Customer Discovery — Why & How

Mariam Hambarchyan

Behavioral Scientist

AgriTech Accelerator

7/17/20

Mariam Hambarchyan
Behavioral Scientist

One of the things I've always found is that you've got to start with the customer experience and work backwards to the technology.
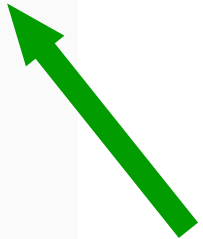
Steve Jobs
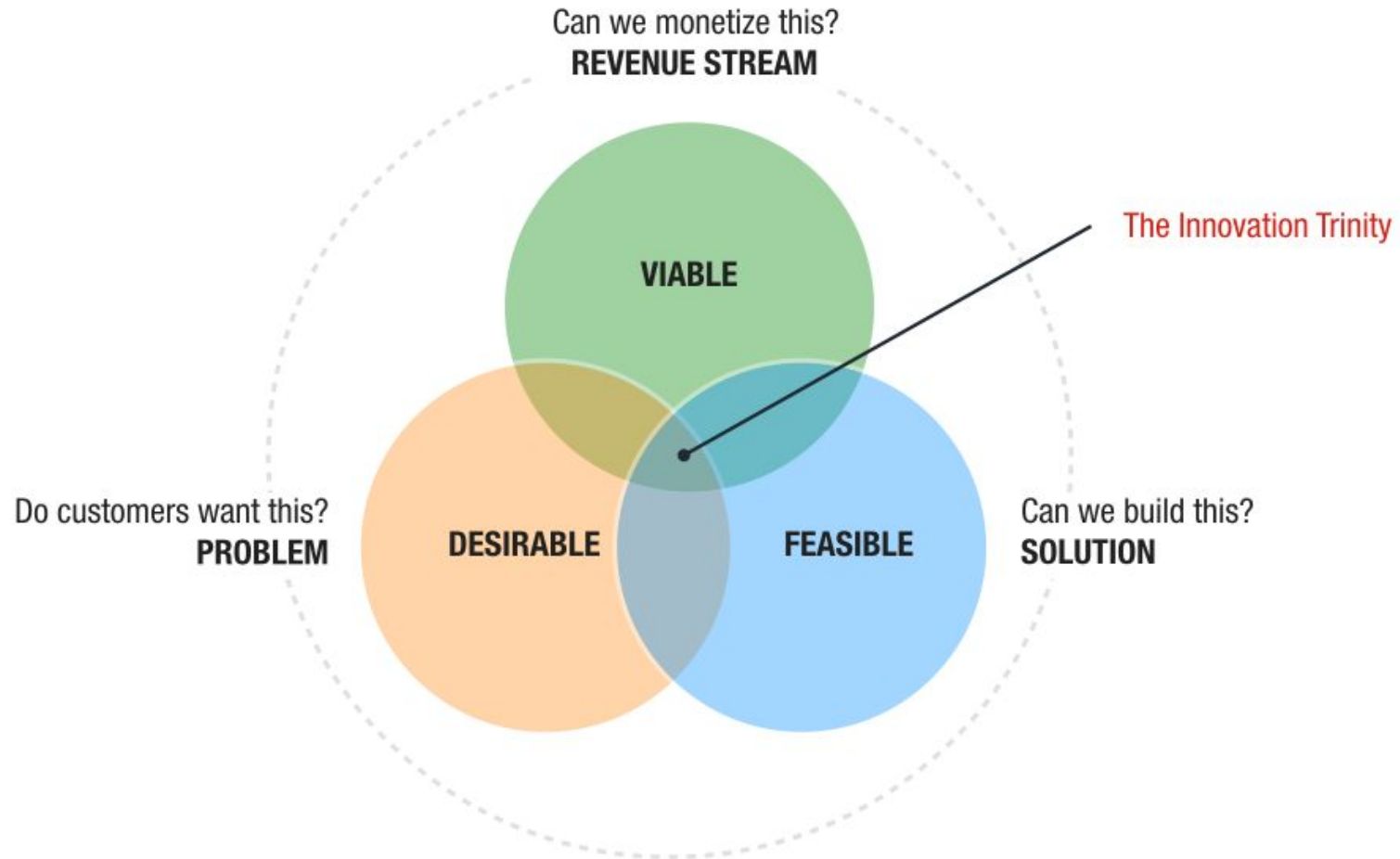Apple Worldwide Developers Conference (1997)
$1 trillion market cap (August, 2018)

The Top Reasons Startups Fail

Most frequently cited reasons for startup failure*

Reason	Percentage
No market need	42%
Ran out of cash	29%
Not the right team	23%
Get outcompeted	19%
Pricing/cost issues	18%
Poor product	17%
Need/lack business model	17%
Poor marketing	14%
Ignore customers	14%
Product mis-timed	13%
Lose focus	13%
Disharmony on team/investors	13%
Pivot gone bad	10%
Lack passion	9%
Bad location	9%
No financing/investor interest	8%
Legal challenges	8%
Don't use network/advisors	8%
Burn out	8%
Failure to pivot	7%

42% of startups report failing due to a lack of product-market fit

Can we monetize this?
REVENUE STREAM

VIABLE

The Innovation Trinity

Do customers want this?
PROBLEM

DESIRABLE

FEASIBLE

Can we build this?
SOLUTION

Ash adapted from IDEO

External Sound → Real-Time Compression → Sound-to-Touch Mapping → Vibration Output

Prototype Exterior (Back)

Prototype Interior (Inside)

Worn Under Clothing

Brain learns to interpret the data!
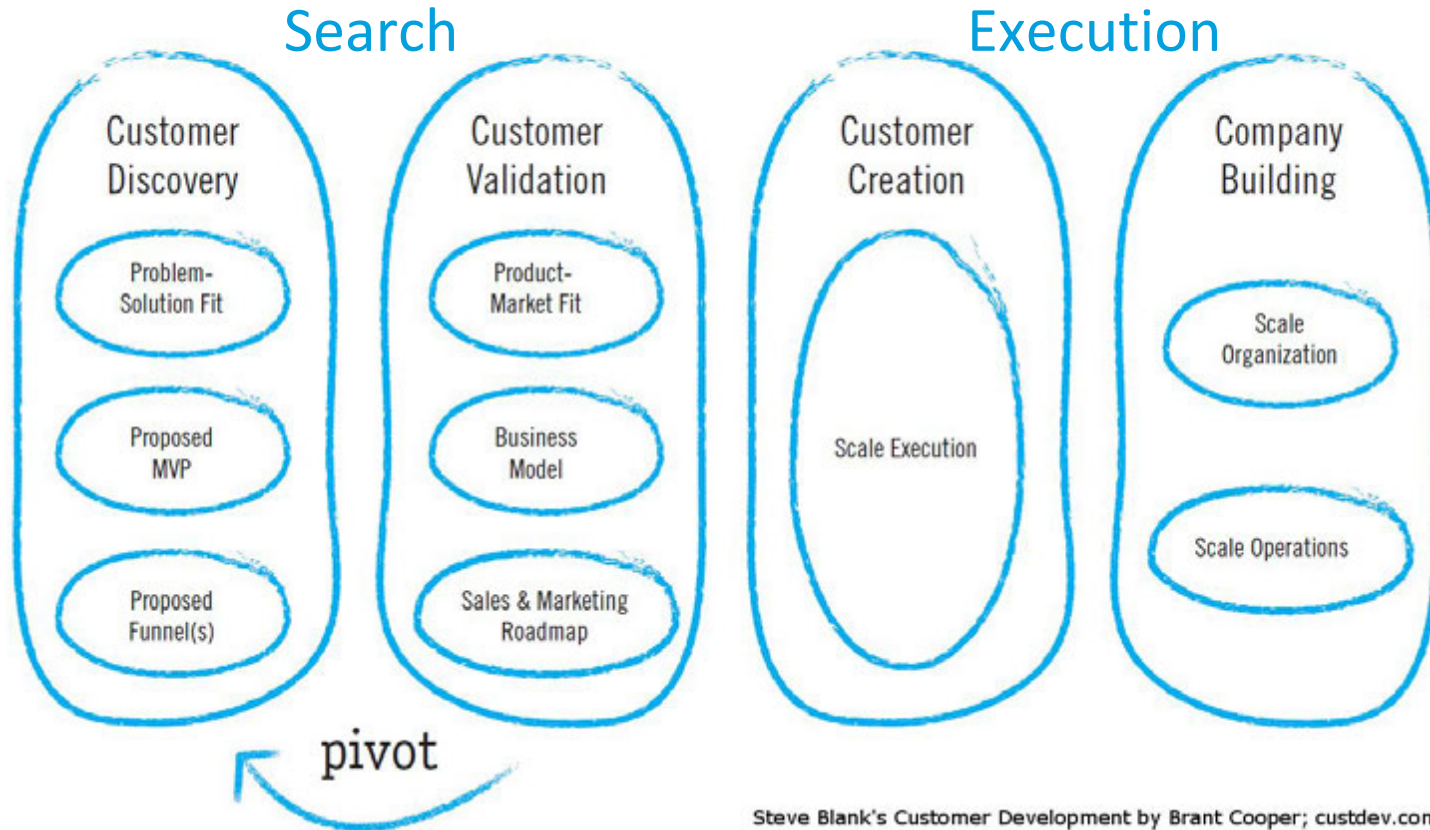
neosensory

where

Customer Development

A startup is a temporary organization used to search for a repeatable and scalable business model.

The customer development process is the way startups quickly iterate and test each element of their business model.
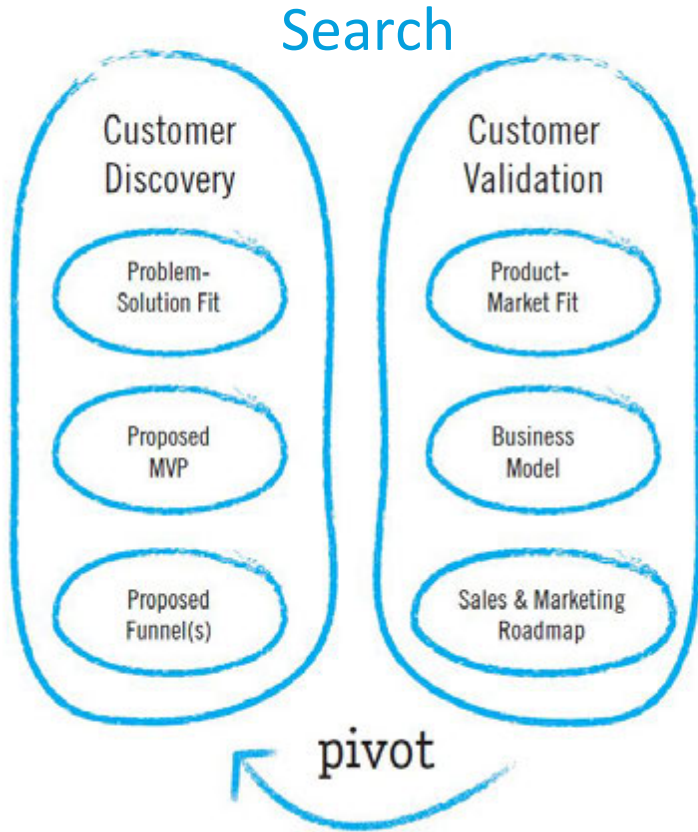
Customer development process

Steve Blank's Customer Development by Brant Cooper; custdev.com
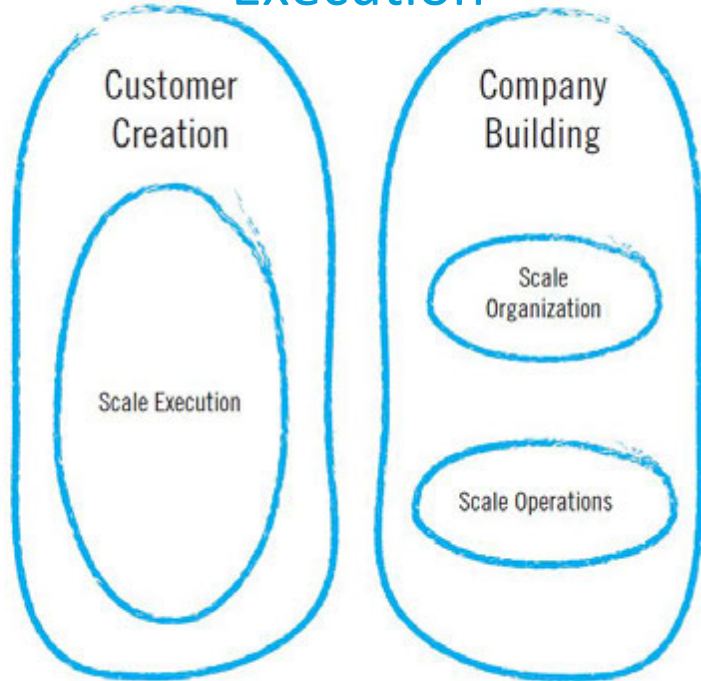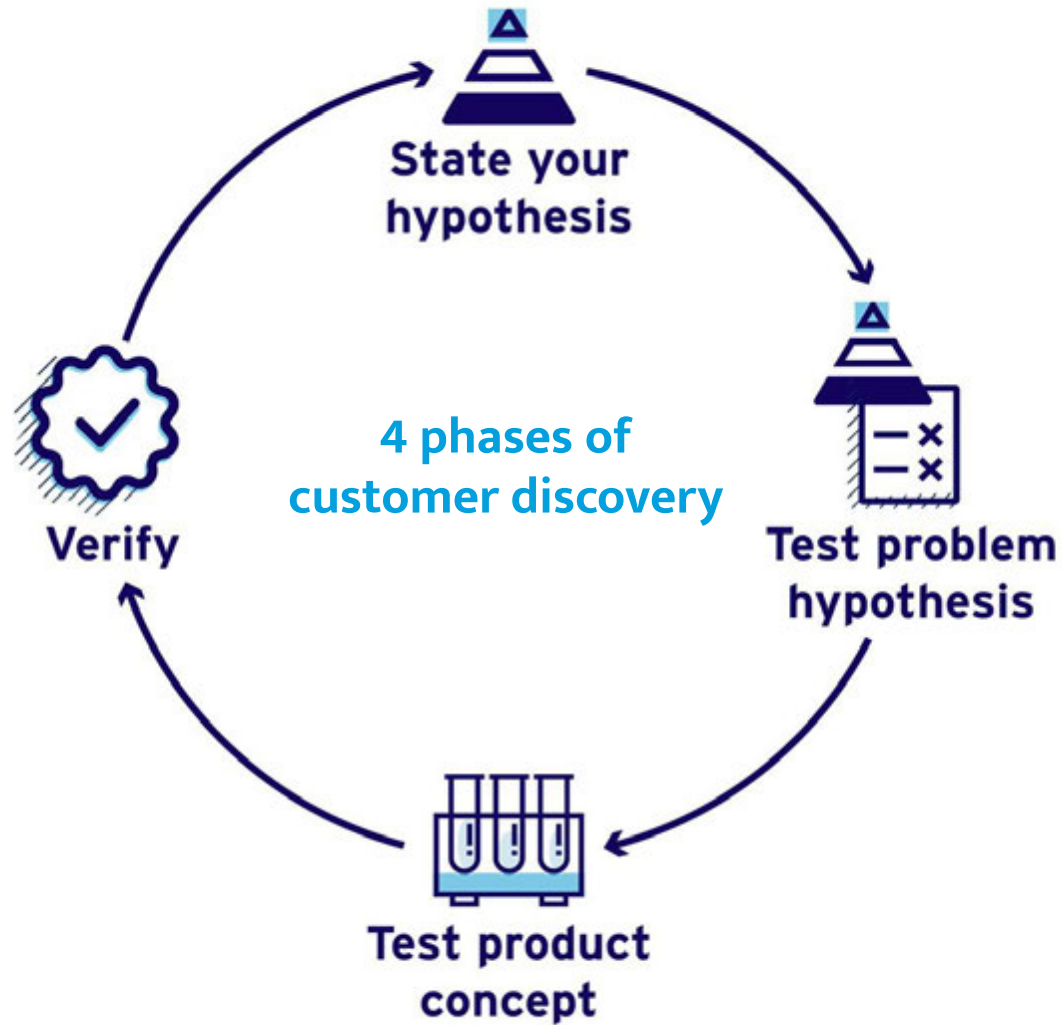
Customer discovery and validation

Search

- Discovery — testing whether the business model is correct by talking to customers, creating a prototype, and running experiments to see if the product solves a customer pain

- Validation — developing a sales model that you can replicate, so you get ready to sell, sell to early adopters, and develop positioning

Customer creation and company building

Execution

- Customer creation — scaling the business model you validated to create and drive more user demand

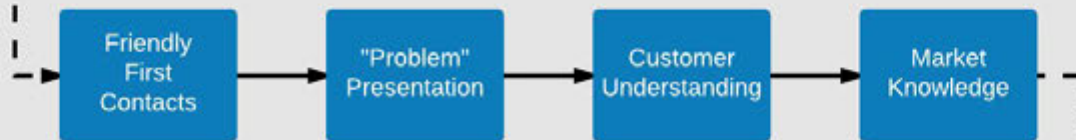- Company building — transitioning from learning and discovery to well-oiled machine for execution
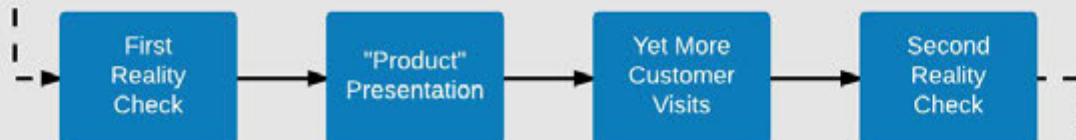
4 phases of customer discovery

State your hypothesis

Test problem hypothesis

Test product concept

Verify

MaRS

Hypothesis
Lean canvas

Product Hypothesis → Customer & Problem Hypothesis → Distribution & Pricing Hypothesis → Demand Creation Hypothesis → Market Type Hypothesis → Competitive Hypothesis

Test "Problem" Hypothesis
Discovery interviews

Friendly First Contacts → "Problem" Presentation → Customer Understanding → Market Knowledge

Test "Product" Hypothesis
User research

First Reality Check → "Product" Presentation → Yet More Customer Visits → Second Reality Check

Verify
Product-market fit?????

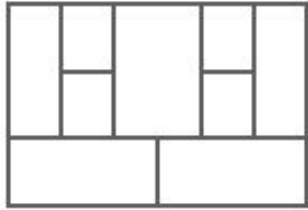Verify the Product → Verify the Problem → Verify the Business Model → Iterate or Exit

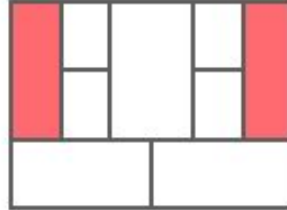Lucidchart
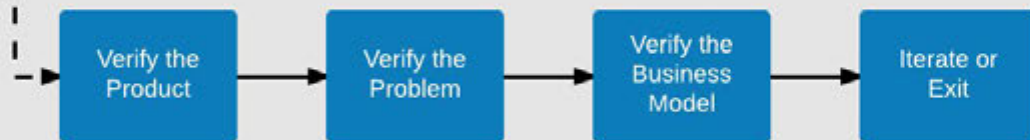
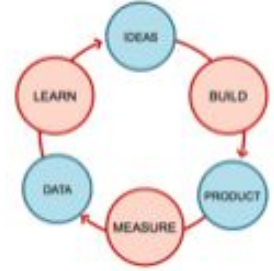# Lean Business Model Canvas

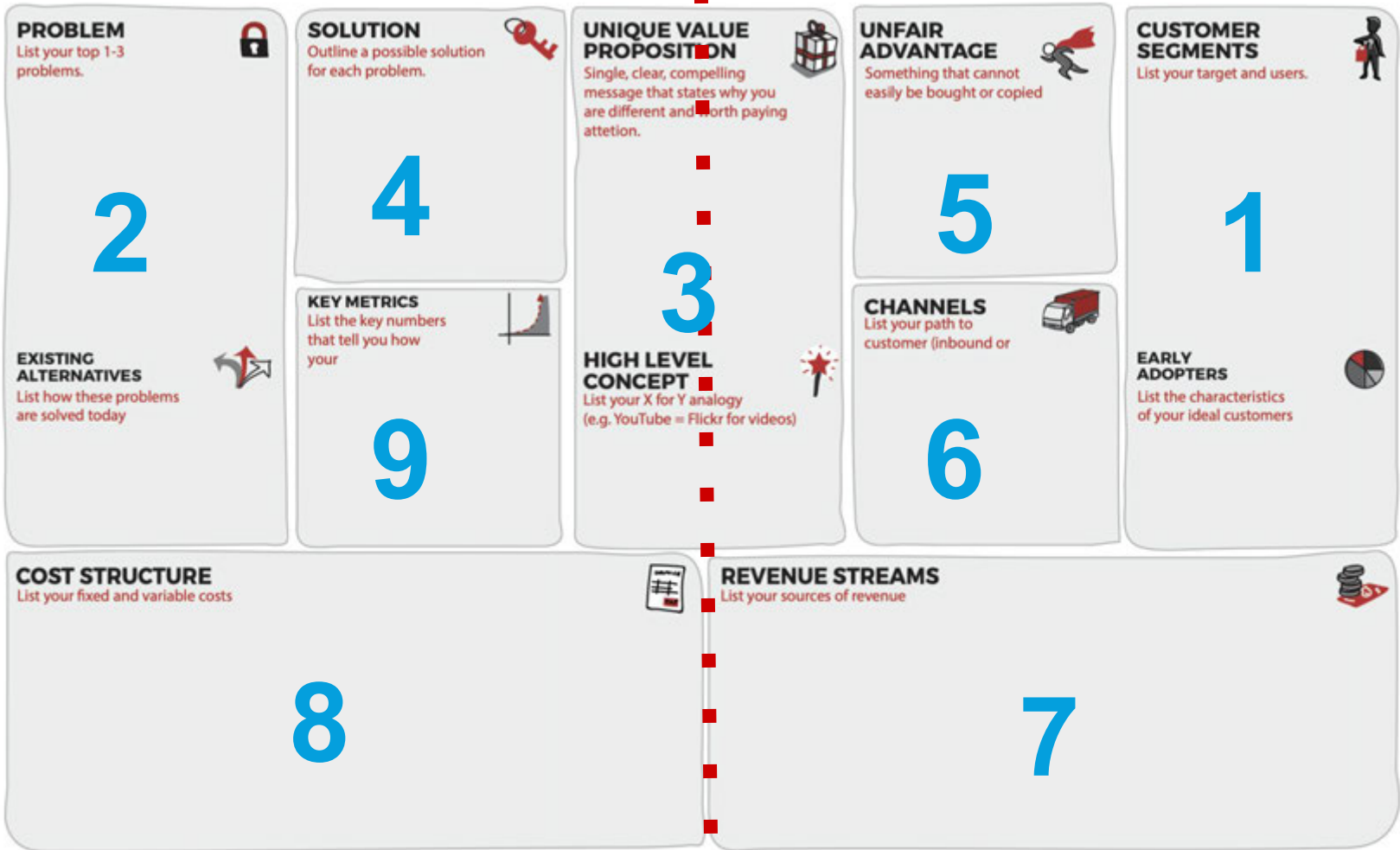Document your
Plan A

Identify the riskiest parts
of your plan

Systematically test
your plan

Create a LeanStack account to use Ash Maurya's online tool for documenting iterations of your lean business model canvas

LEAN CANVAS

Product · **Market**

PROBLEM
List your top 1-3 problems.

2

EXISTING ALTERNATIVES
List how these problems are solved today

SOLUTION
Outline a possible solution for each problem.

4

KEY METRICS
List the key numbers that tell you how your

9

UNIQUE VALUE PROPOSITION
Single, clear, compelling message that states why you are different and worth paying attention.

3

HIGH LEVEL CONCEPT
List your X for Y analogy (e.g. YouTube = Flickr for videos)

UNFAIR ADVANTAGE
Something that cannot easily be bought or copied

5

CHANNELS
List your path to customer (inbound or

6

CUSTOMER SEGMENTS
List your target and users.

1

EARLY ADOPTERS
List the characteristics of your ideal customers

COST STRUCTURE
List your fixed and variable costs

8

REVENUE STREAMS
List your sources of revenue

7

LEAN CANVAS

1 – customer segments

- Your target market – who will purchase your product

- You can get specific enough to list out your different "personas"

- Customers are not always users – who pays and who cares can be different (i.e., customers pay us, but the end-user might be someone else)
    - Just like user personas, you can have customer personas

- Early adopters aren't just more likely to adopt tech, in general, they are the people who need your product the most and are looking for solutions
    - The early success of your business is highly dependent on this group

2 – problem

- Identify your users' top 1-3 problems, though you can list more over time

- User research will uncover the pain points

- Even before conducting user research, you can try to get down to the core of the pain points by using the 5 "why's" method

- Identify users' main frustrations, how these turn into needs, what their desired outcomes are and, ultimately, how all of this translates into their pain points

- Existing alternatives give you insights about potential pain points, as well as positioning and pricing

3 – unique value proposition (UVP)

- Single, clear, compelling message that turns an unaware visitor into an interested prospect (different personas can have different UVPs). Your first battle is to get noticed, so offer a solid solution to a target users' problem

- One of the hardest and critical things to get right, but you can test and refine it

- Focus on your top problems and not on your top features or benefits

- Think in terms of your "finished story" benefit

- Needs to be specific and avoid empty marketing words like fast, easy, simple

- High-level concept can be represented by an X for Y analogy
    - Youtube = Flickr for Videos, so it should be a memorable sound bite that distills your story. Note that it's not your UVP or something you'd put on a landing page, but rather a meme that could be spread by WOM

4 – solution

- Identify a specific solution for each of the problems you have listed

- These solutions are how you will deliver value to your users, so they can be at a higher level as well as at the more specific feature level

- Your minimum viable product (MVP) should be built by taking into account the combination of your solution + unique value proposition + revenue

5 – unfair advantage

- a.k.a. competitive advantage, which is something you can't test, as it will be tested by competition in the market and copycats

- Although people think that being first to market is an unfair advantage, it is often a disadvantage. First movers bear the burden of learning and marketing a new product, whereas fast follower get to build on top of that knowledge

- What you can use to defend against competitive attack, so in essence, an unfair advantage is something that cannot be easily copied or bought

- Examples include: insider info, personal authority, a dream team, existing customers, the right celebrity endorsements, large network effects, community, organic SEO ranking, patents, core values

6 – channels

- Your paths to your consumers and one of the most risky items on the canvas

- Shouldn't be something to defer to later – build and test from "day 1"

- The goal is to identify channels early, as they take time to build

- Touchpoints with your customers – before, during, after purchase

- It's okay to start with outbound channels to jumpstart learning before building up to scalable and more inbound channels
    - OUTBOUND (push) — traditional paid advertising methods like banner and display Ads, TV, print, billboard, etc. and they have fallen out of favor because people ignore them
    - INBOUND (pull) — more favored tools that pull in, rather than interrupt, a potential customer. These include content marketing, blogs, social media, search, influencer marketing, referrals, product placement, etc.

7 – revenue streams

- Pricing is often considered more of an art than a science, but it's really both

- Do value-based pricing rather than cost-based pricing

- Look at existing alternatives as an anchor, but you don't necessarily have to price your product close, if you offer more value

- Pricing will also determine the type of consumers you attract

- When setting pricing, keep early adopters in mind, as their initial adoption is what fuels growth

8 – cost structure

- Helps you estimate the scope and feasibility of implementation

- Impossible to predict accurately as things change a lot in a startup

- Both fixed and variable costs should be estimated

- This figure can be calculated by using how much you need to break even or a different metric of success

9 – key metrics

- Define how success of your product will be measured, which can change during different stages of product development

- Macro level: define the minimum success criteria within a 3-year time window
  - Use revenue target and avoid using profit or company valuation targets
  - Could also frame it in terms of having some impact on the world (enabling a target number of users to derive significant utility)

- Micro level: identify key user actions that measure users' experience of your value propositions

Customer Discovery Research

Who should do customer discovery research?

Everyone

- Mostly importantly, **FOUNDERS** with the power to iterate and pivot on the spot

- Especially, anyone who has **agency over product strategy**

- **Everyone** else should get involved, at least at some point and to some extent

    - Yes, including the engineers, who don't want to leave the building, because they can add a lot of value with their unique perspective, when observing and interacting with users

When should do customer development research?

Always, always, always

- **Before you build** – do customer discovery interviews and get out in the field and just observe your customer segment in their natural habitat

- **While you are building** – at each level of an MVP, as often as you can!

- **After launch** – all that ^ were hypotheses, keep validating product-market fit

What type of questions do quantitative vs. qualitative methods answer?

QUESTIONS ANSWERED BY RESEARCH METHODS ACROSS THE LANDSCAPE

BEHAVIORAL

WHAT PEOPLE DO

WHY &
HOW TO FIX

HOW MANY &
HOW MUCH

WHAT PEOPLE SAY

ATTITUDINAL

QUALITATIVE (DIRECT)

© 2014 Christian Rohrer

QUANTITATIVE (INDIRECT)

Source

A LANDSCAPE OF USER RESEARCH METHODS

BEHAVIORAL

● / ■ Eyetracking

● Clickstream Analysis
● A/B Testing

■ Usability Benchmarking (in lab)

■ Usability Lab Studies

■ Moderated Remote Usability Studies

■ Unmoderated Remote Panel Studies   ■ Unmoderated UX Studies

● Ethnographic Field Studies

● True Intent Studies

◆ ← Concept Testing →

● Diary/Camera Studies

● Customer Feedback

◆ Participatory Design

◆ ← Desirability Studies →   ● Intercept Surveys

▲ Focus Groups

▲ Interviews   ▲ ← Card Sorting →   ▲ Email Surveys

ATTITUDINAL

QUALITATIVE (DIRECT)   **QUANTITATIVE (INDIRECT)**

KEY FOR CONTEXT OF PRODUCT USE DURING DATA COLLECTION

● Natural use of product   ▲ De-contextualized / not using product

■ Scripted (often lab-based) use of product   ◆ Combination / hybrid

© 2014
Christian Rohrer

[Source](#)

Don't just use quantitative metrics that tell you **what** is going on, you also need to talk to people to understand **why**.

WHY USE QUALITATIVE METHODS

Companies talk a big game about how much they care about their customers and their problems, but it's often in the abstract. Qual is a way to float that customer focus up to the surface. It's a tool that allows you to encounter your users in the wild — not just view them as a hypothetical user or aggregated persona. Qual is about filling in the blanks. It's exploratory. It's about emotions. And since it seems squishy and hard to scale, it's easier to write off. But startups do that at their own peril. We build better products and solve bigger problems when we keep real people in mind, and you just can't get that without qual.

Jesse Caesar

Researcher @ Pepsi and consultant @ Amazon

Some qualitative data can and should be coded and turned into quantitative data

🤯

Customer Discovery Interviews

1-on-1 interviews

- Just you **interviewing one user** to learn about their story, attitudes and motivations (if possible, bring a notetaker so you can be more engaged)

- Start as early as you can, **with or without an MVP**, and you have to keep doing it, during customer discovery as well as validation and beyond…

- 20-40 sample is good enough for "one study," if you have targeted your personas well, and you can iterate your MVP during the study

- Ideal if in person, OK-ish if over video and, only if you can't, use the phone

- Costly in terms of resources and time to conduct and analyze data, but GOLD

Resource 1   Resource 2

ACQUISITION

2. Current User Retention

1. New User Retention

3. Resurrected User Retention

POWER USERS

NEW USERS

ACTIVATION

CURRENT USERS

REACTIVATION

RESURRECTED USERS

CHURN

RESURRECTION

CHURN

CHURN

CHURN

CHURNED USERS

Resource
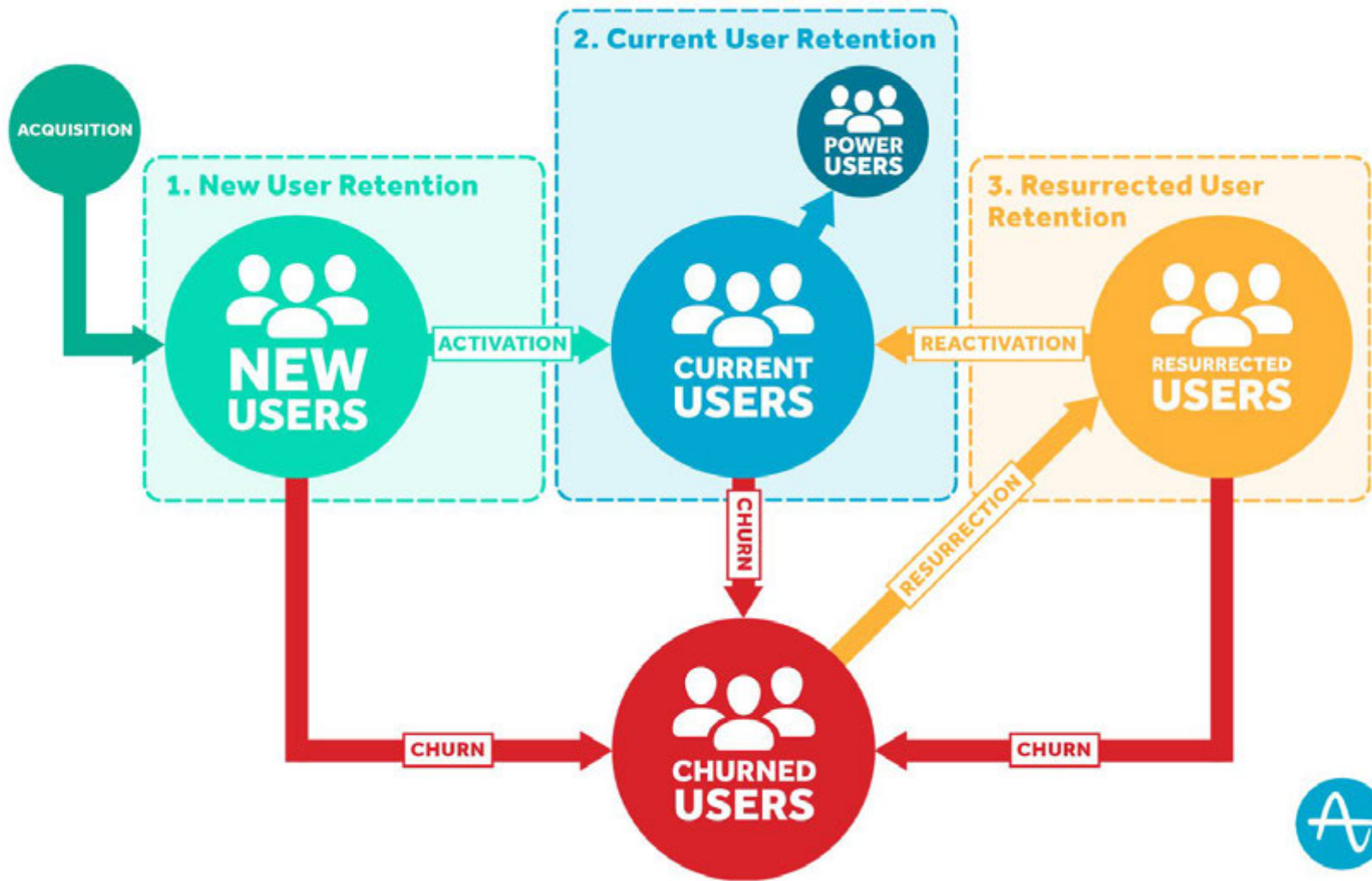
First, find the right customers to talk to.

Mostly 👂 and 👀, don't 🗣 too much

Do NOT pitch — 🚫 about selling 🤑

When is it OK to bring up your product?

Discovery interview roadmap

1. Get to know them and their habits
2. Identify their pain points
3. Learn about experience with alternatives
4. Introduce product/prototype/concept and ask for qual & quant feedback

📝 their own words, not your summary 🧐
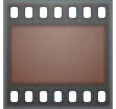
Also, to record (audio/video), or not to record, that is the question.

Go with the 🌊 and uncover the 🧩 pieces, don't rigidly follow the script 📋

Ask open-ended ❓ to avoid 👍 👎 answers and don't push with leading questions

Ask for stories ⌛✍️ that are way more 🔍 informative than general statements 💢

Asking about past and present behavior 🎞️ is a better predictor of future behavior, than asking about future behavior 🔮

Echo technique

- The interviewer repeats the last phrase or word the user said, while using a slight interrogatory tone. Using the exact word(s) that the participant used ensures that the interviewer does not bias the participant by making a suggestion or describing anything in the interface. Instead, she just parrots and probes in a benign way.

- Say these few words while using a tone that makes it clear that the phrase is a question. This will naturally put the user in the mindset of answering the question by elaborating on what he meant by those same words.

    - User: This table is weird, well, hmmm, not sure what, uh…
    - Facilitator: Not sure what?
    - OR Table is weird?

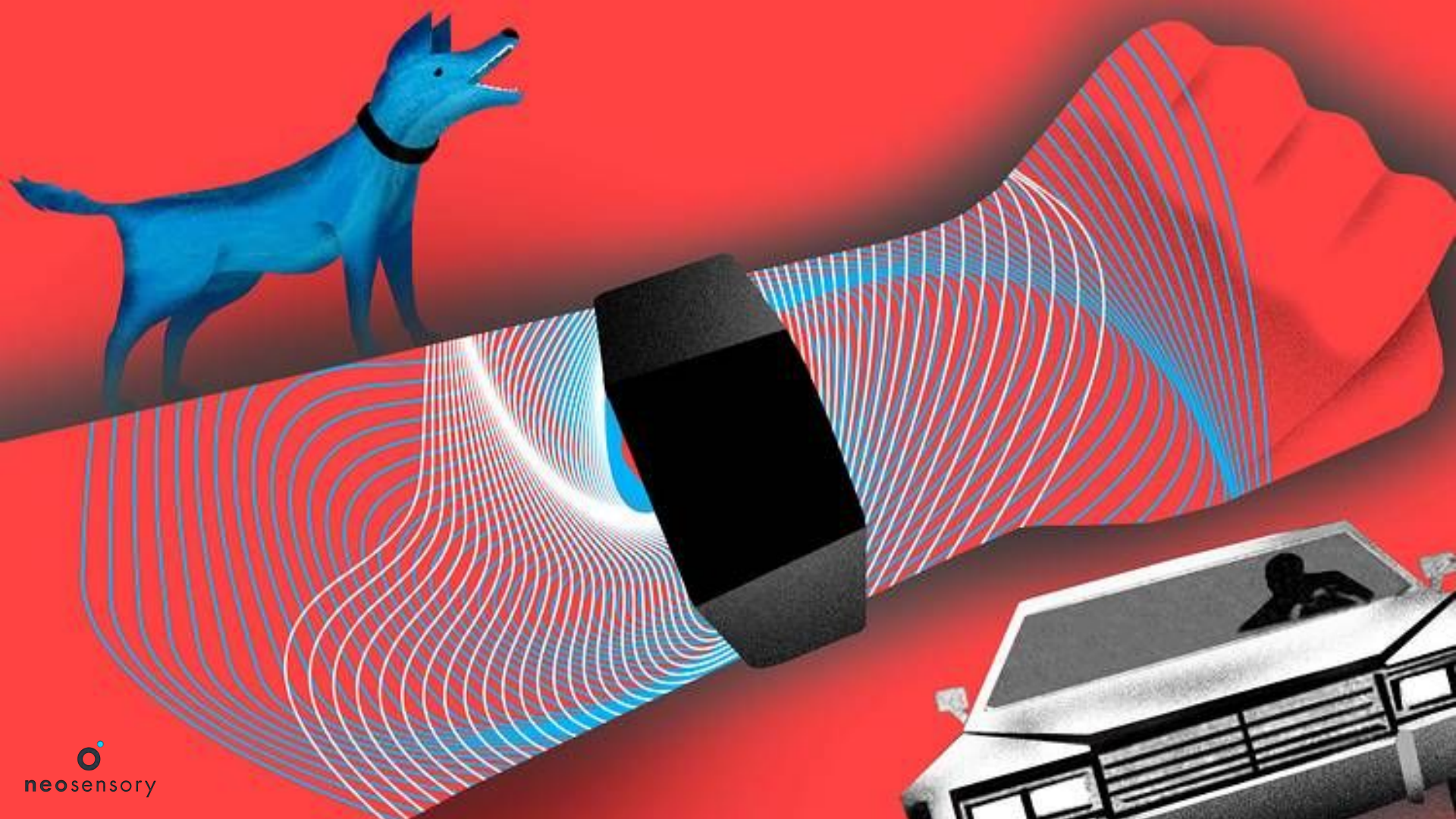Dig deeper into their motivations, pain points, frustrations, and core emotions
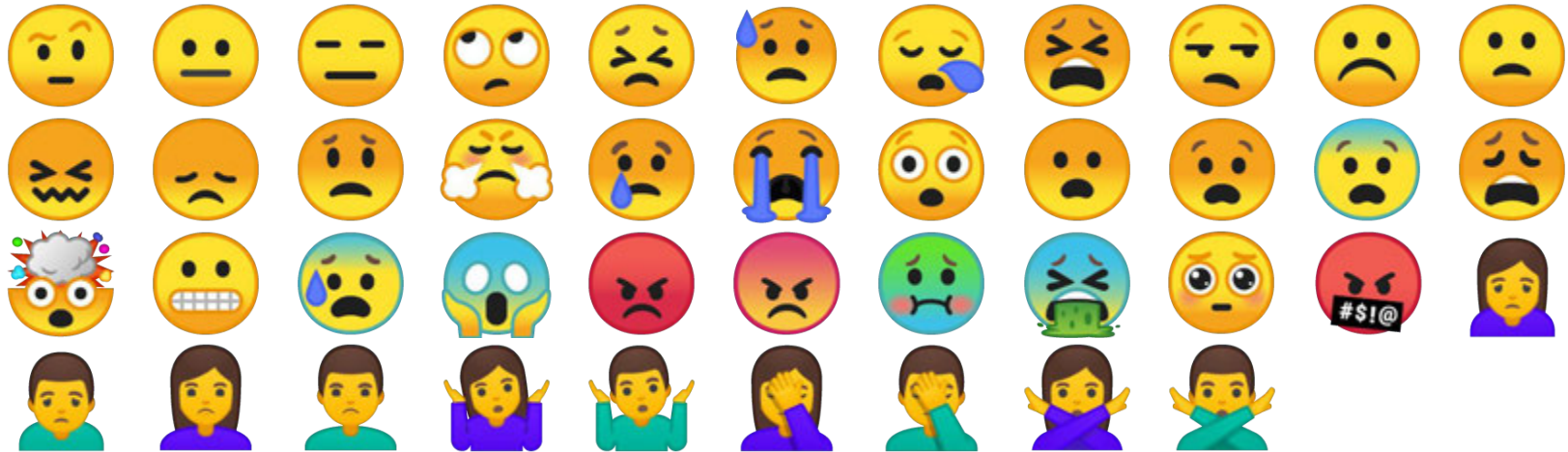
🔨 keep asking "why?"

❓❓❓❓❓ times

Ask about the solutions they've used or are still using 🔋 🔌 💡 🔦 🕯️

BE AWARE

Perceive phone notifications, alarm clocks, doorbells, dogs barking, and all other environmental sounds.

BE CLOSER

Feel voices, laughter, a family member entering the room, a baby crying, and a friend calling your name.

BE ENTERTAINED

Elevate music and movies with an emotionally powerful, immersive experience.

BE SAFE

Detect emergency sounds such as smoke alarms, sirens, and cars honking.
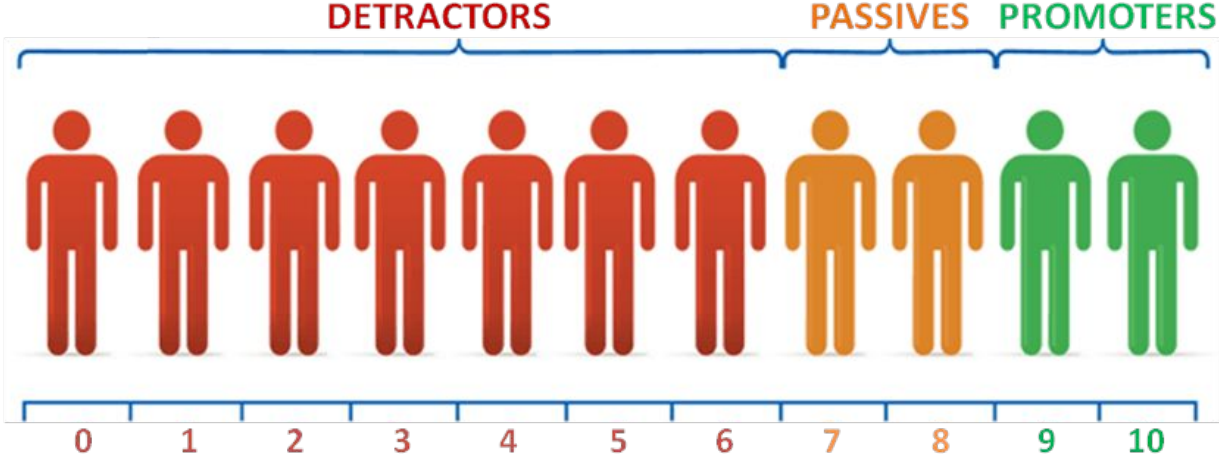
Also ask some quantitative questions

🔢

Using a 1-7 scale, how frustrated were you when that happened?

1️⃣ not at all frustrated

7️⃣ very frustrated

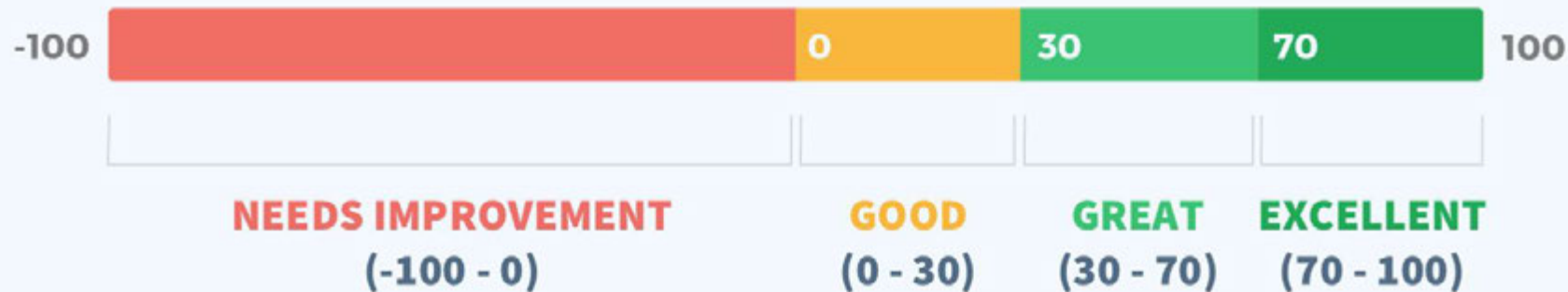How likely is it that you would recommend this product to a friend/colleague?

What is a good NPS score?

-100 | 0 | 30 | 70 | 100

NEEDS IMPROVEMENT (-100 - 0)

GOOD (0 - 30)

GREAT (30 - 70)

EXCELLENT (70 - 100)

RETENTLY

Use Data to Drive Success

Remember, your Net Promoter Score is just a means to an end. Improving the customer experience is valuable because of its effect on your bottom line.

20% to 60%

of variation in organic growth is accounted for by Net Promoter Score

30% better

conversion rate for referral leads, like you get from Promoters

2% = 10%

2% increase in customer retention has the same effect as decreasing costs by 10%

Sean Ellis Test to measure product-market fit

- How would you feel if you could no longer use the product/service?
    1. Very disappointed → **you want more than 40% very disappointed**
    2. Somewhat disappointed
    3. Not disappointed (it's really isn't that useful)
    4. I don't want to use it anymore

- Intentions ≠ action and it doesn't guarantee success, but it's a good indicator

- Collect 50+ responses from a representative sample, but more is better

- Sean suggests surveying people who "experienced the core product or the service at least twice," but you really should collect it starting with your MVP

- It's best to track it by persona rather than aggregated!

Resource 1   Resource 2

Startup Pyramid
by Sean Ellis

Growth

Optimize

Economics

Positioning

Product/Market fit

👋 end interview with "what should I have asked you, but didn't?" and listen for more…

Also, ask for a referral to talk to someone else.

If I had asked people what they wanted, they would have said ... FASTER HORSES

HENRY FORD
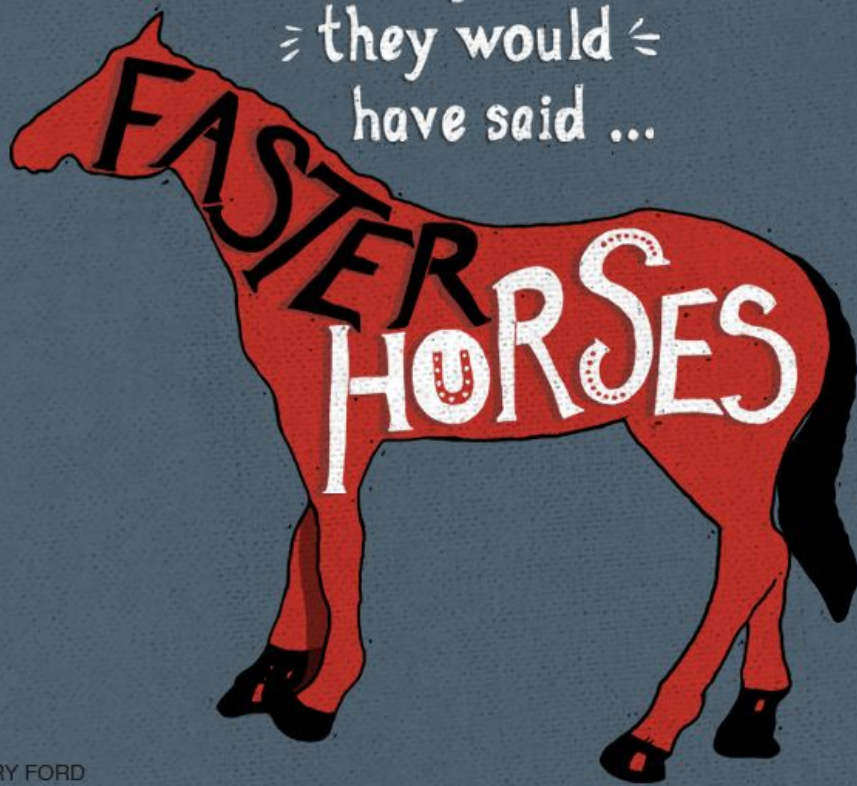
Your most unhappy customers are your greatest source of learning.

Bill Gates
Business @ the Speed of Thought (1999)
$1 trillion market cap (June, 2019)

I put it on and I was like, "Wow!"
I could feel everything on my own, you know.

neosensory

NEW YORK TIMES BESTSELLER

THE POWER OF HABIT

WHY WE DO — WHAT WE DO IN LIFE AND BUSINESS

"SHARP, PROVOCATIVE, and USEFUL." — Jim Collins, author of Good to Great

Charles Duhigg

With a new afterword by the author

"A must read for everyone who cares about driving customer engagement." — ERIC RIES, author of The Lean Startup

Hooked

How to Build Habit-Forming Products

NIR EYAL
with Ryan Hoover

Why Some Ideas Survive and Others Die

MADE to STICK

Chip Heath & Dan Heath

Contagious

WHY THINGS CATCH ON

JONAH BERGER

SWITCH

HOW TO CHANGE THINGS
WHEN CHANGE IS HARD

CHIP HEATH & DAN HEATH
THE BESTSELLING AUTHORS OF **MADE to STICK**

RICHARD H. THALER
WINNER OF THE NOBEL PRIZE IN ECONOMICS
and CASS R. SUNSTEIN
WINNER OF THE HOLBERG PRIZE

Nudge

NEW YORK TIMES Bestseller

Improving Decisions About
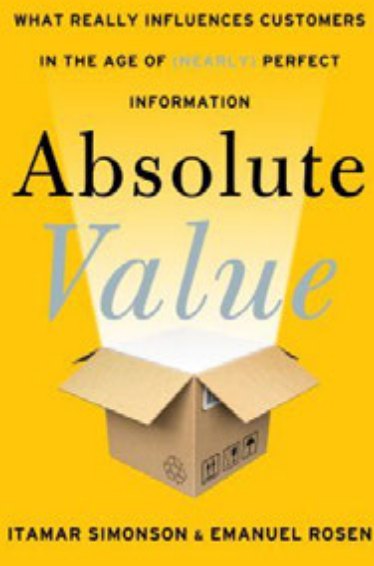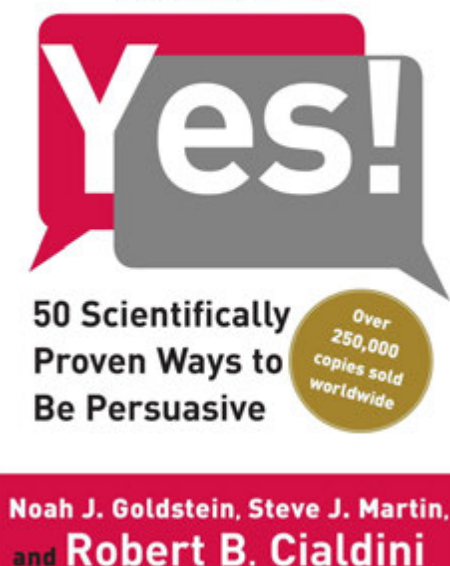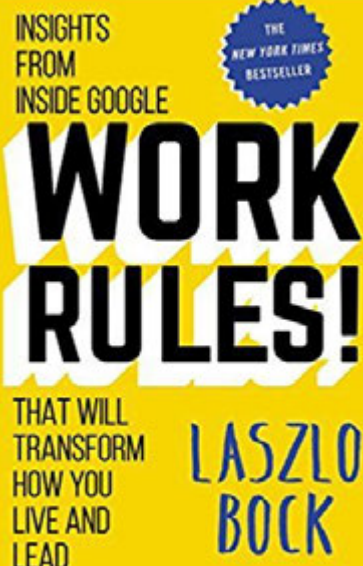Health, Wealth, and Happiness

---

"IGNORE THIS BOOK AT YOUR OWN PERIL." —SETH GODIN

REWORK

NEW YORK TIMES BESTSELLER

JASON FRIED & DAVID HEINEMEIER HANSSON
FOUNDERS OF BASECAMP

THE LEAN STARTUP

How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses

THE NEW YORK TIMES BESTSELLER

ERIC RIES

INSIGHTS FROM INSIDE GOOGLE

THE NEW YORK TIMES BESTSELLER

WORK RULES!

THAT WILL TRANSFORM HOW YOU LIVE AND LEAD

LASZLO BOCK

Yes!

50 Scientifically Proven Ways to Be Persuasive

Over 250,000 copies sold worldwide

Noah J. Goldstein, Steve J. Martin, and Robert B. Cialdini

WHAT REALLY INFLUENCES CUSTOMERS
IN THE AGE OF (NEARLY) PERFECT
INFORMATION

Absolute
Value

ITAMAR SIMONSON & EMANUEL ROSEN

TALKING TO HUMANS

Success starts with understanding your customers

GIFF CONSTABLE
with Frank Rimalovski
illustrations by Tom Fishburne
foreword by Steve Blank

THE FOUR STEPS TO THE EPIPHANY

Successful Strategies for Products that Win

The book that launched the Lean Startup revolution

Steve Blank

REVISED AND EXPANDED EDITION

PREDICTABLY IRRATIONAL

The Hidden Forces That Shape Our Decisions

"Sly and lucid... Revolutionary." —New York Times Book Review

DAN ARIELY

AUTHOR OF THE UPSIDE OF IRRATIONALITY

THE NEW YORK TIMES BESTSELLER

THINKING, FAST and SLOW

DANIEL KAHNEMAN

INFLUENCE

SCIENCE AND PRACTICE

OVER 2 MILLION COPIES SOLD!

ROBERT B. CIALDINI

"Ounce for ounce, there's no better way to learn what customers want and will buy than this wonderful little book. If you want your new product or new business to succeed, start here." —John Mullins, Author of The New Business Road Test

Rob Fitzpatrick

THE MOM TEST

How to talk to customers and learn if your business is a good idea when everyone is lying to you