

Product Managers Crash

Course for Developers

△ Product management is the process of overseeing the ideation, creation, launch and continuous improvement of a product

△ product discovery process

- what problem we solve, and for whom?
- what solutions solves the problem?
- how do we measure success?

△ product managers, designers and engineering leaders drive the discovery process, and if possible, they should also include other product team members in the discovery tasks.

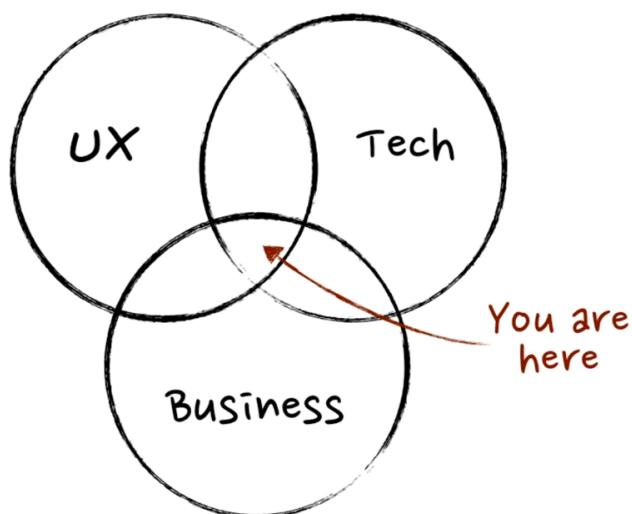
△ product discovery & development process

- defining product vision
- defining product strategy
- defining product roadmap
- product launch & improvement

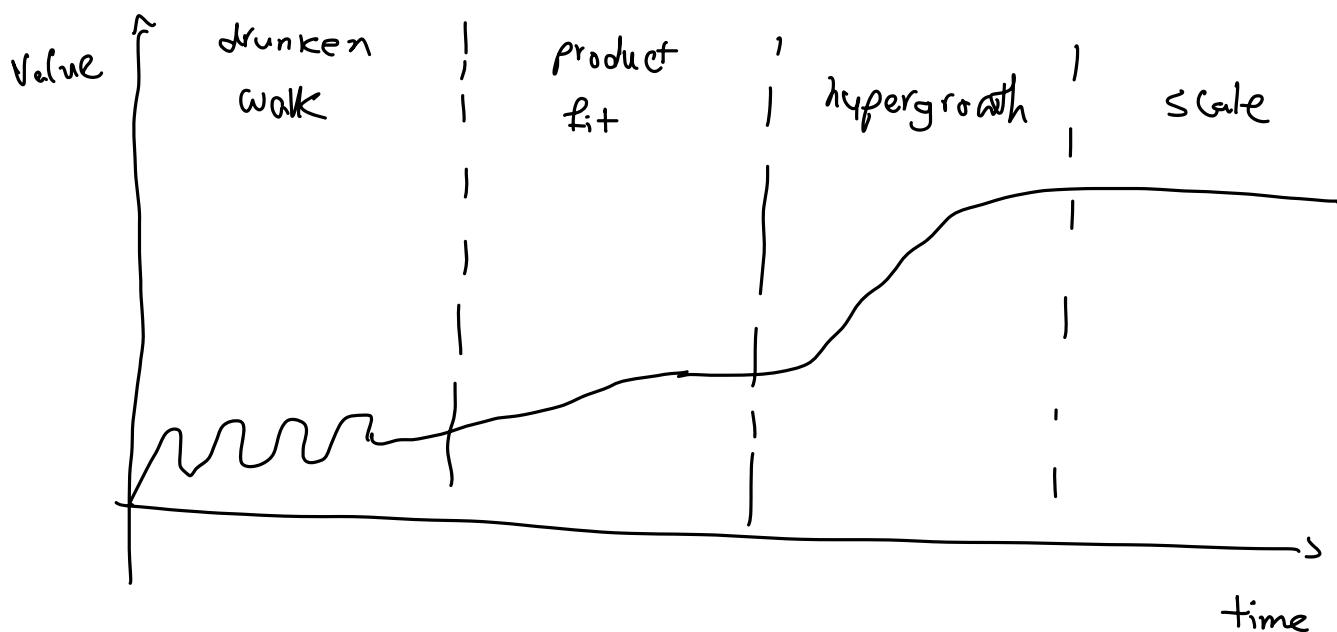
⚠ who is a PM?

- who gets things done
- work closely with designers & engineers
- collaborate with other stakeholders
- drivers of change

⚠ Product Management Venn diagram



⚠ product stages



⚠ you have a product market fit when you can repeatedly and profitably acquire passionate & loyal customers that are your product advocates & can not live without it.

↳ lack of PMF is the number one failure reason

⚠ Good product vision creates story about what you are building, who your customer is & why it matters

↳ it's the final destination you plan to reach with the product

⚠ Product strategy is a set of activities we plan to take to achieve product vision

- understanding of focus markets
- knowledge of customer needs & problems
- details of a product we are building
- trade-offs

⚠ A roadmap is a strategic artifact, while a release is all about execution

⚠ A product roadmap visually shows a product strategy over time as projects we plan to take to accomplish a vision

⚠ Sources of items in product roadmaps

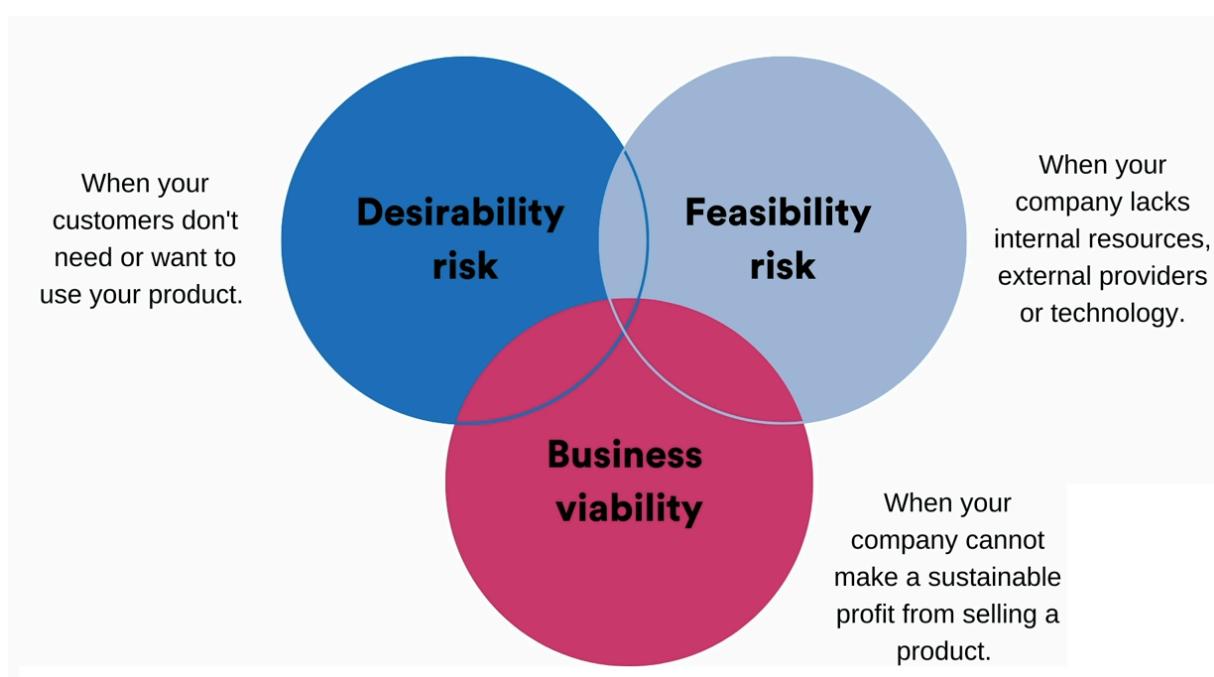
- customer interviews
- surveys
- stakeholder discussions
- data analysis
- customer journey maps

⚠ Business stakeholders tend to prioritize work that has an obvious impact on customer needs, experience or revenue generation

⚠ product goals are quarterly and day-to-day outcomes of the product roadmap that measure progress against the product strategy

- where do you want to go?
- how will you know that you're getting there?

⚠ type of risks



⚠ Impact mapping is a powerful collaborative planning technique that improves alignment between The leadership and The developers

- It helps to strategize and plan product discovery and development work from finding why you are developing a product and what goals you want to achieve
- It prevents team from getting solution-centric or losing focus while building products or delivering product features

⚠ Impact mapping steps

- define "why"
 - ↳ what's the goal we're trying to achieve?
- define actors
 - ↳ everyone who can influence the goal you want to achieve
- define impact
- define "What" (deliverables)
- define user stories
- define experiments

⚠ SMART goals

- ↳ ① smart ② measurable ③ achievable
- ④ relevant ⑤ time-bound

⚠ Ideas backlog

↳ ensure discovery opportunities are scoped, prioritized and planned into the product roadmap

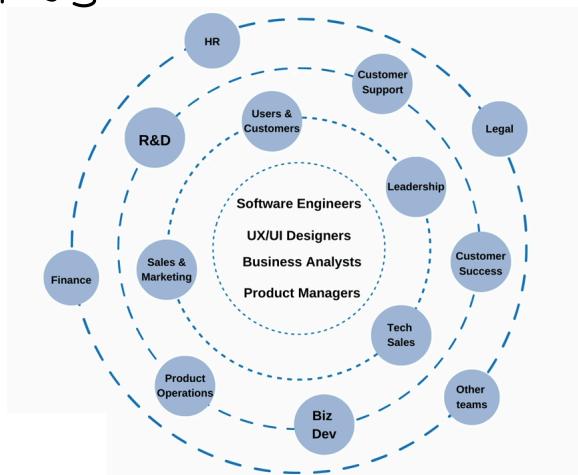
Sources

- ↳ product stakeholders
- ↳ product analytics
- ↳ input from market research & analysis

⚠ Customer's sources for ideation

- ↳ customer interviews or surveys
- ↳ product reviews or testimonials
- ↳ customer support calls

⚠ Product stakeholders



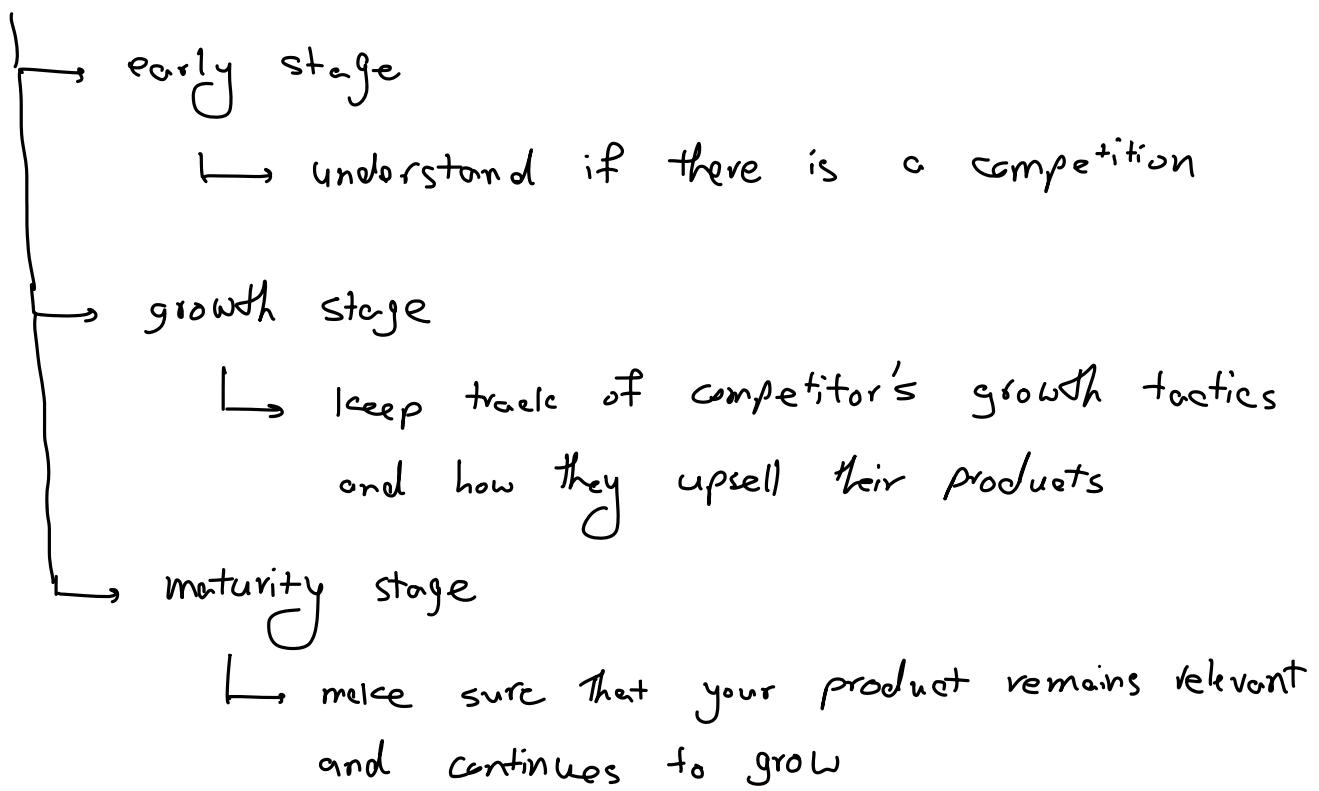
⚠ Market sizing parameters

- total addressable market (TAM)
 - ↳ describes total expected annual revenues within an entire market you're observing
- serviceable market (SAM)
 - ↳ the portion of TAM that a company seeks to market within its specific product or service
- serviceable obtainable market (SOM)
 - ↳ the market size that a company is realistically targeting to capture in a short period of time

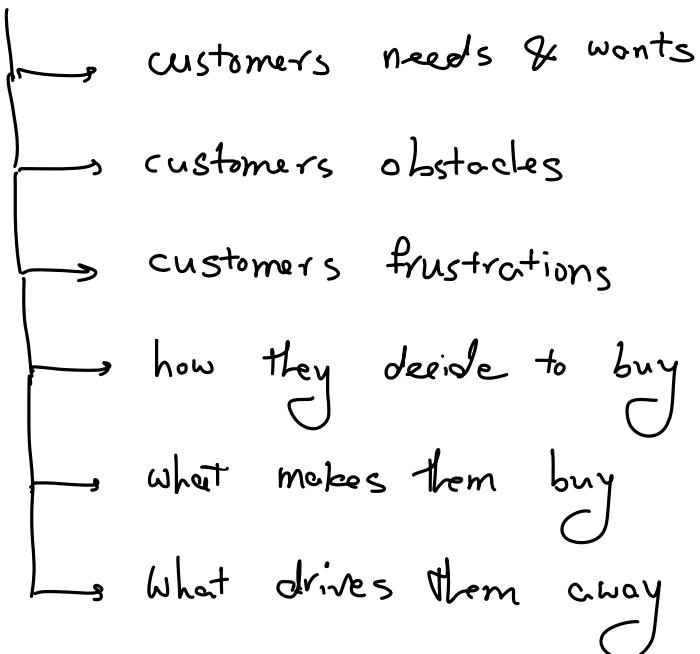
⚠ Type of competitors

- direct
- secondary or indirect
- replacement

⚠ Goals of competitor analysis



⚠ User research goals



⚠ User research identifies the users' goals, needs, motivations, and other insights about users using such human-centric methods as design thinking

⚠ User research process steps

- defining goals, objectives & hypothesis
- selecting a research method
- identifying target audience
- recruiting participants
- collecting insights
- analyzing and synthesizing research data
- documenting findings

⚠ User research goals

- HOW & WHY the problem occurs
- WHO the target users are
- HOW they are affected by the problem

⚠ hypothesis is an assumption in a testable form

- I believe [type of people] experience [type of problem]
when doing [type of task]
- I believe [type of people] experience [type of problem]
because of [limit or constraint]

⚠ User research methods

- in-depth interviews
- contextual interviews
- diary studies
- participatory design
- user journey mapping
- usability study
- card sorting
- event tracking
- A/B testing
- customer surveys

⚠ in-depth user interview

- an interviewer meets with interviewees to discuss what the participant thinks about a specific topic in question

⚠ Contextual interview

- you watch & listen as the user works and you ask questions as the user navigates through your product

⚠ diary studies

↳ participants are asked to keep a diary & log specific information about activities being studied

⚠ User journey mapping

↳ a visualization of a process that a person goes through to achieve a goal

⚠ Usability study

↳ sessions where participants actually use the product or a prototype to achieve a goal

⚠ Card sorting

↳ a technique that involves asking users to organize information into logical groups

⚠ event tracking

↳ a common way to analyze users' behaviors & sourcing product opportunities

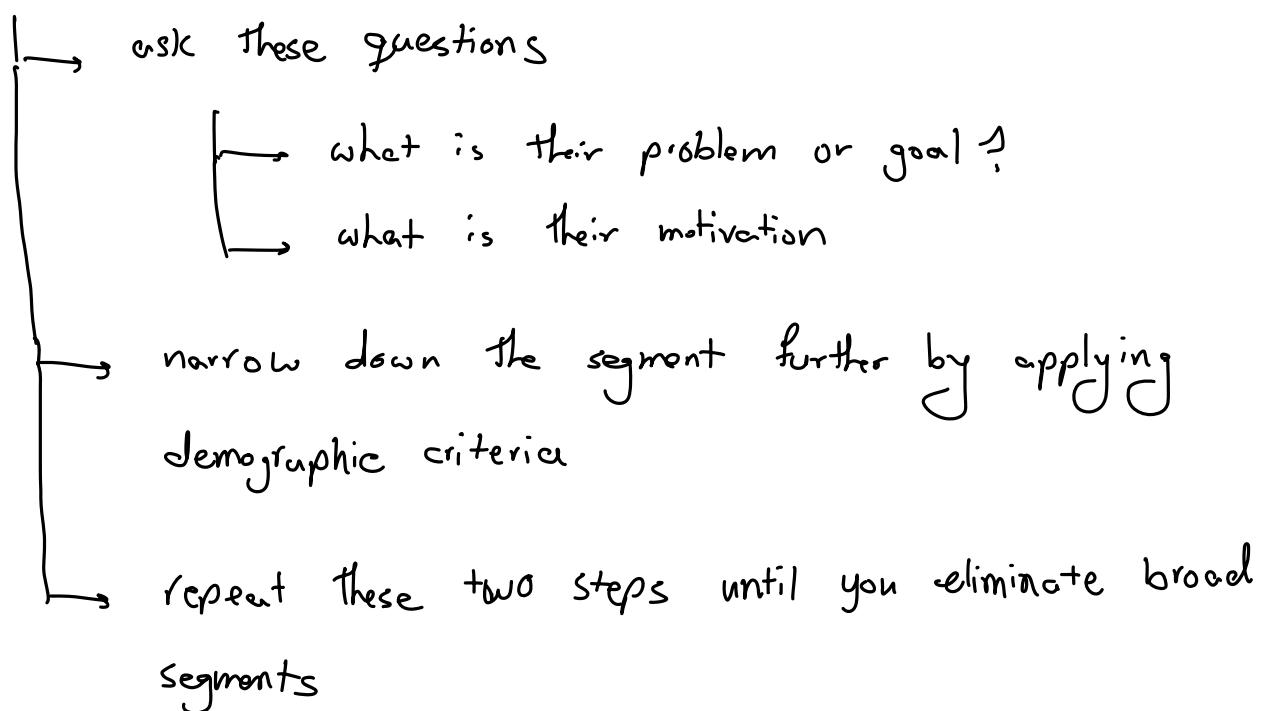
⚠ A/B testing

↳ randomly assigning groups of users to interact with each design & measuring the effect of these assignments on user behavior

⚠ How to choose a research method

	Reasons	Questions	Method
Qualitative research	<ul style="list-style-type: none">• When looking for personal interpretations.• When investigating if a problem exists.	WHY HOW	<ul style="list-style-type: none">• in-depth interviews• contextual interviews• diary studies• participatory design• usability study• card sorting
Quantitative research	<ul style="list-style-type: none">• When finding the priority or scale of a problem.• When comparing alternative design options.	HOW MANY HOW MUCH	<ul style="list-style-type: none">• customer surveys• A/B testing• events tracking

⚠ steps to find a user segment



⚠ Defining a target user makes us focus on addressing the needs of that specific target segment of users

⚠ A user persona is a fictional person made up based on information about real people who might use your product

⚠ A persona is a singular user derived from the bigger user group who has specific details and important features of that group

⚠ How to recruit participants for your research

- define whom you want to invite and where you can find these people
- create an interview screener that helps you select the right audience
- send out invitations to participate

⚠ why do we have to interview non-users ?

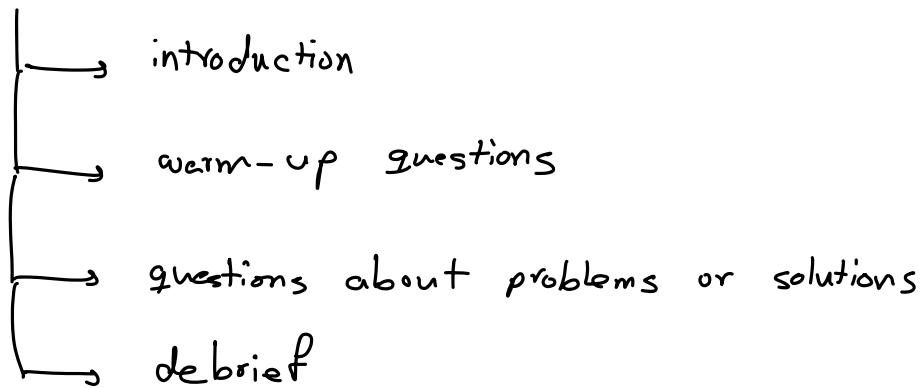
- developing a new product from scratch
- get feedback from newbies
- test potential new user groups
- understand your competitors' users

⚠ to come up with screening questions, think about common characteristics of your target audience like their needs, goals, tasks, motivations and demographics

⚠ How many interviews do you need

- 2~5 : you should review your interview questions and notes and adjust the interview
- ~10 : you should start to see patterns in the answers you are receiving
- < 10 : if you want to try to narrow target segment further

⚠ A discussion guide or interview script is a set of questions and topics you would like to discuss with an interview participant



⚠ A problem statement helps us frame the problem in a way that's actionable for ideating & designing solution alternatives

- * templates
- [type of people] experience [type of problem] because of [limit / constraint]
 - [type of people] needs a way to [user's need] because / but / surprisingly [interview insight]

⚠ Questions to discover problem / product idea

- How do you currently go about this [task/process]?
- Could you describe step by step how you do [task/process]?
- Tell me about the last time you tried to [task/process]
- What do you like about [task/process]? Why?
- What's the hardest thing about [task/process]?
- Why was that hard?
- Has anything about the way you do this [task/process] changed over time? How? Why?
- Do you anticipate [task/process] changing? Why?
- How does this [task/process] impact other areas of your work (life)?
- What step is the most time-consuming? Why is that?
- What could be better about how you currently do this [task/process]?
- If you could remove one step from the process, which step would it be?
- Why do you keep doing [task/process]? Why is it important to you?
- How often do you do [task/process]?
- Tell me about the last time you encountered this problem.
- How often do you experience [problem]?
- What happens before/after you experience [problem]?
- What kind of emotions do you experience when facing [problem] (applicable for user interview)
- Rate the intensity of the emotions on a scale from 1 to 10, with ten being the most intense. (this will help us to prioritize a problem based on its frequency & intensity)

⚠ interview tips & tricks

- try to connect with your interviewees so that they feel relaxed & open to conversation
- begin the interview with more straightforward questions & then get into the specifics
- ask questions neutrally
- shut up & listen!
- don't ask binary or leading questions
- be present in conversation
- look for inconsistencies
- be mindful of time
- do an interview in pairs with your colleagues

⚠️ Validating a hypothesis means you're confident enough to continue investing time and effort in solving a particular problem or research question

⚠️ list of criteria to check when validating a hypothesis

- a customer confirms that there is a pain point or a problem
- a customer is actively looking for a solution to that problem
- a customer invested something to solve the problem
- nothing prevents the customer from finding a solution to the problem

⚠️ research report helps to communicate research findings and your recommendations on the next steps after the research to your stakeholders

- context or why you've decided to start the research
- hypothesis tested
- scenarios tested
- results
- next steps

A brainstorm tips & tricks

- invite stakeholders from different teams
- ask participants from list of products for inspiration
- ask colleagues to do a debrief demo of products they like

A PMs should make trade-offs and select the most promising ideas to focus on - desirable for users, technologically feasible and business viable

A bad practices of doing prioritization

- based on the opinion of senior stakeholders
- based on the next customer deal
- based on competitors' moves

A prioritizing with science means using your research data & product analytics & considering multiple prioritization criteria

A RICE framework

- reach: how many customers a project affects with a given time
- impact: estimate an impact of a project on an individual user
- confidence: how sure are you that feature X will be a high impact feature for users

↳ effort : how much time a project will take from your team, including all team members

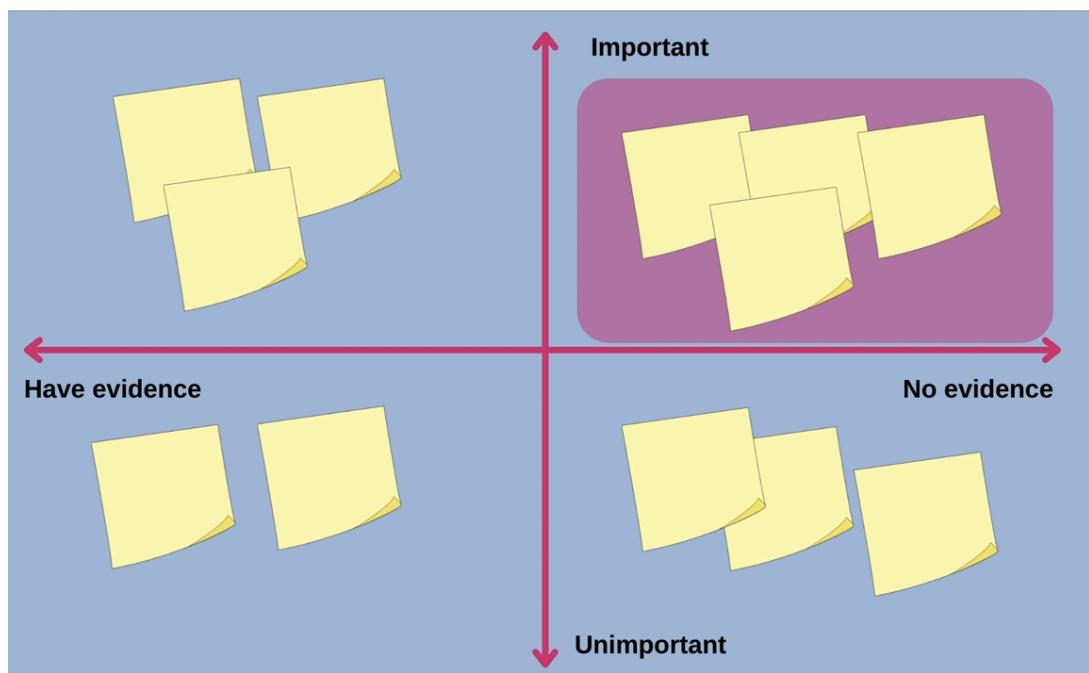
$$\text{RICE score} = \frac{\text{Reach} \times \text{Impact} \times \text{Confidence}}{\text{effort}}$$

⚠ Assumptions at every stage of product

- drunken walk : product desirability
- PMF : you can get customers to pay for your product
- growth : we can deliver the solution in a profitable way

⚠ Leap of faith assumptions carry the most risks and, as a result, need to be tested or validated

⚠ riskiest assumptions



⚠ Running prototype experiments help to validate or invalidate riskiest assumptions & reduce the risks related to development & launch

⚠ MVE requires the simplest design for testing a hypothesis, the easiest implementation, and the least amount of data to validate the hypothesis

⚠ Usability testing goals

- find problems with your product design
- determine how you can improve your design
- continue learning about behaviors of your users

⚠ test types

- qualitative : focused on collecting findings & insights into how users deal with your product
- quantitative : help collect metrics or benchmarks regarding user experience

⚠ How to prepare & run usability test

- explain that this is not a real product yet, but just a prototype
- ask what this prototype is about and what problem it solves
- state the task name without instructions on how to do it

- tip: the best results come from testing with no more than 5 users
- tip: consider inviting about 3 to 4 users from each category

⚠️ desirability test questions

- what is the main benefit that you get from [product]?
- what do you like about [product]?
- what do you dislike about [product]?
- how would you feel if you could no longer use [product]?
- can you explain why you chose that response?
- what's the hardest part about using [product]?
- how can we improve [product] to better meet your needs?

⚠️ A product release is a product that's technically complete, tested, and ready to hit the market

⚠️ A product launch is a much bigger event when your org. is ready to tell the world about major product updates

- ↳ soft or gradual
- ↳ hard or full-scale

A pre-launch tasks

- ensure product readiness
- ensure product documentation is ready
- ensure product has built-in analytics
- how will you assess the launch success?
- go-to-market strategy readiness
- you have plan how to enable stakeholders for launch

A post-launch task

- closely monitor product metrics & user feedback