **business model** for profitability

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?

CUSTOMER DISCOVERY

- Estimating the market size
- Segmenting
- 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 atleast 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)

PICTURE AND NAME	DETAILS	GOAL
• Type of persona	• Relevant characteristics and behaviours • Demographics • Lifestyle • Behavioural attributes • Usage patterns	• Why would the persona want to use or buy the product? • Benefits that the persona wants to achieve • Problems that the persona wants to solve (with the product)

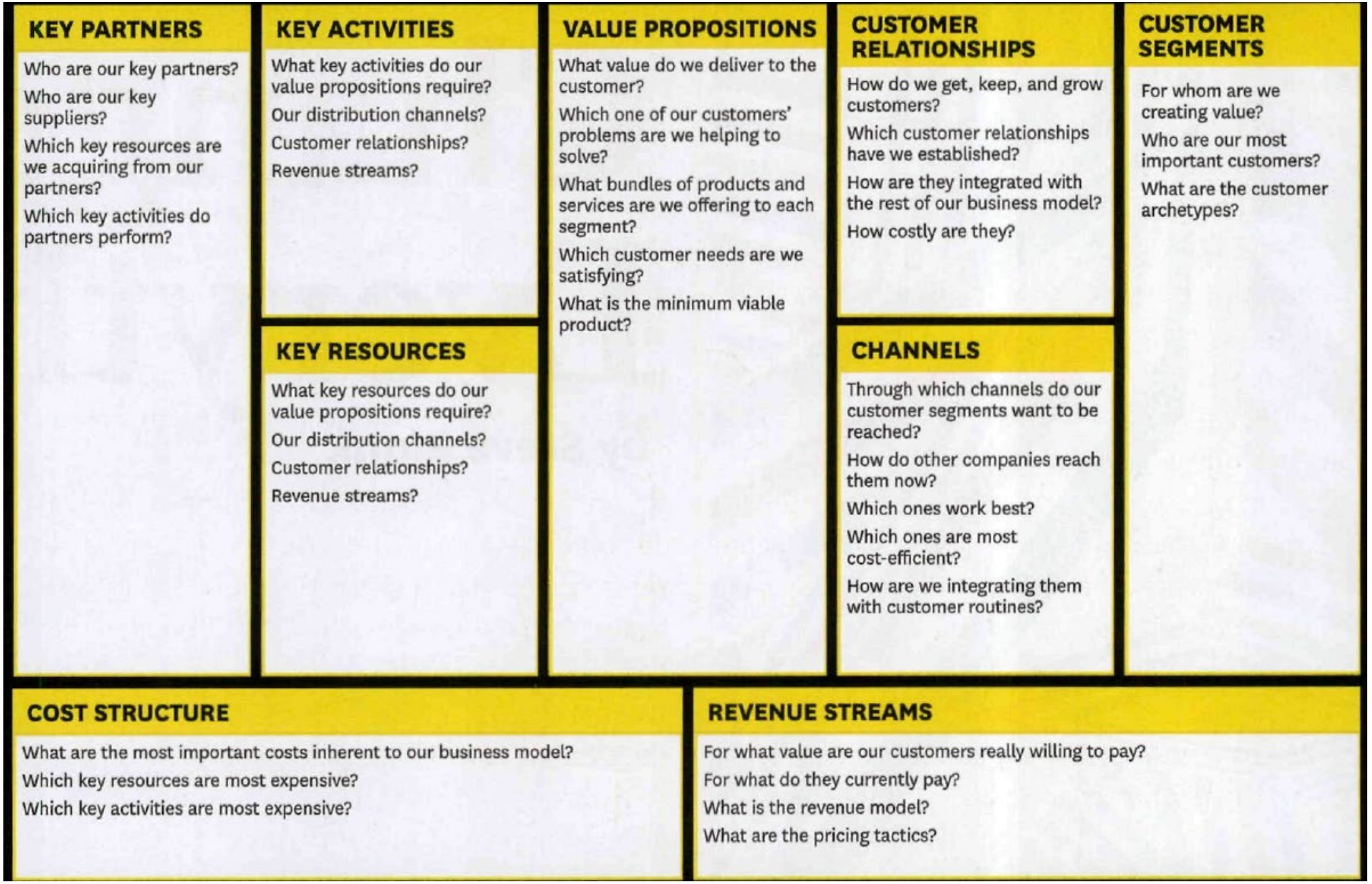
Jobs to be done
what problem is a persona trying to solve, what does she do to solve it, and what happens as a result?

BUSINESS MODEL CANVAS

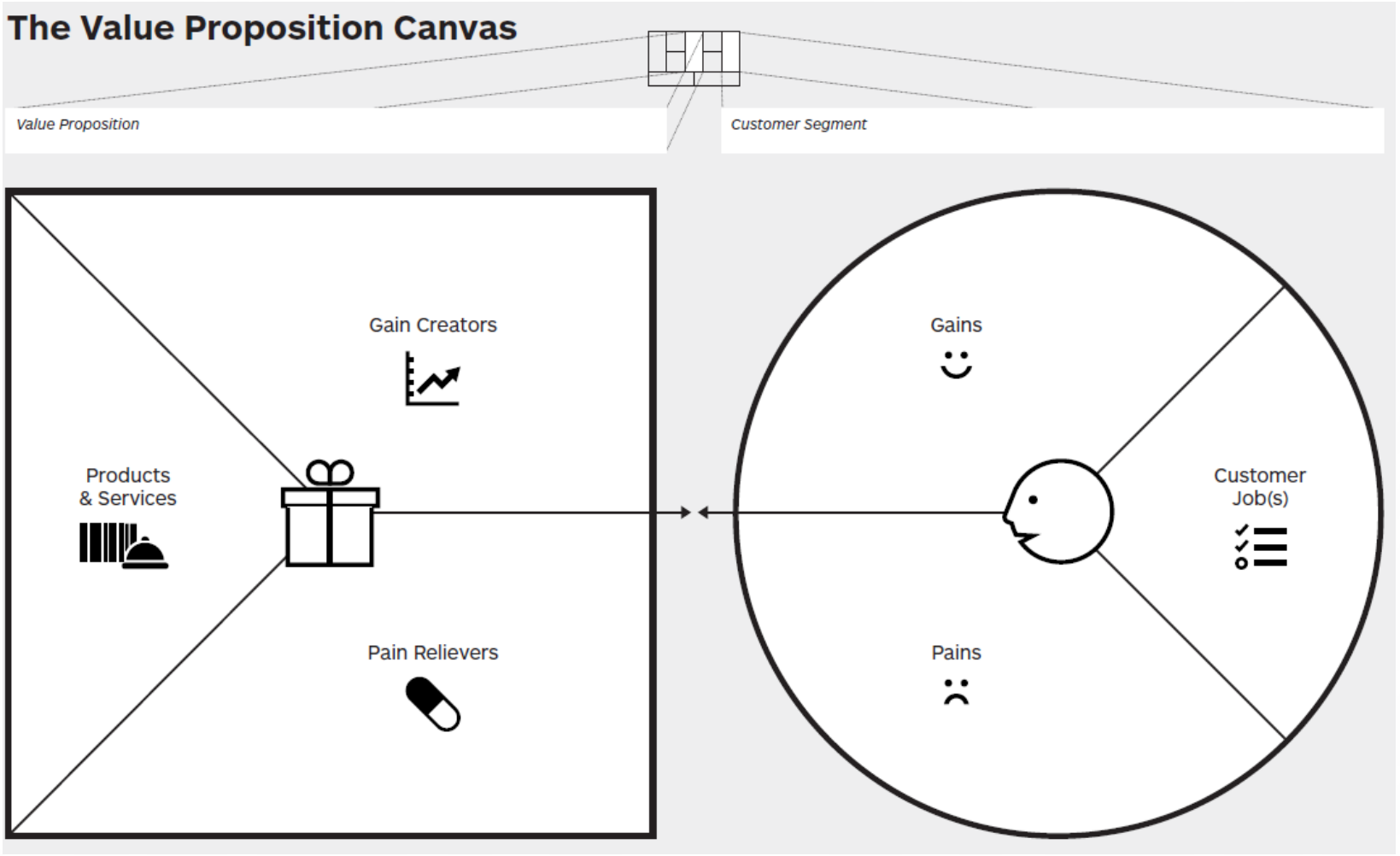
BUSINESS MODEL CANVAS

- Key partnerships
- Key activities – vendor onboarding
- Value propositions
- Customer relationships
- Customer segments
- Cost structure
- Revenue streams?
- Business Model Canvas – Download the Official Template

BUSINESS MODEL CANVAS



Credits: Blank (2013)



- Identify ‘opportunity’ – by understanding the interaction between the customer & the product, and the poorly met or unmet customer needs

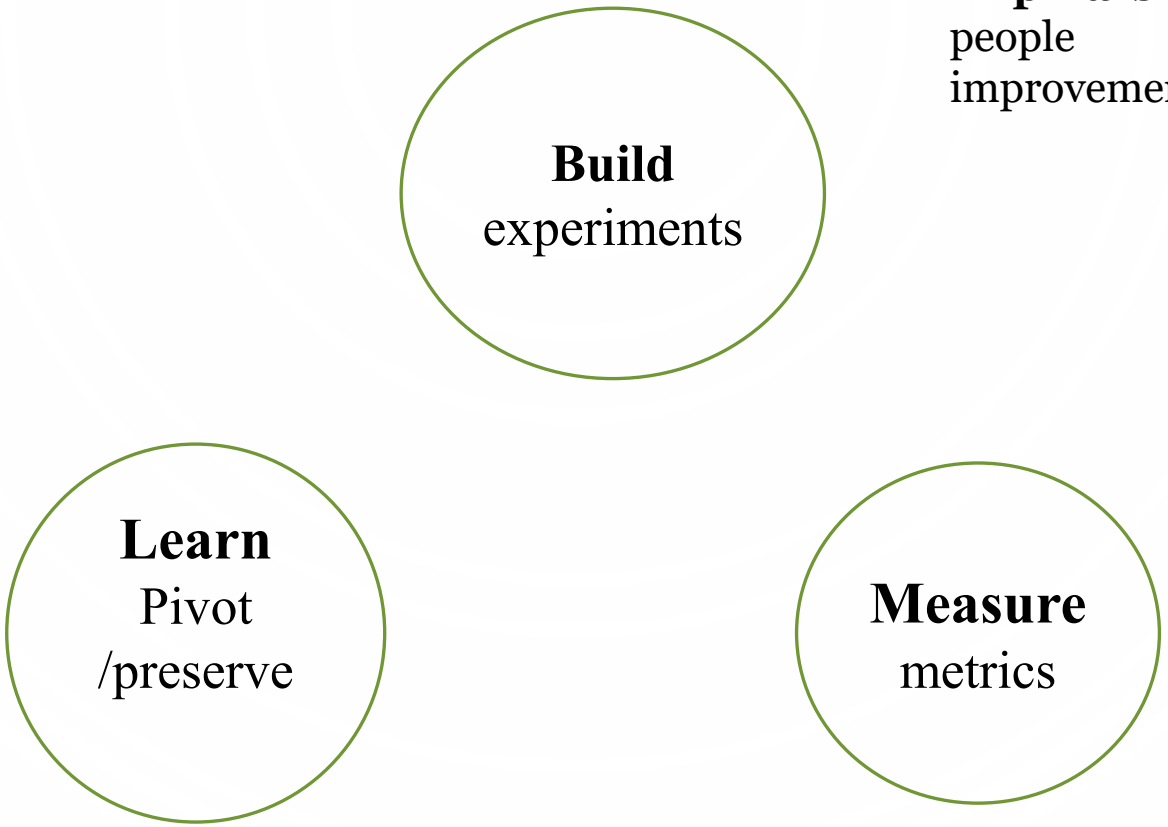
- Explicitly state the opportunity hypothesis:

"I believe that <personas/segments> experience <this pain> when doing <task> because of <limitation>, and alleviating that pain would let the customer <achieve this gain>, although she'd have to <accept these limitations>."

The opportunity is to be linked with – the company goal, the product goal, success metrics and other key metrics

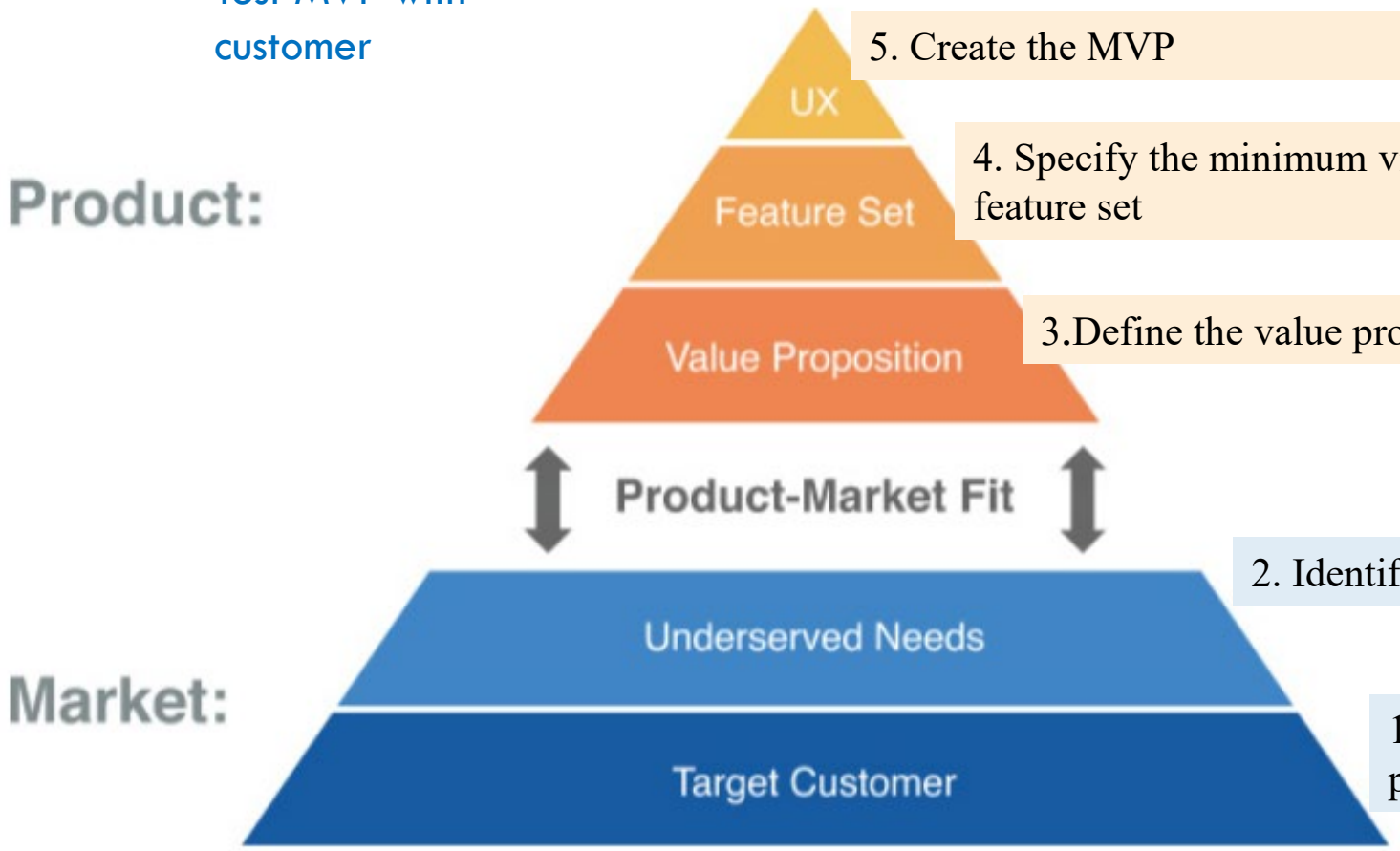
THE LEAN CYCLE

2 pillars of lean: respect for people and continuous improvement



LEAN PROCESS FOR PRODUCTS TO ACHIEVE P-M FIT

Test MVP with customer



5. Create the MVP

4. Specify the minimum viable product (MVP) feature set

3.Define the value proposition of the product

2. Identify underserved customer needs

1. Determine the target customers for the product

Adapted from Olsen (2015)

DESIGN THINKING

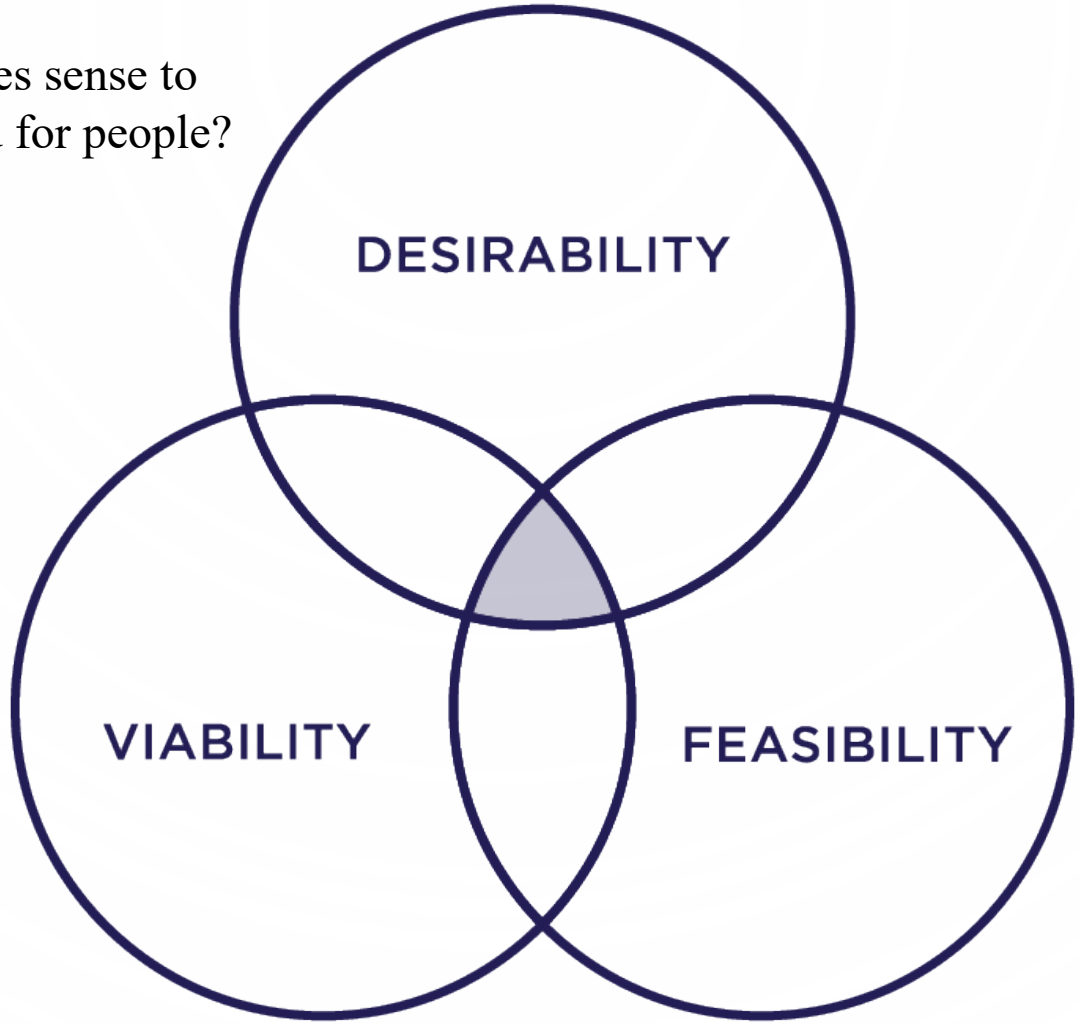
“Everyone designs who devises courses of action aimed at changing existing situations into preferred ones.” - Herbert Simon

DESIGN THINKING (DT)

- First described in 1969 by Herbert Simon, Noble Prize laureate
- A human-centred approach to innovation used to identify and solve complex problems
- DT promotes divergent thinking, customer centricity and empathy building
  - Focus is on improving user experience, not just building solutions
- Helps in both problem and customer/user discovery
  - Unpack problems and successfully navigate to solutions
- Widely applicable for innovating processes, products and services

DESIGN THINKING (DT)

What makes sense to people and for people?



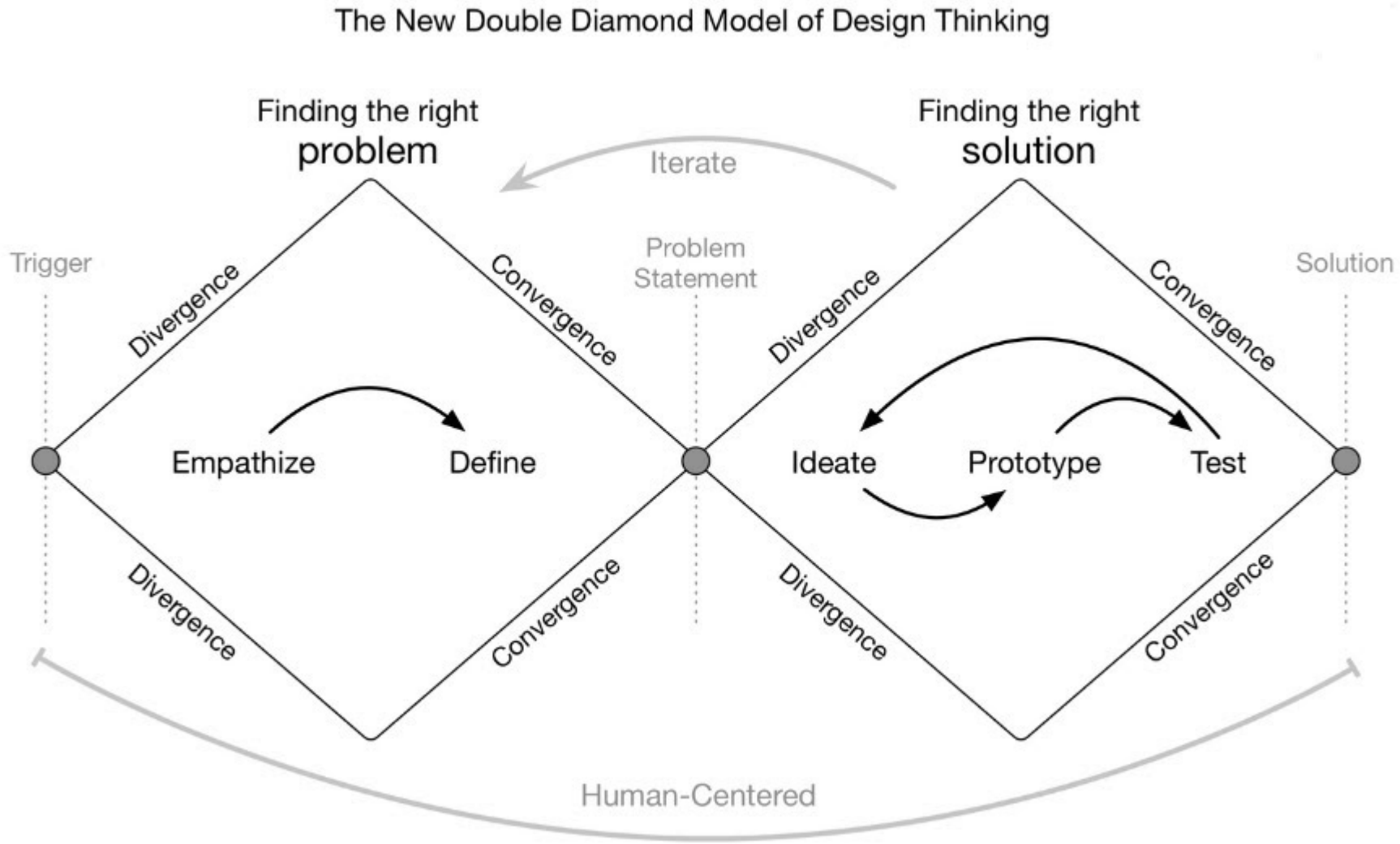
What is technically possible within the foreseeable future?

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

DESIGN THINKING (DT) STEPS

- 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** – test the prototypes (solutions) with the users
- Repeat one or more steps based on user testing

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
  - Contextual framing – context is important!

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

STARTING THE USER RESEARCH PROCESS

- Qualitative user/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/similar initiatives in the market/world;

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

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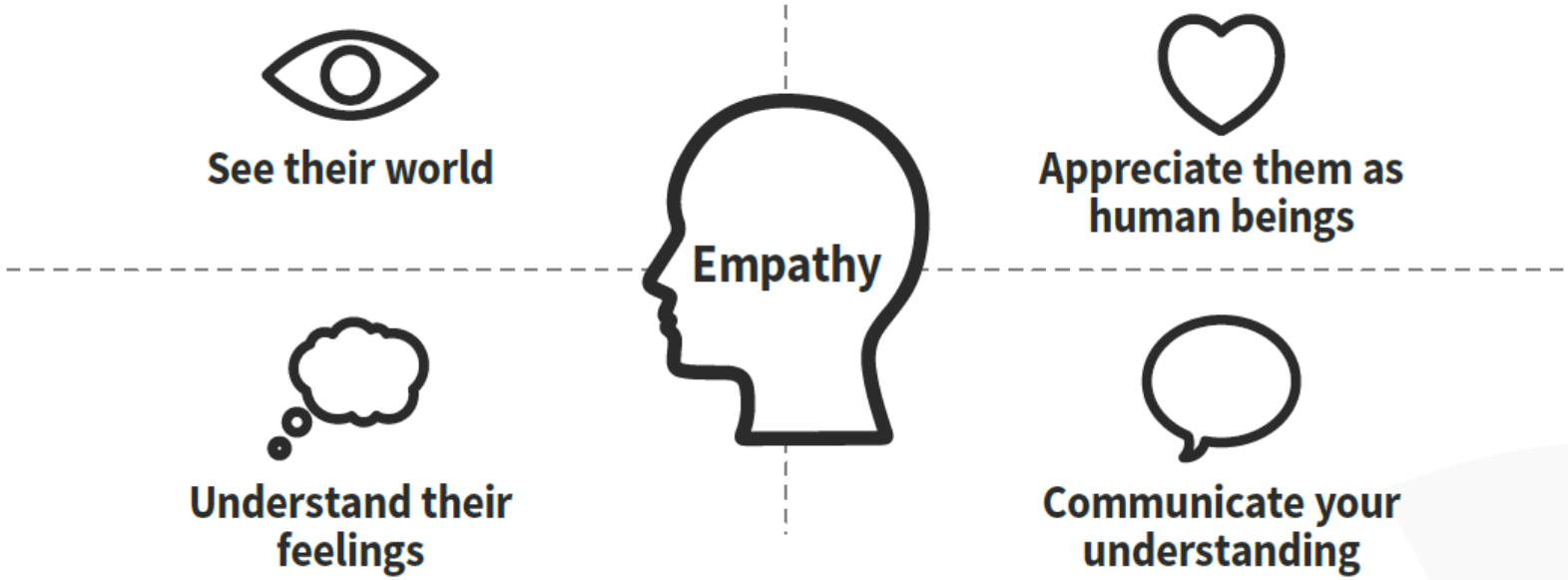
SYNTHESIZING RESEARCH DATA WITH DT TOOLS

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

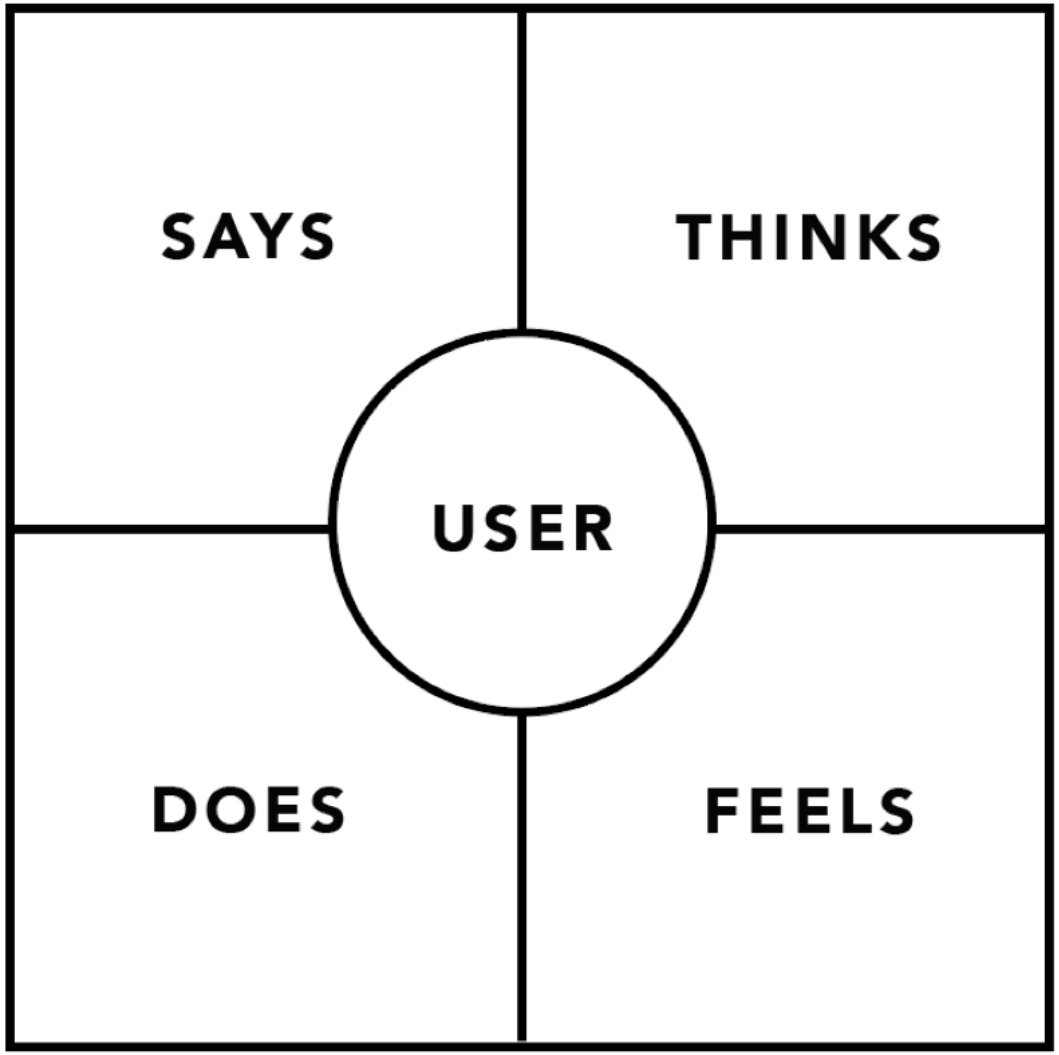
EMPATHY


See their world
Appreciate them as human beings
Empathy
Understand their feelings
Communicate your understanding

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?

HOW TO USE EMPATHY MAP?

Says
- Verbatim quotes from users

Thinks
- Unsaid/unexpressed thoughts

Does
- Actions

Feels
- Emotions

EXAMPLE OF A USER PERSONA

Persona 1: College Student in an Urban Area

- **Name:** Aditi Sharma
- **Age:** 19
- **Occupation:** First-year college student
- **Location:** Delhi
- **Context:** Commutes daily by metro to college and spends time in libraries or cafes with friends.
- **Safety Concerns:** Harassment in crowded public transport and poorly managed last-mile connectivity near her home.

Key Challenges	Needs	Quote
Faces catcalling and staring during metro rides.	Safe and well-monitored public transport.	"I'm okay inside the metro, but stepping out feels unsafe."
Unsafe walking paths from metro to home.	Better streetlights, patrolling, and rideshare options.	"The short walk from the station to my house is the scariest part of my day."

EMPATHY MAP (EXAMPLE)

- **Quote:** “I feel uneasy walking alone at night, even if it’s just a short distance from the bus stop to my home.”

“I hate walking alone at night.”

“I hope I make it home safely.”

Says (Quotes)	Thinks	Feels	Does
	What if someone follows me?	Uneasy, vulnerable, anxious.	Walks briskly; avoids dark alleys.
	Why aren’t there more people or security?	Frustrated about lack of safety.	Keeps phone in hand, ready to call.

PROCESSING INFORMATION AND PRIORITIZING USER NEEDS

- Interpret the customer needs data (scrubbing, trying to clarify the ambiguous statements, etc)
- User-flow
  - the workflow of the user to accomplish her job;
  - the workflow of the user with a product and its brand/firm in accomplishing her job

USER JOURNEY MAP

DEFINITIONS

Touchpoints

All of the moments a customer directly interacts with your company or product.

Actions

What actions does the customer take in these interactions?

Thoughts

What thoughts does the customer have before, during, after?

Feelings

Use a scale or use one word to describe the user's emotional state.

Pain points

What are problems and annoyances the user experiences?

Opportunities / Gain point

How can you fix a user's problem or find a new way to delight them? What about the experience is already delightful?

Source: Product School

PROJECT NAME

USER JOURNEY MAP

	Phase	Phase	Phase	Phase
Steps				
Touchpoints				
Actions				
Thoughts				
Feelings				
Pain points				
Opportunities/Gain point				

EXAMPLE: FIRST TIME RIDE CALL IN RIDESHARING APP

Start thinking about…

1. Touchpoints
2. Actions
3. Thought
4. Feelings
5. Paint points
6. Opportunities

Define Stage	Currently existing journey
Customer persona	A person calling a ride through your app for the first time to see how it compares with a competitor's
Scope & Timeframe	Small scope. Just the few minutes, covering account setup and first call

Source: Adapted from Product School

USER JOURNEY MAP PART 1

	Account setup	Account setup	Account setup	Account setup
Steps	First app open	Accept permissions	Begin account setup	Enter phone and email information
Touchpoints	Interaction with app			
Actions	Click to open	Have to make a selection between allowing location services “only one” “only when the app is open” and “always”	Click “start”	Click into
Thoughts	“Ooh I like their logo”	“I don’t like sharing my data”		
Feelings (1-5)	4 (unsure if they will like your app but open-minded	2 (annoyed but accept this as part of the process)		3 (things are moving along)
Pain points	Long loading time	Have to make a choice		Lots of asks one after another
Opportunities/Gain point		Set permissions ask later in journey		Consolidate the asks into one (i.e. ask for gmail account and autofill)

Credits: Product School

USER JOURNEY MAP PART 2

FIRST TIME RIDE CALL THROUGH RIDESHARING APP

	Account setup	Account setup	Account setup	Call ride	Call ride
Steps	Confirm information	Accept terms and service	Enter payment information	Enter destination address	Confirm ride
Touchpoints	Interaction through, text, email and app				
Actions	Leave app to check messages and manually enter. Leave app to open email and click confirmation link	Scroll quickly to the bottom and click “Accept”	Stand up, grab credit card, enter card information manually	Leave app, opens chat app to confirm address. Enters home and destination address	Clicks button to confirm and waits to see the driver confirmed and how many minutes away
Thoughts		“Not reading this”	“When will I be able to order my ride??”	“Finally!”	Thinking about how long before pickup, if they’ll make it on time to the event
Feelings (1-5)	2	2	1	3	4
Pain points	Have to leave app				Long load time
Opportunities/ Gain point	Can automatically fill out info for a seamless experience		Message that this is the final step		Offer discount to make them excited about first ride

Credits: Product School

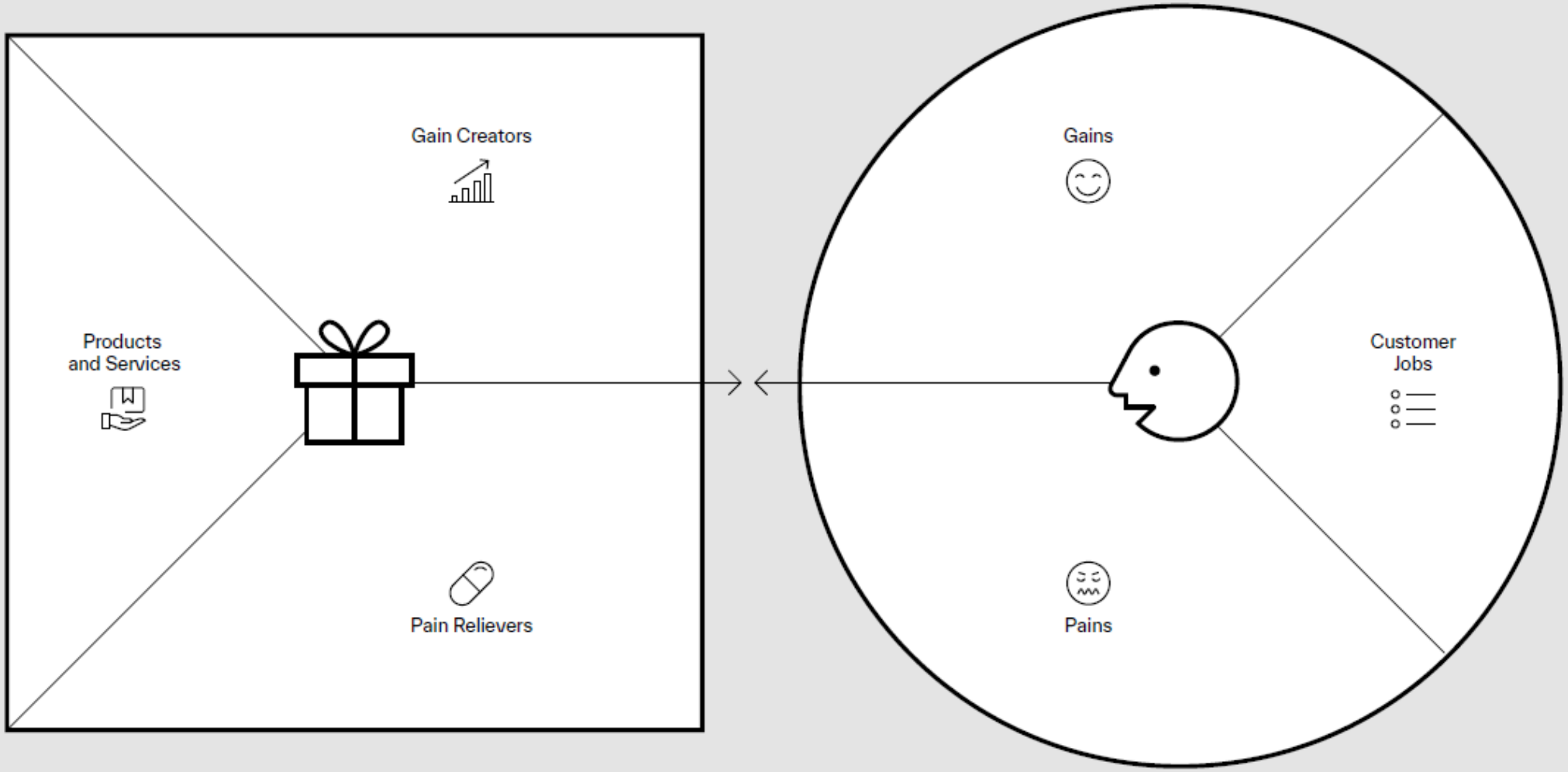
PERSONA: CUSTOMER FAMILIAR WITH RIDESHARE APPS, TRYING YOURS FOR THE FIRST TIME. OPPORTUNITY TO WIN THEM OVER.

Credits: Product School

The Value Proposition Canvas

Value Proposition:

Customer Segment:

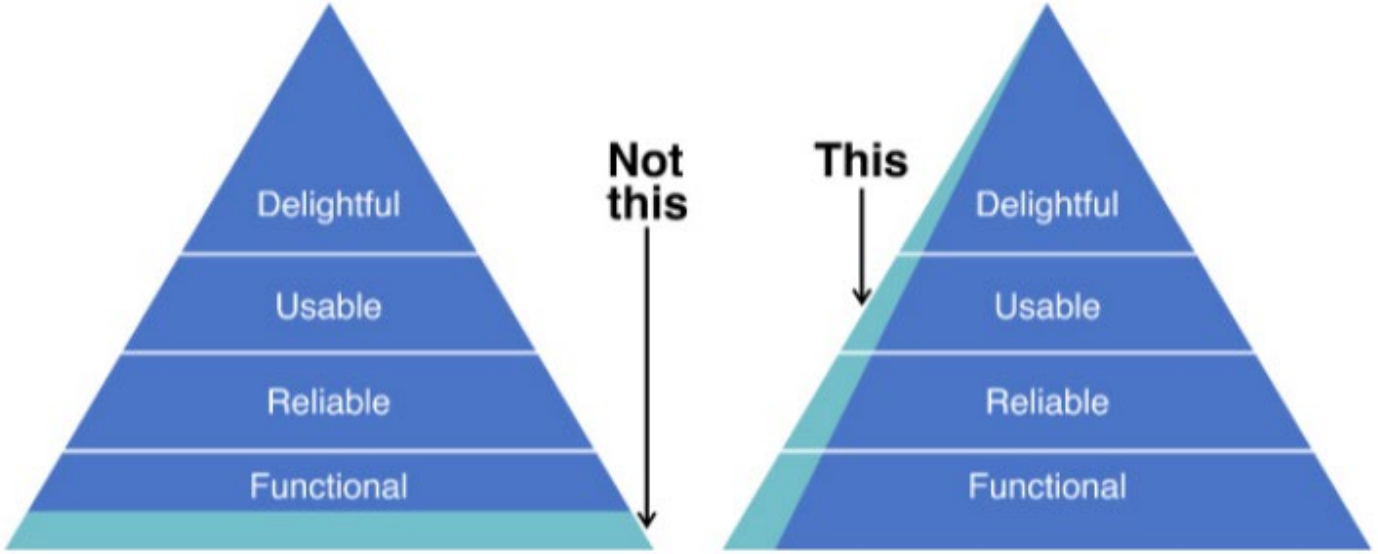


Strategyzer
strategyzer.com

PROTOTYPING

WHAT CONSTITUTES AN MVP PROTOTYPE?

- The Minimum viable product
- While an MVP has limited functionality, it must be complete by also addressing the higher-level attributes of reliability, usability and delight



PROTOTYPING

- Low fidelity prototype
- Medium fidelity prototype
- High fidelity prototype

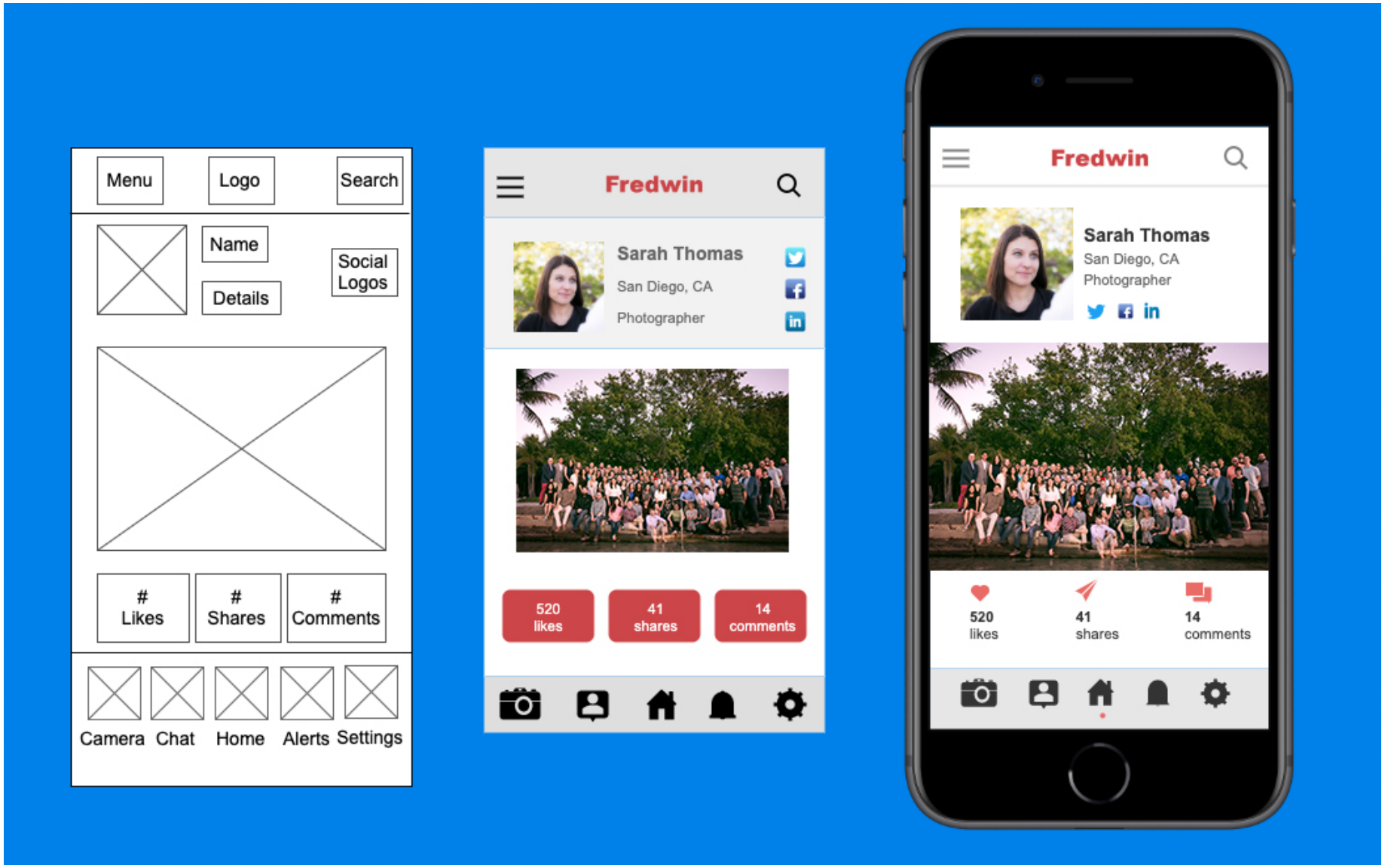
Paper prototype:

https://www.youtube.com/watch?v=2k-EQEQiFEY

Low-fidelity wireframe

High-fidelity Mockup

High-fidelity Clickable prototype



DESIGN ARTIFACTS BY FIDELITY AND INTERACTIVITY

- Design artifacts vary in terms of 'fidelity' – i.e., how closely they represent the real product
- Design artifacts also vary in 'interactivity' – i.e., the degree to which a customer can interact with the artifact relative to a live, working product