

Product Design

Agenda

1. **CIRCLES**
2. **Example Question**
3. **Breakout Rooms**



1. Framework

Step-by-Step Guideline





Your delivery is as important as what you say. Good product management candidates give answers that are **impactful, influential, engaging, and precise.** Ineffective candidates ramble at the same cadence as dull corporate jargon. It's important to be crisp in your responses and avoid boring answers.

- Lewis C. Lin, Author of *Decode and Conquer*

What is the CIRCLES method?



- C**omprehend the situation
- I**dentify the customer
- R**eport the customer's needs
- C**ut by prioritizing
- L**ist solutions
- E**valuate Trade-offs
- S**ummarize your recommendation

Comprehend the Situation



1. Context

- a. What is it? Who is it for? Why do they need it?
How does it work? (3 W's and H)

2. Goals and metrics

- a. Discuss possible goals and focus on one
 - i. Revenue, user acquisition, user retention, market share, customer satisfaction, conversion rate, basket size

3. Constraints and assumptions

- a. Deadlines, resources (budget), scalability, platform, geography

Example Question

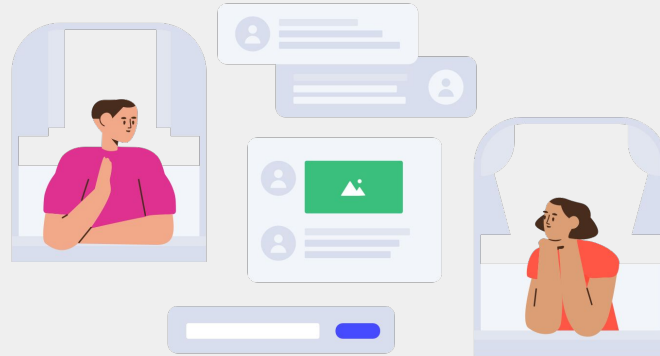
- *Interviewer:* Design an ATM.
- *Candidate:* First, I'd like to ask some clarifying questions! Who am I designing this for (college students, the elderly)? Where is this ATM going to be (nationwide, outdoors or indoors)?
- *Interviewer:* This ATM is mainly for the elderly, and it will be located in various outdoor locations across the country.
- *Candidate:* Am I designing the physical machine or just the software & UI of it?
- *Interviewer:* Only the software and the UI.

Example Question

- *Candidate:* First, I'd like to make sure I understand the goals and constraints; then, I'd explore the user and use cases; last, I'd like to prioritize the use cases and focus on brainstorming solutions for the most urgent use case.
- *Interviewer:* Sounds good!
- *Candidate:* I have increasing user retention and user satisfaction in mind, but is there another goal you'd prefer to discuss?
- *Interviewer:* Let's focus on increasing user satisfaction.

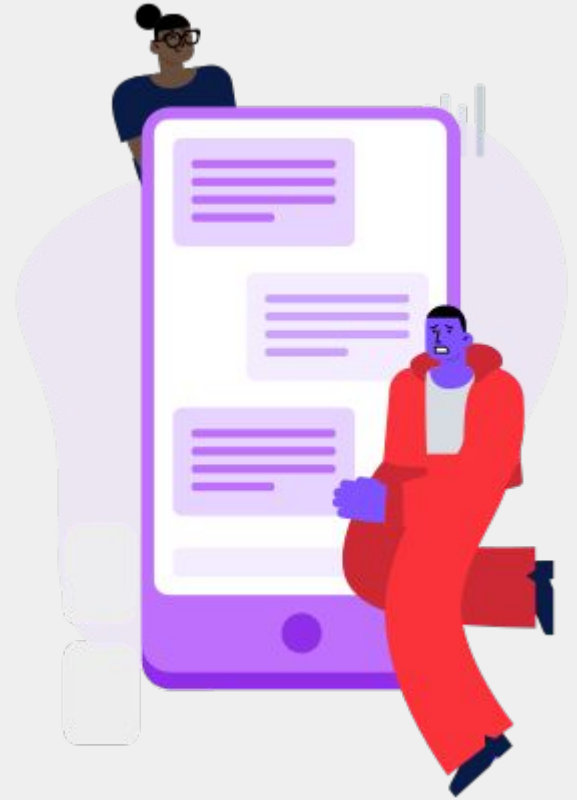
Example Question

- **Candidate:** Are there any constraints in terms of budget, resources or deadlines?
- **Interviewer:** You have an upcoming deadline in 6 months and keep the spending minimal.
- **Candidate:** Got it! There are a few different personas I have in mind...



Identify the Customer

- List potential customer personas (ex. college students, people who have a disability, avid readers)
- Users and customers don't have to be the same person
 - Customer: person paying for the product
 - User: person using it
- Only have limited time - **focus on one**



Report the Customer's Needs

- For each user, capture their needs or use cases
 - *As a <role>, I want <goal/desire> so that <benefit>*
- Draw out a matrix (ex. Design a calculator for kids)

| User | Use Cases |
|---------|--|
| Child | <ul style="list-style-type: none">• Use calculator primarily for homework |
| Teacher | <ul style="list-style-type: none">• Use calculator in classroom and understand how it works• Be able to troubleshoot any problems |
| Parent | <ul style="list-style-type: none">• Use calculator to help their child with homework• Paying for the calculator as well |

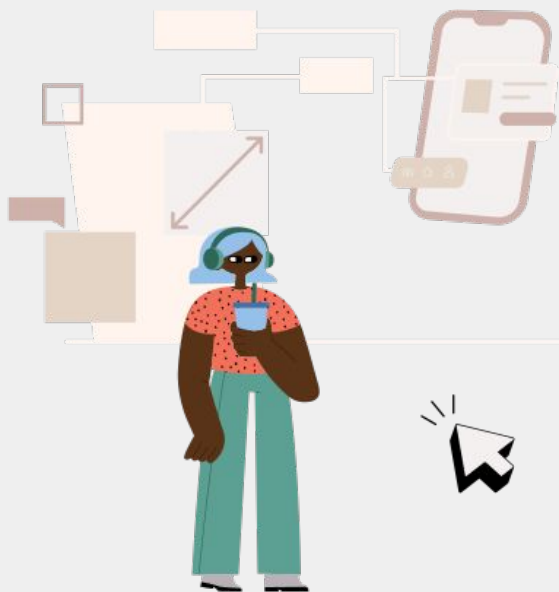
Example Question

- **Candidate:** Let me go to the whiteboard and draw this out!

| User | Use Case |
|---------------------------------------|--|
| Elderly folks | <ul style="list-style-type: none">- Insert ATM card- Enter PIN- Deposit or withdraw cash |
| Family of elderly folks or caretakers | <ul style="list-style-type: none">- Help their elderly family with all the tasks above |

- **Candidate:** Which persona would you like to focus on?
- **Interviewer:** Let's just focus on elderly folks.

Cut, through Prioritization



- Don't design features for all use cases
 - Need to prioritize, assess trade-offs, and show that you can make decisions
- Limited by time, money, and labor
 - **R**each: how many people will be impacted?
 - **I**mpact: what's the benefit of that use case from low to high?
 - **C**onfidence: what's the probability of success?
 - **E**ffort: how much time will it take?

Example Question

- *Candidate:* Based on my understanding of ATMs, here are the main use cases that come to mind, specifically for elderly folks.
 1. Withdraw or deposit cash
 2. Check how much money is in their account
 3. Get human assistance
- *Candidate:* Out of all the different use cases, I feel like the first one is the most important - it ties back to our goal of increasing user satisfaction and it impacts the majority of our users.
- *Interviewer:* Sounds good!
- *Candidate:* Great! Let's start brainstorming solutions...

List Solutions

- Write out a few ideas
 - **Explicitly tie your feature ideas or solutions back to the use cases or goals**
 - **Customer-focused** ideas, not just solutions you want
- Think big
 - Try not to do copycat features
- Have a vision
 - This is the time to show your creativity!



Example Question

- *Candidate:* Here are a couple of ideas that come to mind:
 - a. Voice Assistance (similar to Siri or Google Assistant)
 - i. Walks user through process
 - b. Modify UI -> larger text, colored/bolded outlines to indicate where to click next
- *Interviewer:* What's your recommendation?
- *Candidate:* Of these ideas, I prefer the second one due to our 6 month deadline and limited budget, and it still ties back to our goal of increasing user satisfaction. The voice assistant could be a stretch feature if we still have time and resources.

Example Question

- **Candidate:** In order to implement this solution, I would start by looking at the current UI and analyzing where it falls short. We could possibly attach a survey at the end of an ATM transaction asking for age and what they didn't like about their experience. Then, based on those responses and more user research, we can redesign the UI. We can focus on indicating where to click next, increasing text size, and emphasizing which button is pressed.

What would you like to do?

Withdraw cash

Deposit cash

Which account would you like to withdraw from?

Checking

Savings



Evaluate Trade-Offs

- Discuss pros and cons based on criteria
 - Customer satisfaction
 - Implementation difficulty
 - Revenue potential
- Don't be afraid to critique yourself!
- Don't forget about accessibility!



Example Question

- **Candidate:** There are some tradeoffs, however.
- **Interviewer:** Can you explain more?
- **Candidate:** It will take effort from both engineering and design to redesign the UI. We would also have to decide if this would be an add-on for the current software or a new one that would have to be installed on multiple ATMs. Also, going back to the goal, we need to check if our new UI features are successful.
- **Interviewer:** How would you mitigate these risks?
- **Candidate:** I would plan out a roadmap of features with my engineering and design team, and follow an agile framework to keep track of progress. Before we launch our features, I would test it out within our own company and team and run through key user scenarios. Then, we would do a small-scale launch and run A/B testing to see how these new features stack up!

Summarize your Recommendation



- If you still have time, present a 20-30 second summary of your product or feature proposal
 - Tell your interviewer what feature/product you'd recommend
 - Recap what it is and why it's beneficial to the user
 - Explain why you chose this solution over others
 - Discuss any next steps you'd take to explore this solution further

Week 4 HW: Write-up to mock product design question on Youtube(posted on Elms)

Class Next Week: Pre-recorded lecture
(please watch on your own time)

Week 5 HW will have participation points attached (commenting on a peer's submission!)

In-Class Activity: Product Design Practice

