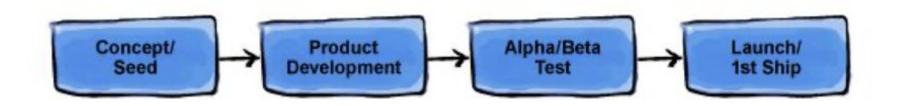
### Thinking as a Designer

Shan-Hung Wu & DataLab CS, NTHU

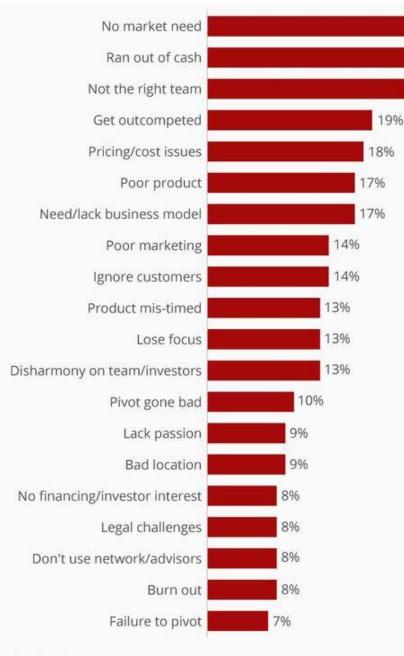
### The Path to Disaster





### Let's imagine:

# You have finally launched your product...



# Tops Reasons Startups Fail

- Not strong competitors
- Not wrong pricing

42%

29%

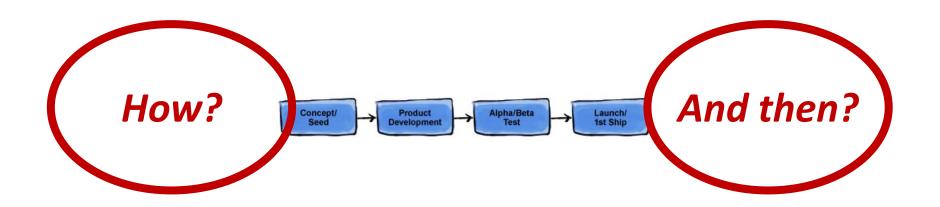
23%

Not poor product





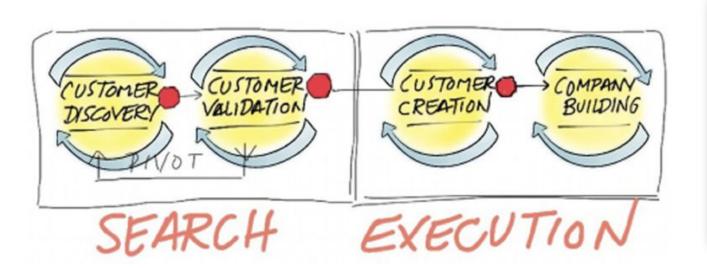
### What's Wrong?

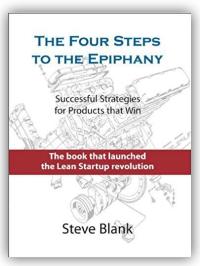


- No, your don't have a really good idea or spec
- No, your user/customer will not come automatically

What would you do in the beginning?

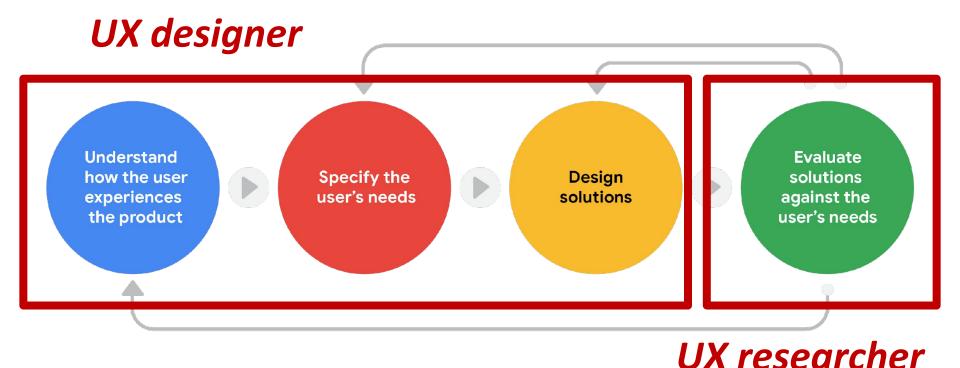
### Iterate Eeverything





Iterate, learn, and then improve (or pivot)

### (Iterative) User-Centric Design Process

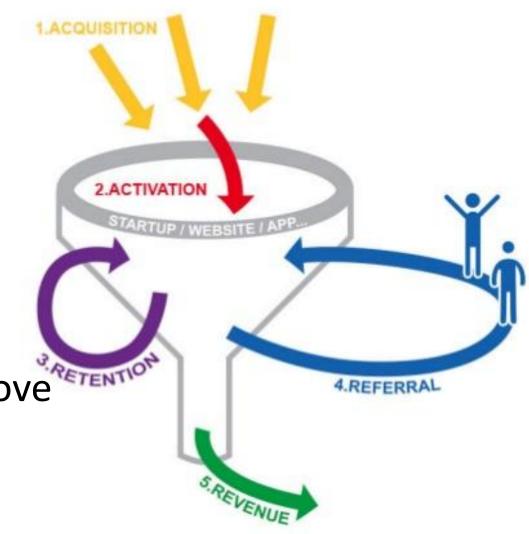


You play both roles in this class

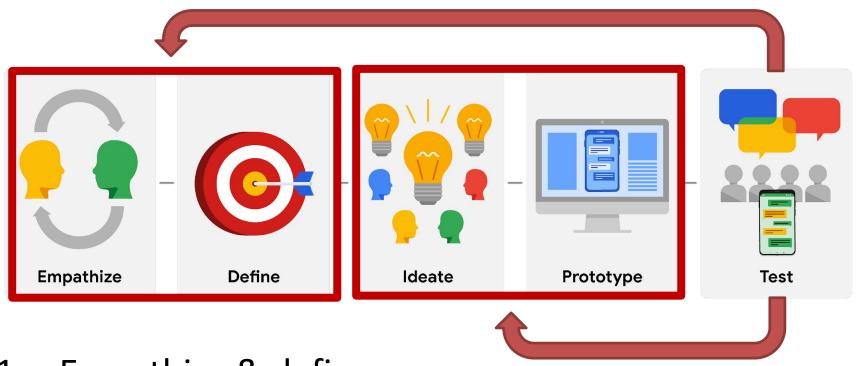
### (Iterative) Lean Execution

- User funnel
  - Acquisition
  - Activation
  - Retention
  - Referral
  - Revenue

Iterate to improve the funnel



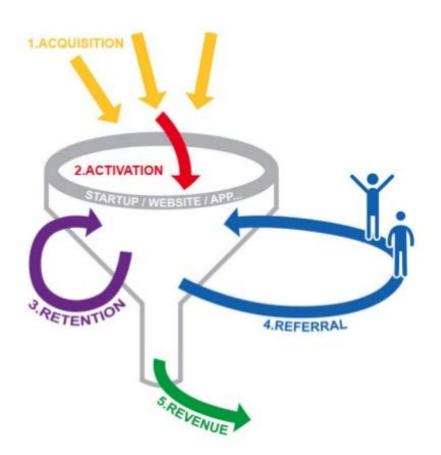
### Outline for Parts I & II



- 1. Empathize & define
  - Understand user's needs and define the problem to solve
- 2. Ideate & prototype

### Outline for Parts III & VI

- 3. Design for retention & growth
- 4. Using data
  - Analytics
  - Intelligence



### What is a Good UX?

- Usable
  - Is the product easy to use?
- Equitable
  - Can the product be used regardless of background, gender, race, or ability?
- Enjoyable
  - Does the product create a positive connection with users?
- Useful
  - Does the product solve user problems?

### Note: Users ≠ End Users

- Users
  - Any person who uses a product
- End users
  - Specific audience you create product for

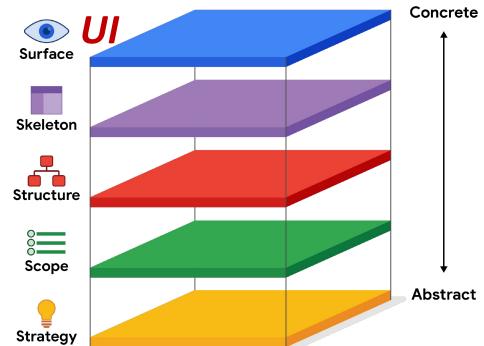
A good UX makes the end users happy

### Note: $UX \neq UI$

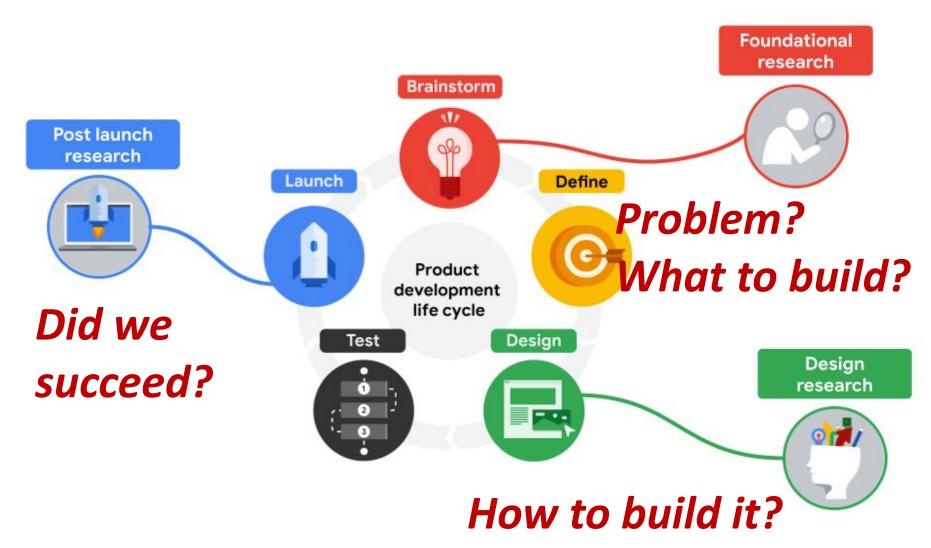
- Strategy
  - How to help users reach their goals?

— How to reach marketing or business goals?

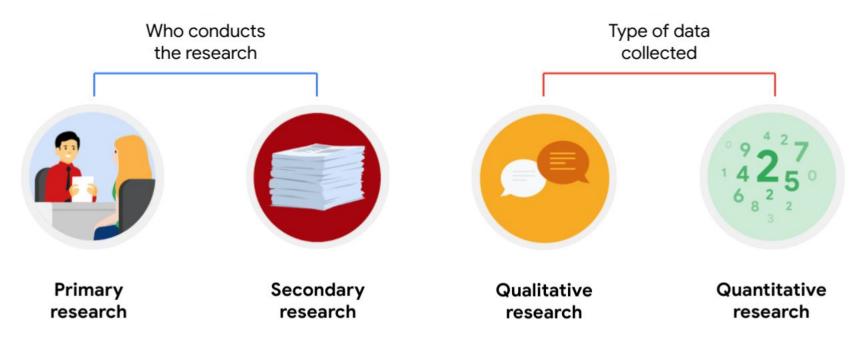
- Scope
  - What features to include?
  - What not to?
- Structure
  - Navigation system?
  - Transitions?
  - Notifications?
- Skeleton
  - Layout of each page/screen?



### Types of UX Research



### Types of UX Research



- By whom: primary vs. secondary
  - You or the book/report/stats/...
- Data type: quantitative vs. qualitative
  - "What" vs. "why"

# Common Research Methods before Launch

#### Interviews

- Personal, open-ended questions
- To collect in-depth information on people's opinions/thoughts/experiences/feelings

#### Surveys

- Get many people answer the same questions (quantitative or qualitative)
- To understand what most people think about your design
- Most useful after you have some initial understanding of the users' pain points and want to solidify that

#### Usability studies

- Evaluate a prototype by testing it on users
- Can have interviews afterward
- To fix issues before the final product launches







# Common Research Methods after Launch

- Usability studies
  - Observe key performance indicators (KPIs)
    - E.g., time spent in product, purchase rate, etc.
  - To reach your design or business goals



# The research method we choose is decided by the question we are trying to answer

### Secondary Research

- "What gen z thinks of millennials"
- Good for projects just get started
- Pros
  - Saves time & money
  - Backs up primary research
- Cons
  - No specific user feedback
  - May not applicable to target situations

### **Interviews**

- Pros
  - Understand what users think and why
  - Ask follow up questions
- Cons
  - Take time and money
  - Small sample size □ bias

## Surveys

- Pros
  - Larger sample size
  - Fast
  - Inexpensive
- Cons
  - No in-depth feedback

### **Usability Studies**

### Pros

- Firsthand user interaction specific to your design
- Challenge our assumptions
- In-depth feedback

### Cons

- One measure one thing: how easy your prototype/product is to use
- Expensive
- Difference between usage in lab and real life

### Exercise: End Users & Personas

- Select a topic that interests you
- 2. Download and try out relevant apps
- 3. Describe your hypotheses about the end users using FigJam
  - It's free for students
  - Follow the "User research activities" template

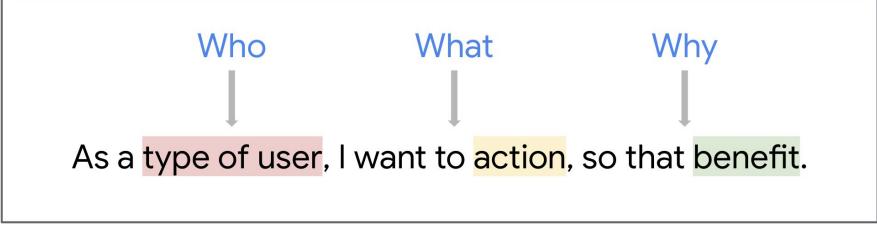


# Come out 3 Personas

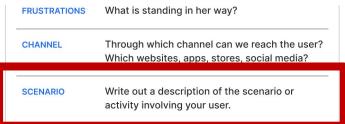
- Architype
- Background

#### Persona





- Chamber
- Scenario

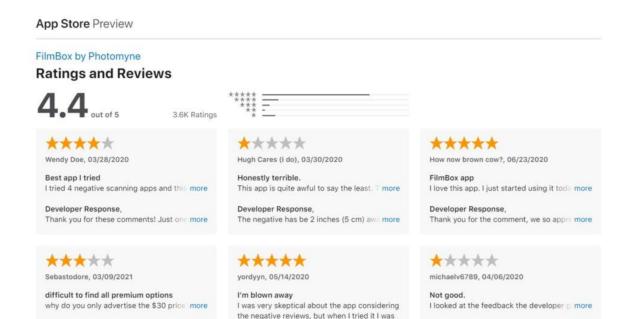


### Personas

 Fictional users whose goals and characteristics represent the needs of a user segment

## User Segment/Group

- A set of users who have similar interests, goals, or concerns
- How to verify your 3 hypothesis?
  - You, positive reviewers, and negative reviewers



### What Topics?

- Study apps
  - Flashcards
  - Focus or Pomodoro techniques
- Habit-forming apps
  - Daily planner, to-do lists
  - Exercise / fitness
  - Tracking / motivation
- Meditation / calming apps
- Or any topic interesting to you and classmates

## **Assigned Reading**

- How to improve a milkshake?
  - Larger size? More flavors?
- Personas?
  - Commuter in the morning
  - Parents in the evening

# Competing Against

Luck

THE STORY of INNOVATION and CUSTOMER CHOICE

#### CLAYTON M. CHRISTENSEN

Taddy Hall, Karen Dillon, and David S. Duncan





