



# PRODUCT MANAGEMENT CASEBOOK

2024-25

**PRODUCT CLUB**  
IIT KANPUR

# PREFACE

Hello Product Enthusiasts,

We are excited to introduce the first edition of the IITK Product Management Casebook. As a vibrant community of students, the Product Club, IIT Kanpur is dedicated to exploring the field of product management, collaborating with peers, and engaging with industry professionals. Our mission is to create a platform that educates, inspires, and empowers students to become significant contributors to the product management ecosystem.

This casebook is designed to be a valuable resource as you embark on your product management career journey. It includes 21 real-world cases and 4 guesstimates, all derived from actual product management interviews. Each section features a detailed framework, followed by a sample case and a series of interview cases to help you develop a structured and thoughtful problem-solving approach.

To get the most out of this casebook - we recommend thoroughly studying the frameworks and sample cases to understand the case-solving process. Following this, practice mock cases between two individuals or groups using the interview transcripts as a guide. After solving the case, engage in active discussions to exchange feedback and highlight areas for improvement. Keep in mind that the transcripts provided serve as a template for understanding the approach and should not be considered as the definitive solution.

Best of luck in your preparation journey!

Regards,  
Team Product Club  
Indian Institute of Technology Kanpur

# ACKNOWLEDGEMENT

It gives us great pleasure to present you this casebook, created by the team of Product Club, IIT Kanpur to guide you through the interview processes of various product roles and help you secure your desired career path.

Creating this casebook has been a collaborative endeavour spanning three batches of the Product Club. Our dedicated team has worked tirelessly to gather and compile a wealth of experiences and insights, ensuring that this resource is both comprehensive and valuable for the reader. We are deeply grateful to everyone involved for their commitment and support throughout this journey. Your insights and experiences have enriched the content significantly.

We extend our heartfelt gratitude to our alumni who contributed their time and generously shared their personal interview experiences. Your collaboration and assistance in structuring the cases has been invaluable.

Finally, we would like to thank, our readers, in anticipation of becoming a part of this effort. Your support and encouragement inspire us to strive for continuous improvement. We hope this casebook serves as a valuable tool in your preparation.

Thank you for being a part of this journey with us.

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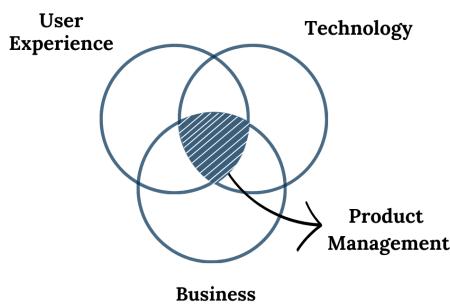
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# INTRODUCTION TO PRODUCT MANAGEMENT

## 1.1 What is Product Management

Product management is a unique role that sits right at the intersection of engineering, business strategy, and design. It involves everything from planning and designing to delivering products that solve real problems for users, while also helping the business grow. A product manager (PM) connects all these dots, ensuring that the product works well and serves the business's and its customers' needs.



## 1.2 Key Responsibilities of a Product Manager

### 1. Vision and Strategy:

- A product manager's first job is to define a clear vision—a long-term goal that describes what the product is supposed to achieve. This vision sets the direction for the entire team.
- The next step is to create a strategy that outlines how to get there. This includes building a roadmap that prioritizes features, allocates resources, and sets timelines. The roadmap is essentially the action plan for turning the product vision into reality.

### 2. User-Centered Focus:

- Product managers have to know their customers inside and out. This means understanding their pain points, needs, and behaviours. The

more they know about their users, the better they can design a product that solves real problems.

- It's about constantly gathering user feedback and using that to refine and improve the product over time.

### **3. Cross-Functional Leadership:**

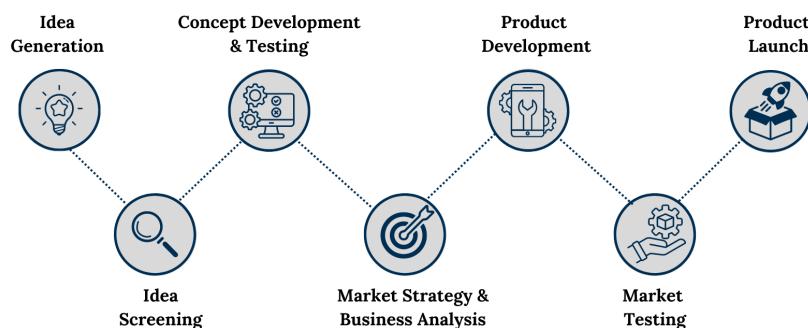
- Product managers lead without authority. They don't directly manage the engineers or designers, but they still need to make sure everyone is aligned and working toward the same goals. This requires a lot of collaboration with teams like engineering, design, marketing, and sales to make sure everything moves smoothly.
- PMs act as the glue that holds everything together, balancing the different needs and priorities of each team.

### **4. Data-Driven Decision Making:**

- PMs are deeply data-driven. They track product performance, define key metrics (KPIs), and use these numbers to guide decisions. Whether it's figuring out which features to prioritize or how to improve the user experience, data plays a big role.
- It's all about using data to back up decisions, ensuring that the product continues to deliver value to users while driving business results.

### **5. Go-to-Market and Collaboration:**

- Once the product is ready, PMs work closely with product marketing teams to develop a go-to-market plan. This includes everything from positioning and branding to how the product will be launched.



**Stages of Product Development**

## 1.3 Learning Resources

- **Product Club Resources:**
  - [ProdCamp 1.0 playlist](#)
  - [Product Placement Bootcamp playlist](#)
  - [Product Club Medium Page](#)
- **Books:**
  - Decode and Conquer, by Lewis C. Lin
  - Cracking the PM Interview, by Jackie Bavaro
  - Swipe to Unlock, by Neel Mehta
  - The Design of Everyday Things, by Don Norman Hooked
- **YouTube Channels:**
  - [Exponent](#)
  - [PM School](#)
  - [PM Exercises](#)
- **Podcasts:**
  - [TechCrunch Daily Disrupts](#)
  - [The Product Podcast](#)
  - [Masters of Scale](#)
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- **Tech Websites**
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  - [Techcrunch](#)
- **Product Websites**
  - [The Intercom Blog](#)
  - [Product-Love](#)
  - [Nir And Far](#)
  - [Art of Product Management](#)

# PRODUCT DESIGN & IMPROVEMENT

## 2.1 How to Approach a Product Design & Improvement Case

In product management interviews, you'll often be asked to design or improve a product. These questions assess your creativity, user empathy, ability to balance solutions with business goals, and skills in prioritizing features.

### Example Questions:

- Design a mental wellness app (*Product Design*)
- Design a product to find lost earbuds (*Product Design*)
- How would you improve WhatsApp? (*Product Improvement*)
- How would you enhance Amazon Prime delivery services? (*Product Improvement*)

In these types of questions, it's beneficial to follow the CIRCLES framework.



The CIRCLES framework helps you organize your thoughts when answering product design or improvement questions. Knowing its structure ensures that you can confidently cover all important aspects, no matter what the product is.

## 2.2 Sample Case - Product Design

### *Problem Statement: Design a smart refrigerator*

In this sample case, we will learn how to apply the CIRCLES framework to design a user-friendly and efficient smart refrigerator.

1. **Comprehend the Situation:** Before jumping into the design, it's important to ask some clarifying questions. Make sure to fully understand what the interviewer is asking for. In this case, the following clarifying questions could be asked to the interviewer:

- What exactly do you mean by 'smart'?
- Are we focusing on designing an entirely new refrigerator or enhancing it with smart features?
- Who is the target audience for this design?

*Interviewer: "A smart refrigerator refers to adding advanced features that go beyond basic cooling functions. In this case, we're focusing on enhancing an existing refrigerator with smart features rather than designing a completely new one. The target audience for this design will be urban household users."*

2. **Identify the Customer:** Next, you need to identify the different types of users who would benefit from a smart refrigerator. Here, customer base can be segmented based on demographics and lifestyle:

- **Homemakers:** They are the primary users of refrigerators. They frequently handle daily tasks such as food storage and meal preparation along with other domestic duties.
- **Working professionals:** They have limited time to balance work and household responsibilities, so they rely on efficiency and convenience in their daily routines.
- **Differently-abled individuals:** For example, a blind person uses a refrigerator differently, needing specific design features to help them.

Once the user segmentation is complete, ensure you prioritize any group based on the impact or direction the interviewer may lead. In this case, working professionals could be prioritized, as their busy schedules make it more difficult to manage household tasks like meal planning, and keeping track of groceries. Homemakers have more flexibility, while differently-abled individuals often have others to assist them.

**3. Report the Customer's Needs:** Next, you focus on the needs of the prioritized user segment, which in this case, are working professionals. Their pain points could be:

- **Managing food inventory:** They struggle to track what's in the refrigerator, leading to expired food and unnecessary grocery purchases, which results in a waste of time and money.
- **Difficulty in accessing required items:** Refrigerators often hold a variety of products, making it challenging to quickly find what you need as they can get pushed behind other items.
- **Limited flexibility in storage and settings:** They struggle to adjust storage layouts or temperature settings for different food kinds, leading to inefficient space usage and poor preservation.
- **Remote monitoring:** They often are unable to remotely check their refrigerator contents while grocery shopping, causing missed items or unnecessary purchases.

**4. Prioritize Customer Problems:** Next, you have to prioritize the pain points based on customer satisfaction, reach, impact, or ease of implementation. For example, in this case, prioritization can be done based on the impact on user experience and satisfaction.

- High-priority problems:
  - Managing food inventory
  - Remote monitoring

These pain points are essential to solve in order to prevent food wastage, improve meal planning efficiency, and provide convenience and flexibility for busy users.

- Low-priority problems:
  - Limited flexibility in storage and settings
  - Difficulty in accessing required items

Although important, they may be less of an immediate concern for a busy professional.

**5. List Potential Solutions:** Next, you have to outline the main features that will solve the prioritized customer's problems:

- **Automatic inventory scanner:** Detects refrigerator items and expiration dates, helping to prevent food waste and improve meal planning efficiently.

- **Mobile app integration:** Allows remote monitoring of items, expiration alerts, and grocery management.
  - **Smart-home integration:** The refrigerator could connect with other smart devices to give reminders, such as, "You're low on milk—should I order more?" or "The spinach is going to expire soon—maybe cook it over the weekend?"
6. **Evaluate Trade-offs:** Here, you again need to use the RICE framework (Reach, Impact, Confidence, Effort) to evaluate and prioritize solutions. If short on time, an impact-vs-effort matrix can be used to select the solution with the highest impact-to-effort ratio.

Solution	Impact	Effort	Need
Automatic Inventory Scanner	High	High	Strong
Mobile App Integration	High	Medium	Strong
Smart Home Integration	Medium	High	Moderate

Hence, to achieve our business goals, we will prioritize the automatic inventory scanner and mobile app integration features, as they offer significant impact and address key user needs. The smart-home integration could be considered for future enhancements.

7. **Summarize:** Finally provide a concise summary covering the problem understanding, target user segment, prioritized pain point, chosen solutions, and the evaluation of trade-offs.

"We designed a smart refrigerator for urban households, prioritizing working professionals. Key pain points were inventory management and remote monitoring. The automatic inventory scanner and mobile app integration were chosen as high-impact solutions, while smart home integration was set for future enhancements."

## 2.3 Sample Case - Product Improvement

**Problem Statement:** How would you improve WhatsApp?

1. **Understand the Product:** To begin, you must have a clear understanding of the product or feature you are trying to improve. You can start by stating your understanding of the product and ask the interviewer if there's anything to add. For example, in this case:

"WhatsApp is a messaging app that allows users to send text messages, make voice and video calls, share images and documents, and create group chats."

Note that if you're not familiar with the product, it's okay to ask the interviewer to explain what it is.

2. **Ask Relevant Questions:** In this context, the term "improvement" can mean many things, so it's essential to clarify the focus of improvement. In this case, you can ask the following clarification questions:

- What kind of improvement are we focusing on? User acquisition, engagement, monetization, or a specific feature enhancement?
- Should we focus on a particular platform like mobile (iOS/Android) or desktop?
- Is there a specific user demographic or region we need to concentrate on?

*Interviewer: "In this case, let's assume the goal is to improve user engagement and retention across all platforms. The focus should be on the user segment that would need more improvements to enhance their overall experience and engagement with the product."*

3. **Identify the Users:** Next, you have to segment the customers and create the user personas. Make sure to prioritize one persona and explain why you chose it. Alternatively, you can ask the interviewer if they would like to focus on a specific persona. In this case:

- **School children:** They use WhatsApp for communication with friends and family, requiring monitored and secure access to ensure safe interactions.
- **Young adults and professionals:** They use WhatsApp for social interactions and work-related messaging, seeking efficient features that support personal and professional communication.

- **Elderly users:** They use WhatsApp to stay connected with family and friends but require simplified navigation and accessible features due to limited experience with technology.

In this case, you can prioritize elderly users as they're trying to become more digitally active but often struggle with technology. Making WhatsApp easier could improve their experience and help them stay more engaged.

4. **Report Customer Needs:** For elderly users, the pain points often relate to usability and accessibility. Here are the common challenges they face:

- **Complex interface:** The app might be confusing or unintuitive, with too many features packed into a single screen.
- **Small text and buttons:** Limited agility and vision make it difficult to use WhatsApp's standard font sizes and button layouts.
- **Understanding emojis/slang:** Many elderly users often struggle to interpret modern emojis and slang, like in family groups, leading to miscommunication.
- **Privacy concerns:** Worries about who can see their profile, status, or messages and how to control those settings.

5. **Cut Through Prioritization:** We should prioritize these pain points based on their impact on elderly users' experience and how likely each solution is to improve engagement.

- High-Priority Problems:
  - Complex Interface
  - Small Text and Buttons

Addressing these issues would directly improve usability by eliminating basic challenges that limit elderly users from engaging with the app.

- Low-Priority Problems:
  - Understanding Emojis/Slangs
  - Privacy Concerns

Elderly users can have basic conversations without needing to understand emojis or slang. Though privacy is also important, they would still prioritize ease of use over it.

6. **Listing Down Potential Solutions:** Now that we've prioritized the key issues, let's outline some potential solutions:

- **Simplified User Interface (UI):** Introduce a "Lite" or "Senior Mode" with fewer visible features, larger icons, and simplified navigation to improve usability for elderly users.
- **Limit advanced features:** Reduce screen clutter by hiding advanced features such as statuses or business chats, displaying them only when explicitly enabled.
- **Customizable text and button options:** Offer a setting to increase text and button sizes for better visibility and easier interaction, especially for users with vision or motor skill challenges.
- **Tutorial:** Provide a short tutorial feature that explains key features and settings in an easy-to-understand language. This tutorial should be easily accessible at any time, allowing users to revisit it if they forget how to use certain features.

7. **Evaluating Trade-offs:** Next, you must weigh the complexity and impact of these solutions:

Solution	Impact	Effort	Need
Simplified UI	High	Medium	Strong
Customizable Text Size	High	Low	Strong
Limited Advanced Features	High	Low	Strong
Tutorial	Medium	Medium	Moderate

Simplifying the UI, offering customizable text and button sizes, and limiting advanced features will directly address core accessibility and usability challenges, making the app more user-friendly for elderly users. The tutorial feature, while helpful, is a supportive enhancement that does not directly solve the primary usability concerns.

8. **Summarize the Proposed Improvements:** To improve WhatsApp, we focused on enhancing the user experience for elderly users, who often struggle with the app's complexity and accessibility. Our product will offer a simplified UI, customizable text and buttons, and an option to hide advanced features, improving engagement and retention.

## 2.4 Spice Box for a Blind Man

**Interviewer:** Design a spice box for a blind person.

**Aman:** Sure. Before we proceed, could I ask a few clarifying questions?

**Interviewer:** Absolutely! Go ahead.

**Aman:** Alright, just to clarify, is the person fully blind or partially blind?

**Interviewer:** Assume the person is fully blind.

**Aman:** Okay. Can you tell me more about why there's a need for a spice box specifically designed for someone who is blind?

**Interviewer:** The individuals need to cook food for themselves.

**Aman:** When you mention a spice box, are you referring to a large container with multiple compartments for different spices, or could it also be a small container, like one for salt?

**Interviewer:** Assume it's a larger box with multiple compartments to store different spices.

**Aman:** Got it. I'll start by defining a few personas to cover a broad spectrum of needs.

- **Children:** Young blind individuals who are dependent on family members for daily tasks, including cooking.
- **Non-working blind Adults:** Blind adults who are not employed and receive regular care from family members or caretakers.
- **Blind adults living alone:** Blind adults who live independently and work remotely, spend most of their time at home without immediate help.
- **Elderly blind:** Older blind users may have assistance from family members or specialized care services.

Among these personas, a blind adult who lives alone and works remotely would benefit the most from a specialized spice box. This user spends a significant amount of time at home and handles cooking without any assistance. Can I go ahead with this persona?

**Interviewer:** Sure. Go ahead!

**Aman:** Now, with this defined persona, I'll analyze the current user journey to better understand the challenges.

- The user first searches for the spice box in its usual location.
- Then it opens and identifies each spice by feeling its texture, smelling it, or tasting it.
- After identifying the desired spice, it measures and adds the correct quantity to the food.
- Next, it ensures that the spice is mixed properly into the dish & adjusted as needed.
- Finally, the spice box is closed and returned to its location.

The main challenges here are: first, locating the spice box; second, correctly identifying the desired spice; and third, measuring and adding the correct quantity to the food.

Keeping in consideration that, since the user is blind and lives alone, they are likely familiar with the location of their items, so finding the spice box may not be the highest priority to solve. So, I will focus on addressing the remaining two challenges.

**Interviewer:** That's a solid breakdown. How would you address the challenges to optimize the process?

**Aman:** The key solutions to address these challenges would be:

For desired spice identification,

- **Engraved symbols or Braille:** We could engrave each spice compartment with distinct symbols or braille near the top of each section. This would help the user easily identify each spice by touch.
- **Engraved patterns or templates:** Additionally, the user can be provided with a set of engraved patterns or templates. These would allow them to easily label new spices or replace old ones by attaching the appropriate pattern or Braille label to the corresponding compartment.

For measuring the correct spice quantity,

- **Built-in dispensing mechanism:** We could design the spice container with a built-in dispensing mechanism. This would work by pressing a button, which would release a pre-measured amount of spice, such as one teaspoon, directly into the user's dish. The container would be engineered to ensure that only the desired quantity is dispensed each time the button is pressed, reducing the chance of over or under-dosing. This system would streamline the process, making it easy for users to get the

exact amount of spice they need with minimal effort, while also helping to avoid spills and maintain consistent flavor in their cooking.

**Interviewer:** Those are some great solutions. The case ends here!

## 2.5 Spotify for Older Adults

**Interviewer:** How would you design Spotify to cater to older adults?

**Parth:** Can you clarify the primary objective of designing Spotify specifically for older adults?

**Interviewer:** Absolutely. The objective is to enhance the music streaming experience for older adults by making it more accessible, intuitive, and enjoyable.

**Parth:** Got it. Are we focusing solely on the music-listening features of Spotify, or should we also consider the use cases for podcasts and videos?

**Interviewer:** Let's focus solely on the music-listening features for now.

**Parth:** Understood. Let's consider an elderly music lover who enjoys classical and devotional music but finds the current app interface challenging. The key pain points include:

- Difficulty in navigating the app due to lack of tech-savviness
- Trouble discovering specific genres like classical and devotional
- Challenges in organizing and managing their music library
- Abrupt transitions between different genres can be disruptive

**Interviewer:** That's a clear breakdown of the issues. How would you address these pain points?

**Parth:** Key solutions to address the defined pain points would be:

- **Simplified interface:** Designing a simplified app interface with larger text and buttons would ease navigation and enhance usability. Incorporating both light and dark modes would be important, as dark mode can reduce glare and be easier on the eyes, benefitting the user with vision issues.
- **Tutorial:** We could introduce a tutorial feature to provide step-by-step guidance on using the app's key functions in their regional language, making the experience more user-friendly.
- **Genre categories on the homepage:** We could design a simplified homepage with clearly labelled genre categories like Classical, Devotional, Blues, and Soul, allowing users to easily navigate and explore music within each genre, preventing any disruptions between them.
- **Pre-organized and personalized music library:** Within each category, we could also include pre-organized playlists, saved/liked songs, and personalized recommendations for that genre. This would allow users to

manage their music library easily by automatically organizing songs into genre-specific playlists without users needing to create and manage multiple playlists manually.

**Interviewer:** How would you prioritize among these solutions?

**Parth:** I would prioritize based on the potential impact on the user experience and the effort required to implement each solution.

Solution	Impact	Effort	Priority
Simplified interface	High	Low	High
Tutorial feature	High	Medium	Medium
Genre categories on homepage	High	Medium	Medium
Pre-organized music library	Medium	High	Low

To improve accessibility for elderly users, we can prioritize features like the simplified UI, tutorial functionality, and genre categorization in our preliminary product. The pre-organized and personalized music library feature, due to its high complexity, may be considered for later updates.

**Interviewer:** How would you go about testing and implementing these designs?

**Parth:** For testing and implementation:

- **Prototype development:** I'd start by developing low-fidelity prototypes using tools like Figma.
- **User testing & iteration:** Testing these prototypes with senior citizens would be crucial to gather qualitative feedback and make necessary refinements.
- **β launch:** Once the core features are developed and integrated into Spotify's existing framework, I'd move to a soft launch, targeting a small user group to collect initial user feedback before a full-scale rollout.

**Interviewer:** What metrics would you use to gauge the success of this redesign?

**Parth:** I'd focus on several key metrics like:

- **Feature Adoption Rate:** To assess how effectively users interact with the new features.
- **User Engagement Score:** To evaluate how well the design meets their needs.
- **Retention Rate:** To evaluate if elderly users continue engaging with the features.

Gathering feedback through surveys and analyzing usage data would help in continuously improving the app.

**Interviewer:** That's a well-rounded approach.

## 2.6 App for a Legal Marketplace

**Interviewer:** Design an app for a legal marketplace.

**Vijay:** Sure. Before I start, could I ask a few clarifying questions?

**Interviewer:** Absolutely, go ahead.

**Vijay:** What's our primary objective in designing this app for a legal marketplace?

**Interviewer:** The main goal is to create a digital platform that makes legal information and services more accessible to the general public.

**Vijay:** Are we focusing on personal legal matters like property disputes, divorces, etc., or public legal matters like filing a PIL?

**Interviewer:** Let's focus on personal legal matters for now.

**Vijay:** Are we focusing on any specific areas of law, like criminal, civil, or something else?

**Interviewer:** The platform will be a general legal resource, so it's not limited to any particular area of law.

**Vijay:** Got it. Is this app intended specifically for India, or aimed at a global audience?

**Interviewer:** It's specifically for the Indian market.

**Vijay:** Are we targeting a particular segment of the Indian population? For instance, if we're focusing on lower-income groups, the app might prioritize issues like wage disputes, eviction cases, or access to government benefits.

**Interviewer:** Good point. Our target audience is primarily upper and middle-class citizens from Tier 1 cities in India.

**Vijay:** Alright. So, we're focusing on upper and middle-class Indians who may not have a strong understanding of legal processes. Should I go ahead with this segment?

**Interviewer:** Yeah sure.

**Vijay:** Before addressing challenges, it's crucial to analyze the user journey:

- **Recognizing a legal issue:** The journey to legal assistance starts when an individual realizes they have a legal issue like receiving a notice, being

involved in an accident or facing a lawsuit.

- **Finding a lawyer:** The user then needs to find a lawyer, navigating various options like online directories or court offices.
- **Managing the case:** After selecting a lawyer, they have to manage the case which involves attending court sessions and handling paperwork.
- **Paying legal fees:** Finally, the user settles legal fees and closes the process.

Based on this journey, the specific pain points are:

- **Accessing legal information:** This is often challenging due to the complexity of the system and the use of jargon.
- **Finding a trustworthy lawyer:** Many people in India often rely on personal connections to find a lawyer; those without connections struggle to find trustworthy legal help. Coordination and consultation with multiple lawyers is also time-consuming and frustrating.
- **Managing documents and schedules:** Legal processes involve a lot of paperwork, deadlines, and court appearances, which can be overwhelming for a user who is unfamiliar with legal procedures.
- **Opaque legal fees:** The cost of legal services can be unclear and stressful.

Accessing legal information, finding a lawyer, and managing the legal process would have the highest impact on the user. So I'll focus on addressing these issues.

**Interviewer:** Sure. Please proceed.

**Vijay:** Key solutions to address the defined pain points would be:

- To make legal information more accessible,
  1. We could simplify it by incorporating easy-to-understand language.
  2. Since legal information is vast and complex, training a language model on it might not be enough. Instead, we could crowdsource legal content, allowing users to review contribute, and verify articles. We could also offer incentives for their participation.
  3. We could organize content into flashcards for concise information and offer a “contact a lawyer” option for complex queries.
  4. We could create searchable database segments or clusters where users can quickly find relevant legal topics.
- To find a trustworthy lawyer,

1. We could introduce a social scoring system for lawyers, based on user reviews, satisfaction ratings, and the number of cases handled.
  2. We could highlight lawyers recommended by friends or within the user's network in the search filters. This would add an extra layer of trust by showing which lawyers are endorsed by people they know.
  3. We could include real-life anecdotes and detailed reviews from users. These testimonials would help build trust and make the app a reliable resource for finding legal services.
- To manage documentation and schedules,
    1. Within the app, we could develop a tool that tracks important deadlines, documents, and court appearances.
    2. We could allow users to upload documents and organize them in a digital format, reducing the need for physical paperwork.

**Interviewer:** These are some well-thought solutions. How would you proceed with the app's development?

**Vijay:** We'd start with research and development to organize content, gather lawyer contacts, and assess their ratings. We'd then segment this information for easy discovery. After that, we'd conduct A/B testing and launch a minimum viable product (MVP) to refine the app based on user feedback.

**Interviewer:** How would you measure the success of these features?

**Vijay:** To measure the success of these features, we would track several key metrics:

- For legal information access, we could monitor user engagement with the content, such as time spent on articles, search frequency, and the number of queries converted to lawyer consultations.
- For the social scoring and trust-building features, we'd assess the rate of lawyer selection based on ratings, user satisfaction scores, and the frequency of user-generated reviews and ratings.
- For document and schedule management, we could track the number of documents uploaded, deadlines met, and user satisfaction with the scheduling and notification features.

**Interviewer:** Excellent analysis!

## 2.7 Swiggy Group Orders

**Interviewer:** You might order food while staying in hostels, right?

**Aman:** Yes, I do.

**Interviewer:** Where do you usually order from?

**Aman:** I generally use Swiggy.

**Interviewer:** How often do you order alone versus with friends?

**Aman:** I'd say around 20% of the time I order alone, and the other 80% with friends.

**Interviewer:** How long does it take you to decide on an order when you're alone compared to when you're with friends?

**Aman:** When I'm alone, it usually takes about 5 minutes. But with a group of friends, it can take around 20 minutes.

**Interviewer:** Alright, your task is to reduce this group ordering time from 20 minutes to 5 minutes for a group of 5 people.

**Aman:** So, I need to reduce the group ordering time on Swiggy for young adults. Is there anything more to it?

**Interviewer:** No, you can proceed now.

**Aman:** Let's break down the current group food ordering process. First, everyone in the group comes together to browse the app and pick their favourite items. Each person adds their choice to the cart, and once everyone is done, they finalize the order. Afterwards, they place the order and handle payment, often splitting the cost. Finally, they wait for the delivery and enjoy the meal together. Does this seem accurate?

**Interviewer:** Yes, that's a fair breakdown.

**Aman:** Based on the user journey, the key pain points are:

- **Finding a common restaurant:** Group members often have different tastes, making it tough to agree on a single restaurant.
- **Staggered deliveries:** Ordering from multiple restaurants causes longer or staggered delivery times.
- **Varying budgets:** Different spending limits among group members

complicate decision-making and delay the order.

Do you want me to address anything else?

**Interviewer:** No, you've covered all the issues.

**Aman:** Alright! A potential solution that immediately comes to mind is for Swiggy to allow delivery drivers to pick up orders from many restaurants and deliver them all together. But I think we should focus more on optimizing the group ordering process itself rather than logistics.

**Interviewer:** Okay, let's focus on the ordering process.

**Aman:** To tackle these problems, key solutions would be:

- **Group creation feature in the app:** Users can form a group directly within the Swiggy app by inviting others from their individual Swiggy accounts.
- **Personalized restaurant suggestions:** The app will analyze each member's past orders to suggest restaurants that cater to everyone's preferences and spending habits. This avoids endless back-and-forth discussions and helps select a restaurant faster.
- **Simultaneous ordering:** Each group member can add their preferred items to a shared cart at the same time from their devices. This eliminates the need for one person to manage the entire order.
- **Finalizing the order:** After everyone has added their items, the group can finalize the order together, saving time and avoiding confusion.

**Interviewer:** What further improvements would you suggest?

**Aman:** We could add a bill-splitting feature during checkout, allowing each member to pay for their portion. This will remove the hassle of one person covering the entire payment and collecting money from others.

**Interviewer:** That sounds reasonable. Great job!

## 2.8 Traffic Light Optimization

**Interviewer:** Your task is to optimize traffic lights.

**Aman:** Could you clarify what specifically we're focusing on? Are we looking to improve the physical design of traffic lights, enhance the algorithms that control them, or determine better locations for installation?

**Interviewer:** We're focusing on optimizing the algorithms that control the traffic lights.

**Aman:** What's the objective behind this optimization?

**Interviewer:** The existing traffic light system is not very effective at managing traffic, particularly in big cities where people often spend a lot of time travelling to their destination. The aim is to reduce traffic congestion in urban areas without altering the current road infrastructure.

**Aman:** Sure. Are we aiming to optimize traffic lights across the entire city, or are we considering specific intersections that frequently experience heavy congestion?

**Interviewer:** Let's focus on high-traffic intersections that often see the worst congestion.

**Aman:** Currently, traffic lights run on preset timers that are adjusted based on the usual traffic patterns in that area. Is this correct?

**Interviewer:** Yes.

**Aman:** In this case, all travellers, whether in private or public vehicles, will experience the same pain points. Therefore, there's no need to segment users in this case. However, we can account for exceptions like ambulances and rallies in the solution later on. Does that work?

**Interviewer:** Okay.

**Aman:** The key pain points faced by people travelling on the road are:

- **Traffic congestion:** Long wait times at intersections create traffic bottlenecks that slow down overall road movement.
- **Wasted fuel and energy:** Frequent starts and stops in traffic cause vehicles to remain idle for a longer time at red lights, leading to increased fuel consumption and unnecessary energy waste.

- **Unpredictable delays:** Uncoordinated traffic causes unpredictable wait times, making it difficult for people to plan their travel.

To prioritize these issues, unpredictable delays and traffic congestion have the highest impact on city commuters. Wasted fuel and energy are also important, but addressing the first two will naturally improve energy efficiency as well.

**Interviewer:** That sounds reasonable. How would you go about addressing these high-impact issues?

**Aman:** To address unexpected delays and longer travel times, I'd suggest implementing a dynamic signal timing system. Currently, traffic lights operate on preset timers that are fixed based on the typical traffic patterns of that area. Instead, we can implement an algorithm that dynamically adjusts traffic light timings according to the actual traffic flow.

**Interviewer:** Would you like to elaborate more on how it will be implemented?

**Aman:** To implement this system we would:

- Collect and analyze traffic patterns at different times of the day, across various days of the week, and throughout different seasons.
- Develop a predictive deep learning model using historical time series data to anticipate real-time traffic conditions and optimize traffic light timing accordingly.

**Interviewer:** That sounds like a step in the right direction, but consider an unexpected situation like an accident. The lights would still change from red to green even if there's a blockage. How would you handle that?

**Aman:** To handle such situations, the installed cameras would monitor the number of cars within a specific range of the signal using image recognition. If they detect an unusual buildup of stationary vehicles, it would trigger an alert, notifying traffic management authorities to respond quickly. In the meantime, the system would automatically turn the traffic light red for that lane to prevent further congestion.

**Interviewer:** What about regular maintenance or malfunctions in the system?

**Aman:** To ensure the system runs smoothly, we could incorporate self-diagnostic features that continuously check the health of the cameras and signals.

- If a malfunction is detected, the system will switch to a safe default mode and alert the maintenance team for prompt action.

- Regular maintenance schedules would also be implemented to prevent breakdowns.

**Interviewer:** You've addressed the technical aspects well. Any thoughts on how to implement such a system practically in a city?

**Aman:** Implementing this system would require a phased approach:

- **Pilot phase:** Start by implementing it in high-traffic areas and intersections known for congestion and accidents. This will help us test and refine the system.
- **City-wide rollout:** Once the initial phase is successful, we can gradually roll out the system across the city.
- **Collaboration:** Work closely with local authorities to ensure smooth integration with the current infrastructure.

**Interviewer:** Great, that was a comprehensive solution.

## 2.9 YouTube Sign-Ins

**Interviewer:** Tell me about your favourite product.

**Aman:** My favourite product is YouTube.

**Interviewer:** Why do you like it so much?

**Aman:** I like YouTube because it has a vast variety of content like educational content, entertainment, news, and whatever I need. Plus, the recommendations are spot on; they always match my interests.

**Interviewer:** That's interesting! Let's say you're a Product Manager at YouTube. How would you encourage non-signed-in users to create accounts and sign in?

**Aman:** Can I ask what the main goal of this initiative is? Are we looking to collect more user data to improve our algorithms and strategies?

**Interviewer:** That's one part of it, but right now, our main focus is on boosting user engagement. We want to provide a more personalized experience by offering tailored recommendations based on users' watch histories.

**Aman:** Understood. YouTube is already a well-known platform, so we need to address why some users aren't signing in. I'd assume there are two main reasons: either they don't have a Google account, or they have one but choose not to sign in. Should we focus on users who already have Google accounts but aren't signing in?

**Interviewer:** Yes, let's proceed with that scenario.

**Aman:** In that case, I believe users might avoid signing in due to concerns like receiving too many notifications, spending too much time on the platform, or worrying about data usage. Some users might not see any added benefit from signing in compared to using YouTube anonymously. Others may fear their watch history will be tracked or used for targeted ads. Is there anything else that I'm missing out?

**Interviewer:** No, that covers all. Those are some valid concerns, let's move on to potential solutions.

**Aman:** We could start by explicitly highlighting the benefits of signing in to the users. For example, signed-in users can subscribe to channels, save their progress on videos, receive personalized recommendations, and access their

watch history across all devices. These features are valuable, especially for users who want a more seamless experience.

**Interviewer:** That sounds good. How else might we encourage sign-ins?

**Aman:** We can encourage sign-ins by introducing non-intrusive prompts that remind users of these benefits. For example, if a user frequently watches a particular type of content, a message could suggest, "Sign in to save your progress, get personalized recommendations, and sync your favourite videos across all your devices."

**Interviewer:** Could you propose a more direct approach?

**Aman:** We could offer exclusive content or early access to certain videos for signed-in users. This would provide a clear, tangible benefit for creating an account. Additionally, we can introduce a brief tutorial that explains how users can easily manage notifications and provide transparency regarding privacy and data usage, which might help address their concerns.

**Interviewer:** What do you think about restricting certain features for non-signed-in users?

**Aman:** While limiting features like playlist creation or restricting access to certain content might push some users to sign in, it could also frustrate them and negatively impact their experience. Instead, we should focus on enhancing the experience for signed-in users by offering more value, rather than taking features away from non-signed-in users.

**Interviewer:** That's a good point. How would you measure the success of these strategies?

**Aman:** I would monitor the conversion rate of non-signed-in users to signed-in users. Additionally, we could track user engagement metrics like likes, comments, and video shares, comparing them before and after implementing the strategies. Additionally, we should look at retention rates and how often these users return to the platform. User feedback would be invaluable for fine-tuning our approach.

**Interviewer:** Great! You've covered a lot of ground with those suggestions.

# ROOT CAUSE ANALYSIS

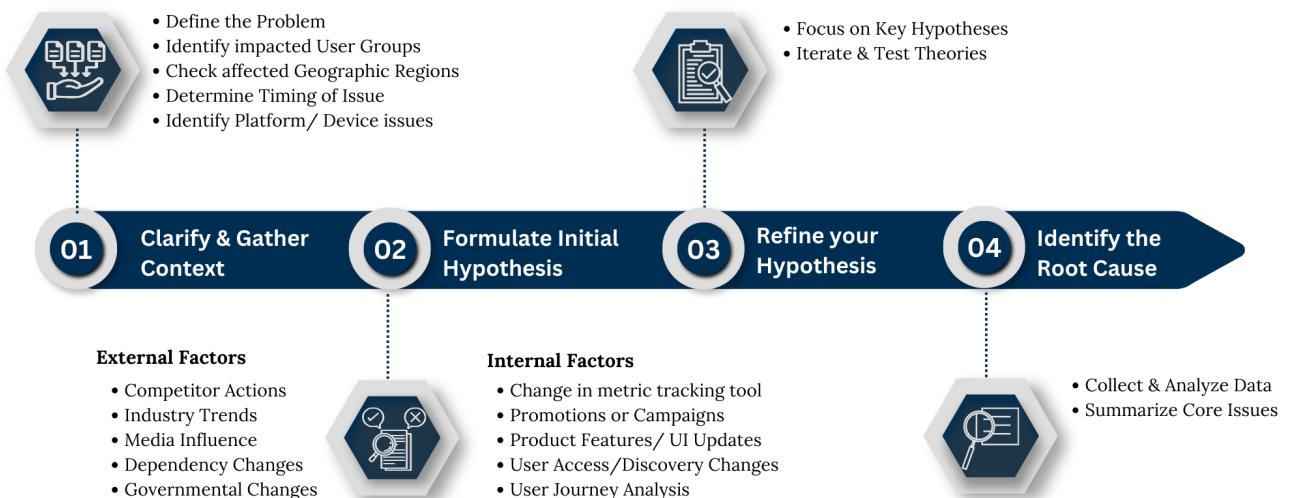
## 3.1 How to Perform Root Cause Analysis

In product management interviews, RCA questions assess your analytical skills and ability to identify underlying problems that may affect product performance or user experience.

Here are some examples of RCA questions:

- Swiggy's monthly recurring revenue has dropped. Evaluate the reasons.
- There's been a recent increase in cart abandonment. Analyze the cause.
- Spotify's uninstall rates have risen. Why is this happening?

The structure below outlines the steps involved in the RCA process:



By following this structured approach, you can effectively uncover actionable insights that address underlying issues, ultimately leading to meaningful improvements.

## 3.2 Sample Case

**Problem Statement:** Identify the reason behind the 20% decline in the conversion rate of free users to premium subscribers for a cloud storage service.

1. **Clarify and Gather Context:** The first step is understanding the situation and the metrics involved. You can ask the following clarifying questions:

- Is the drop consistent across all user demographics, geographies, and devices (phone/laptop) or operating systems (iOS, Android)?
- Is the conversion rate declining gradually, or was there a sharp drop around a specific time?

*Interviewer: "Over the past six months, there has been a steady decline in the conversion rate, with the drop remaining consistent across all demographics, geographic regions, and devices."*

2. **Formulate Initial Hypothesis:** Start by generating initial theories about potential causes, and refine them by asking targeted questions and gathering specific data. These issues can be broadly categorized into external and internal factors.

**External Factors:** Events/ circumstances outside the organization's direct control that could be influencing the problem. For example, in this case:

- Have any new competitors entered the market in the past six months, or have existing competitors launched more attractive deals or improved their free tier services that might be drawing customers away?
- Is there any external economic factor, such as rising inflation or job losses, that might have affected consumer's willingness to spend on premium subscriptions in this industry?
- Is the cloud storage market becoming saturated, reducing the pool of potential users likely to upgrade from free to premium plans?

*Interviewer: "There have been no significant competitive activities, and economic factors are not a major concern; the cloud storage market has not saturated"*

**Internal Factors:** Events/ circumstances that are within the organization's control. In this case:

- Are there any changes in the formula or metric tracking methods that might have caused a perceived drop?

- Are there any bugs or issues with the user interface in the upgrade process that could be causing users to drop off before completing their purchase?
- Did we increase the price of the premium plan, or do users feel that our premium pricing is too high compared to competitors, potentially discouraging upgrades?

To get a deeper insight into internal factors, we will map the user journey:

- Are new users discovering our service at the same rate as before? Has there been a decline in the number of users signing up for the free plan?
- Is the onboarding process communicating the value of our premium features? Are users aware of the advantages of upgrading?
- Are the in-app prompts effectively communicating the latest enhancements or new benefits of premium features?
- Do users perceive the free tier as sufficient for their needs, reducing their motivation to upgrade to the premium plan?
- Are there any bugs or friction in the payment process, particularly on specific devices or platforms, that could be preventing users from completing the upgrade?

*Interviewer: "There have been no changes made in the conversion rate calculation. There are no reported bugs, price changes, or campaign failures. While new user onboarding remains the same, users heavily utilize free features but drop off during payment."*

The outlined questions offer valuable insights into factors affecting conversion rate declines, highlighting potential issues across critical stages of the user journey, including discovery, onboarding, free plan usage, premium feature evaluation, and the decision-making process during upgrading from free to premium.

3. **Identify the Root Cause:** After gathering and analyzing the information given by the interviewer, you narrow down the most likely root cause(s). For example, in this case, the causes can be:

- Product bugs in payment flow: We find that there is a significant drop-off in the payment funnel, especially on the mobile app. Users

abandon the upgrade process due to a bug that prevents the payment page from loading correctly on iOS devices.

- Reduced value perception of premium features: User feedback indicates that many free users don't see enough additional value in upgrading. Many premium features are perceived as non-essential or are not well communicated in the user flow.

### 3.3 Uber Revenue Decline

**Interviewer:** Uber is seeing a decline in its revenue. Analyze the reason behind this.

**Aman:** Sure, just to clarify, are we referring specifically to Uber rides, or does this also include other Uber services like Uber Eats?

**Interviewer:** We're focusing on Uber rides only.

**Aman:** Is this decline in revenue a first-time occurrence, or have there been similar declines previously?

**Interviewer:** This is the first time it has happened.

**Aman:** What percentage of revenue drop are we seeing?

**Interviewer:** We don't have an exact number, but the decline is considerable.

**Aman:** Is this revenue decline happening globally, or is it limited to India?

**Interviewer:** It's limited to India.

**Aman:** Understood. I will begin by analyzing external factors that might have affected the revenue.

**Interviewer:** Yeah sure. Please proceed.

**Aman:** Is this drop happening with competitors, or is it unique to Uber?

**Interviewer:** This is specific to Uber.

**Aman:** Has there been any major change in external factors that could affect demand or operations in India? For example, changes in government regulations, fuel prices, or a surge in competition?

**Interviewer:** None of those seem to be the issue.

**Aman:** Have any external events, like transportation infrastructure changes or public transport's increased popularity, affected user behaviour?

**Interviewer:** No, none of those things seem to be happening either.

**Aman:** Alright, let's move to internal factors. Uber's revenue mainly comes from ride commissions, cancellations, promotions, and advertisements. Is the decline happening across all these streams, or is it primarily driven by a drop in ride commissions?

**Interviewer:** The decline is due to reduced earnings from ride commissions.

**Aman:** Has this affected any particular service type, like UberX, UberRent, or UberReserve?

**Interviewer:** No, the decline is uniform across all services.

**Aman:** Understood. The revenue can be calculated as the total number of rides multiplied by the average cost per ride. Have we decreased ride prices? Or is the drop in revenue due to a decrease in the number of rides?

**Interviewer:** The average price per ride has remained the same, but there has been a decrease in the number of rides.

**Aman:** Has there been a decrease in customer demand on the platform?

**Interviewer:** There have been no changes in customer demand.

**Aman:** Are drivers leaving the platform, leading to a reduction in their numbers?

**Interviewer:** No, that is not the case.

**Aman:** Let's walk through the user journey to pinpoint where the issues might lie. The first step is opening the app. As the customer demand is consistent, there will be no problem here. Next, users enter their pick-up and destination details. Is there any problem with this step?

**Interviewer:** No, that process is running smoothly.

**Aman:** After entering the details, they choose a vehicle from the available options. Any issues at this stage?

**Interviewer:** No, users aren't facing problems here.

**Aman:** Alright, the next step is the ride confirmation phase, where the user waits until a driver accepts their ride request. Are there any drop-offs or issues at this stage?

**Interviewer:** Yes, customers are experiencing increased wait times.

**Aman:** Okay, so if the customers are experiencing longer waiting times, despite the number of drivers remaining the same on the platform, it indicates that there might be some issue on the drivers' side. Let's map out the driver's journey to identify the root cause.

When drivers log in, they wait for a ride request, accept the ride, reach the pick-up point, drop off the passenger, and then wait for the next ride. Have drivers stopped accepting rides or cancelling them more often?

**Interviewer:** No, drivers are not cancelling rides.

**Aman:** If that's the case, then the issue must occur after they complete a ride. After dropping off a passenger, are drivers struggling to find their next ride?

**Interviewer:** Yes, drivers are facing delays in getting new ride requests after completing a trip.

**Aman:** If drivers aren't getting enough rides despite steady customer demand, and customers are struggling to find drivers, this could be due to a mismatch between supply and demand in certain areas. Are drivers operating in zones with lower demand, causing longer idle periods between rides?

**Interviewer:** Yes, that seems to be the issue. The drivers are often in areas with low passenger demand after dropping off their rides.

**Aman:** This mismatch is likely causing both an increase in wait times for passengers and a decrease in ride availability, leading to fewer completed rides. In turn, this reduces revenue for both drivers and Uber.

**Interviewer:** How would you address this problem?

**Aman:** We need to ensure that drivers can either get rides from the same dropoff location or navigate to areas with higher demands. However, travelling to a new location increases fuel costs and idle time, impacting overall earnings.

**Interviewer:** Include both these considerations in your solution.

**Aman:** We could create a driver-centric feature within the Uber app that displays ride expectancy at various locations. This feature would provide real-time data and historical trends to help drivers anticipate where rides are more likely to be booked. For example, we could show drivers the expected wait time for their current location and suggest nearby areas with higher ride probabilities.

**Interviewer:** How would you define ride expectancy?

**Aman:** Ride expectancy could be defined as the average number of rides booked within a 10-minute window at a specific location, based on historical data. If the

ride expectancy at the current location is above a predefined threshold, drivers would be encouraged to stay. If it's below, the app would suggest the nearest area with better prospects, taking into account travel distance and fuel costs.

**Interviewer:** How would you present this information to the drivers in a user-friendly manner?

**Aman:** We can design a simple, intuitive screen within the driver app. It would show a map with colour-coded zones indicating ride demand levels. For instance, green zones could indicate high demand, yellow zones moderate, and red zones low demand. Additionally, a notification system could alert drivers when they enter a low-demand area and provide suggestions for nearby high-demand areas.

**Interviewer:** Excellent. How would you measure the success of this feature?

**Aman:** We'd track metrics such as driver idle time, the number of rides per driver, fuel efficiency, and overall driver earnings. Additionally, driver feedback would be crucial to refine and improve the feature.

**Interviewer:** Great job. You've provided a thorough analysis and practical solution.

### 3.4 Blinkit Order Reduction

**Interviewer:** The number of orders on Blinkit is declining. Can you identify the cause of this problem?

**Alok:** Sure. To better understand the scope of the issue, could you clarify how you're defining the metric for "orders"? Are you measuring the total number of orders placed in a specific time frame, or are you tracking something more specific, like the average number of orders per customer?

**Interviewer:** We're specifically measuring the total number of successfully placed orders per day.

**Alok:** Is this decline happening in specific cities, or is it a nationwide issue?

**Interviewer:** It's happening uniformly across the entire country.

**Alok:** Is it more significant in certain demographics, like new customers versus returning customers?

**Interviewer:** The decline is consistent across all customer demographics.

**Alok:** Are we seeing this decline across all product categories, or is it more noticeable in certain ones?

**Interviewer:** The decline is nearly the same across all product categories.

**Alok:** When did we first notice this decline, and how has it progressed since then? Was there a specific date or event that coincided with the start of this trend?

**Interviewer:** The decline started about a month ago and has been gradual. There wasn't a specific event or date that stands out.

**Alok:** Alright! I'd like to first delve into the internal factors. Have there been any recent changes in how Blinkit tracks or calculates the number of orders? For example, could the issue be related to a problem with how data is being reported?

**Interviewer:** No, we haven't made any changes to how we track the metric.

**Alok:** What about promotions? Have there been any changes to coupons, discounts, or marketing campaigns recently? Could fewer promotions be influencing customer behaviour?

**Interviewer:** Our promotions and marketing efforts have been consistent, so that's unlikely to be the cause.

**Alok:** Understood. How about recent features or UI updates? Have there been any changes to the user interface, or core algorithms that could have affected the user journey around the time the decline began?

**Interviewer:** We haven't made any major updates recently, just a minor UI tweak.

**Alok:** Understood. I'll approach this by mapping out the user journey to identify where the drop-off might be happening. I'll break it down into key steps: starting the app, product search, adding items to the cart, choosing payment options, and completing the order.

**Interviewer:** That sounds like a solid plan. Let's go step by step.

**Alok:** Are we seeing any issues with app crashes or slow load times?

**Interviewer:** No, the app is functioning well.

**Alok:** Moving on to product search, are users having trouble finding the products they want, or is there any issue with search functionality?

**Interviewer:** The search functionality is working fine, and users can find products.

**Alok:** Next, I'll consider the add-to-cart stage. Are users adding items to their carts?

**Interviewer:** Yes, users are adding items to their carts, but fewer orders are being placed.

**Alok:** That indicates the drop-off is happening at the checkout stage. Are there any issues on the cart page? For instance, are users being overwhelmed with ads or pop-ups, or facing a cluttered interface?

**Interviewer:** No, the number of ads hasn't increased, and the cart page is operating as usual.

**Alok:** Let's dive deeper into the checkout process. Are users reaching the payment gateway?

**Interviewer:** Yes, users are reaching the payment page, but they're not completing the payment.

**Alok:** If users are reaching the payment page but not completing their transactions, there could be several reasons. One common issue might be related to problems with their bank transactions. Is this issue limited to a specific bank, or is it widespread across all banks?

**Interviewer:** People with various banks have reported encountering technical issues with the payment process.

**Alok:** Since the problem affects users across all banks, it's likely not a bank-specific issue. This suggests that the issue might be with the payment gateways that Blinkit has integrated.

**Interviewer:** Yes, the problem is indeed with the payment gateway. There have been numerous reports of technical glitches preventing users from completing their transactions. Some payments fail to go through, and others show error messages.

**Alok:** In that case, it's plausible that this issue is causing users to abandon their carts at the final step. I would recommend focusing on investigating the root cause of these payment gateway issues—review any recent API changes, and check the logs for recurring errors, server-side issues, or potential conflicts between our platform and the payment gateway providers.

**Interviewer:** That seems reasonable.

### 3.5 Zomato Order Decline

**Interviewer:** Orders on Zomato are decreasing. Can you help us figure out why?

**Nitin:** Yeah sure! To start, I'll ask a few clarifying questions to better understand the issue.

**Interviewer:** Absolutely, go ahead.

**Nitin:** I want to understand the scale of the issue. Is the reduction in orders seen across all regions in India or specific to certain areas?

**Interviewer:** It has been observed all across India.

**Nitin:** Is this reduction sudden, or has it been happening gradually over time?

**Interviewer:** The decline has been gradual over the past two months.

**Nitin:** Are we seeing this decline more among specific user groups, such as new users, existing users, or users with particular food preferences?

**Interviewer:** Yes, it seems more pronounced among non-vegetarians.

**Nitin:** Is this reduction more prominent in certain types of non-veg dishes, or is it across the board?

**Interviewer:** The decline appears to be more significant in chicken dishes.

**Nitin:** Is the reduction seen across both dine-in and delivery services, or is it specific to one of these?

**Interviewer:** It's uniform across both dine-in and delivery services.

**Nitin:** Understood. Now let's further investigate other internal or external reasons that might have caused the problem.

**Interviewer:** That sounds good.

**Nitin:** I would first like to look at internal factors. Have there been any changes in the metric calculation tool for chicken orders? Were any adjustments made, or is it functioning correctly?

**Interviewer:** We haven't noticed any issues with the tool so far.

**Nitin:** Have any recent UI changes that might be affecting visibility? For example, is the non-veg option easily accessible to users, or could there be any nav-

igation issues? Also, are there any changes in how these items are displayed, such as in filters, search results, or menus?

**Interviewer:** We haven't made any major changes to the UI, and the options appear to be displayed as intended. The navigation also seems to be functioning smoothly.

**Nitin:** Have there been any recent campaigns or promotions by Zomato?

**Interviewer:** Yes, we ran a campaign offering significant discounts on chicken dishes.

**Nitin:** From what we've covered, it looks like there aren't any major issues with the platform internally. Now I'll start analyzing the external factors. Should I move forward with that?

**Interviewer:** Yes, you're right! Internal factors don't seem to be affecting the decline. You can proceed with external factors.

**Nitin:** Let's start with the competitive landscape. Have any of our competitors launched new features or been offering better deals on chicken dishes that are drawing users away?

**Interviewer:** We haven't noticed any major shifts in the competition recently.

**Nitin:** Is there any seasonal or other market trend occurring that might be affecting the entire industry?

**Interviewer:** Yes, there seems to be a trend where users are moving away from chicken dishes.

**Nitin:** Since users are moving away from chicken dishes, could it be related to any health concerns or issues with chicken?

**Interviewer:** Yes. There has been a virus outbreak affecting chickens nationwide.

**Nitin:** Okay. So, the virus outbreak could be affecting the supply of chicken to restaurants, leading to shortages and possibly increasing prices. Also, customers are likely avoiding chicken due to the fear of the virus. Even if the chicken available is safe, public perception and fear can significantly influence their dining choices. Customers may be concerned about the potential health risks associated with consuming chicken.

**Interviewer:** How can we address this issue?

**Nitin:** To address these issues, we could:

- Reassure customers by highlighting our strict sourcing policies, rigorous health inspections, and thorough cooking processes to ensure chicken safety.
- Using our website, social media, and in-restaurant signage for clear and transparent communication—such as sharing behind-the-scenes videos—can help foster trust with customers.
- Additionally, we can promote alternative dishes like vegetarian, vegan, seafood, and other meats through special promotions, detailed staff recommendations, and engaging marketing campaigns to shift customer focus and maintain satisfaction.

**Interviewer:** Excellent analysis!

# PRODUCT METRICS

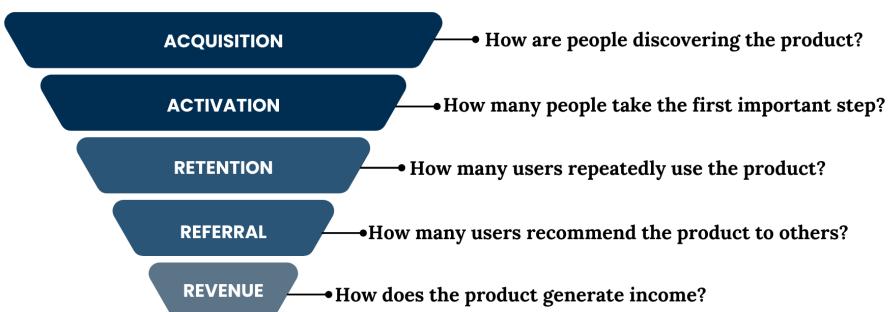
## 4.1 How to Approach Product Metrics Case

Product metrics are quantifiable indicators that track a product's performance, usage, and business outcomes. They provide critical insights that guide decision-making, optimize features, and ensure the product aligns with business objectives.

### Example Questions:

- How would you evaluate the performance of an e-commerce platform?
- What metrics would you use to reduce churn in a music streaming app?
- How would you measure the effectiveness of a new feature in a ride-sharing app?

In tackling these types of questions, leveraging the AARRR framework can be highly beneficial. This framework, which stands for Acquisition, Activation, Retention, Revenue, and Referral, helps you break down the user journey into key stages:



This framework enables you to identify specific metrics for each stage and provides a more detailed understanding of user behaviour and interactions, thus helping to optimize overall business growth.

## 4.2 Sample Case

**Problem Statement:** Evaluate the success metrics for Ola.

1. **Describe the Product:** Ola is an Indian ride-hailing service that connects passengers with drivers through its platform, offering a range of transportation options, including cars, auto-rickshaws, and bike rides.
2. **Clarify the Scope:** Establishing the scope of the analysis is critical to ensure that the discussion remains focused and relevant. You can ask clarifying questions such as:
  - Are we focusing on Ola's ride-hailing service, or should we also include other services like Ola Electric?
  - Are we focusing on both stakeholders—the passengers and the driver—or just one of them for this analysis?

*Interviewer: "For this discussion, we will focus exclusively on Ola's ride-hailing services, while concentrating solely on the rider side of the platform."*
3. **Describe the Customer Journey:** The product journey outlines the steps a user takes when interacting with Ola, from discovery to post-ride engagement, ensuring all key touchpoints are addressed.
  - Passengers discover Ola through ads, social media, or recommendations from friends.
  - Users download the Ola app to explore its features and assess its usability compared to competitors.
  - Users search for rides and interact with the app, evaluating its options and booking process.
  - Users finalize their ride bookings by entering destination details and choosing payment options, aiming for a smooth experience.
  - During the ride, users interact with the driver and assess the overall quality of service, which impacts their likelihood of repeat usage.
  - After the ride, users provide feedback and ratings, influencing future decisions and potentially referring new customers.
  - Based on their experience, users decide whether to continue using OLA, engaging with promotions and loyalty programs for future rides.
4. **Quantify User Behaviour:** Explores each phase of user interaction with Ola, focusing on how customers engage with the platform across various stages, such as Acquisition, Activation, Retention, Referral, and Revenue.

For each of these stages, identify relevant metrics that offer valuable insights and help assess the effectiveness of our strategies.

- **Acquisition:** This outlines how Ola attracts users to its platform using various strategies such as advertisements, promotions, referrals, partnerships, and online marketing campaigns. The aim is to raise awareness and encourage potential users to download the app.

App Downloads	Brand Search Volume	Cost Per Acquisition	Social Media Engagement	Market Penetration
# installs	# users searching for OLA	# cost to acquire new passengers	# interaction levels on social media	# new users acquired

- **Activation:** This is about getting the users to take their first ride. Once they download the app, Ola makes sure the onboarding process is smooth, provides a simple sign-up process, offers discounts on the first ride, and ensures the app is easy to navigate.

App activation rate	Time spent in the app	Conversion rate	Bounce rate	Time to first ride
% users who open app after downloading	Avg # time spent before making a decision.	% who search for a ride and actually book	% who exit the app after searching ride	Average time from signup to book first ride

- **Retention:** Ola keeps its customers engaged and coming back by providing excellent service, offering discounts or loyalty programs, maintaining high-quality vehicles, and ensuring quick response times for rides.

Retention rate	Frequency of bookings	Churn Rate	Driver retention rate	DAUs, WAUs, and MAUs
%users who booked another ride	average # rides taken by a user over time	%users who stop using the platform	% of drivers retained over time	daily, weekly and monthly active users

- **Referral:** Happy customers refer others to the service, contributing to Ola's organic growth.

Referral rate	Referral incentive redemption rate	Net Promoter score(NPS)	Positive reviews	Social media mentions
# users acquired via referrals	% of users claiming referral bonuses	# likelihood to recommend score	# positive reviews on external platforms	# organic mentions of OLA by satisfied customers

- **Revenue:** Ola generates revenue from the rides customers take. It can also earn through premium services, subscriptions, or partnerships with other businesses.

Average revenue per ride	Customer Lifetime value	Payment success rate	Commission rate	Revenue per vehicle category
revenue generated per completed ride	total revenue OLA expect from a user over their lifetime	% of successful transactions	% of fare OLA retains from each ride	total revenue generated from each vehicle type

5. **Prioritize the Metrics:** We have a lot of potential metrics here, but we need to focus on the ones most critical to understanding the success.

- **Retention Rate:** Retaining existing customers is more cost-effective than acquiring new ones. A high retention rate indicates that users are satisfied with the service and are booking rides repeatedly.
- **Conversion Rate:** If users are searching but not booking, there could be a problem with pricing, availability, or trust in the app. Improving this conversion is crucial for driving revenue.
- **Referral Rate:** Referrals are an organic and cost-effective way to grow the user base. If users are willing to recommend OLA, it shows they are satisfied, and OLA can gain new riders at a lower acquisition cost.
- **App Activation Rate:** Ensuring that users who download the app are opening and exploring it is crucial. If activation is low, OLA needs to optimize the onboarding process and initial user experience.
- **Customer Lifetime Value (CLV):** This metric tracks the total revenue OLA can expect from a user over their lifetime. A high CLV indicates strong user engagement and long-term profitability for the platform.

## 4.3 Measuring Success of Instagram

**Interviewer:** Describe the success metrics for Instagram.

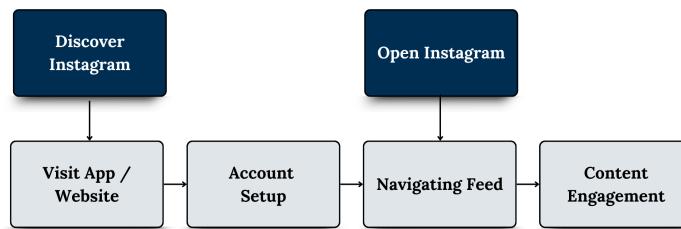
**Parth:** Instagram is a social media platform that allows users to share and interact with a wide range of content, including photos, videos, stories, and reels. Its primary goals are to increase user engagement, satisfaction, and overall app performance. Is this comprehensive, or is there anything else to add?

**Interviewer:** Yes, that covers it.

**Parth:** Sure. Before proceeding, I would like to clarify whether we are focusing on a specific feature of Instagram, or should I consider the entire app?

**Interviewer:** Let's keep it broader, consider the entire app.

**Parth:** Got it. To define Instagram's success metrics, I'd map the user journey into 5 stages:



**Acquisition:** This stage refers to the process of attracting and bringing new users to our platform. This could be achieved through targeted marketing campaigns, partnerships with influencers or brands, and algorithm-driven recommendations that increase visibility. Key metrics would include:

- **New User Signups Rate:** The total number of users who create accounts on Instagram over a period of time.
- **Cost Per Acquisition (CPA):** The cost incurred to acquire each new user.

**Activation:** In this stage, new users set up their profiles and start engaging with content after onboarding. This includes completing profile setups and interacting with various features. Key metrics would include:

- **Profile Completion Rate:** The percentage of new users who complete their profile information.
- **Time to First Interaction:** This tracks how quickly a new user engages with content—likes, comments, follows—after signing up.

**Retention:** This stage refers to the platform's ability to keep users engaged over time, ensuring they return and interact with content consistently. Key metrics would include:

- **Monthly Active Users (MAUs):** The number of unique users who engage with Instagram at least once a month, such as by liking, commenting, or posting.
- **User Churn Rate:** The percentage of users who stop using Instagram over a specific period.
- **Session Frequency:** This metric shows how many times a user returns to the app in a given week or day.

**Referral:** This stage refers to the process of acquiring new users through existing users. Success in this stage can be measured through various referral-specific metrics. Key metrics would include:

- **Viral Coefficient:** Measures the number of new users generated by existing users.
- **Net Promoter Score (NPS):** Gauges user satisfaction and the likelihood of recommending Instagram to others.

**Revenue:** This stage considers the platform's ability to generate income through its various monetization channels, including ads, in-app purchases, and partnerships. Key metrics would include:

- **Average Revenue per Creator:** Measures the revenue Instagram generates from its creator ecosystem, divided by the number of active creators. It reflects how creators attract more businesses and users, driving advertising demand and engagement through their content.
- **Average Revenue per Advertiser:** Measures Instagram's revenue generated from advertisers, including paid ads, promoted posts, and brand partnerships on the platform.

**Interviewer:** That's a solid analysis. Now, how would you evaluate reel monetization?

**Parth:** Evaluating reel monetization is important for understanding the revenue potential of this feature. To assess this, we can track the revenue generated from ads displayed on reels. Key metrics to consider include:

- **Ad Impressions:** The total number of times ads are viewed.
- **Click-Through Rates (CTR):** The percentage of users who click on the ads.

- **Revenue Per Thousand Impressions (RPM):** The earnings generated for every 1,000 ad impressions.

By monitoring these metrics through Instagram's ad dashboard, we can evaluate the revenue generation from reel monetization.

**Interviewer:** Excellent. How would you track these metrics effectively?

**Parth:** To effectively track and analyze these metrics:

- Leverage the built-in analytics tools provided by Instagram to track user engagement, follower growth, and content performance. This will give a clear view of key metrics such as Monthly Active Users (MAUs), user engagement, and profile completion rates.
- Create custom dashboards using data visualization tools (such as Tableau or Power BI) to visualize and monitor key metrics in real-time. This allows for quick assessments of metrics like Average Revenue per Creator and Average Revenue per Advertiser.
- Use ad management tools to monitor the volume and revenue generated from sponsored posts, assessing the effectiveness of monetization strategies.
- Finally, utilize Instagram's ad dashboard to track ad performance on reels, evaluating their impact on revenue generation.

**Interviewer:** That sounds comprehensive.

## 4.4 Tata 1mg Success Metrics

**Interviewer:** What would be the key success metrics for Tata 1mg's medicine inventory?

**Aman:** I view inventory management at Tata 1mg as the process of efficiently tracking, storing, and replenishing medicines and healthcare products to ensure that these items are available when needed, while also reducing waste and avoiding stockouts. Is there anything more to it?

**Interviewer:** No, that's comprehensive.

**Aman:** Now, I will outline the key functions of the inventory management system and then establish success metrics for each section.

- **Inventory tracking:** This involves monitoring and updating product quantities and locations to maintain accurate inventory records and prevent discrepancies.
- **Order fulfilment :** This includes receiving and storing inventory, processing and shipping orders to customers, and managing returns as necessary.
- **Replenishment and restocking:** This process involves ordering and receiving new stock as needed to maintain optimal inventory levels.

Is there any other function you would like me to consider?

**Interviewer:** Yes, you can include quality control in your analysis.

**Aman:** Sure, quality control includes ensuring that products meet specific standards before they are stocked or shipped to customers.

**Interviewer:** That's correct! Now you can proceed with defining the success metrics.

**Aman:** The metrics for the corresponding functions are:

- **Inventory Accuracy Rate:** Ensure that our recorded stock levels accurately reflect the inventory in hand.
- **Order Fulfillment Accuracy Rate:** Monitor the accuracy with which medicines are packed and delivered to ensure that customers receive the correct items.
- **Order Processing Time:** Average time from receiving the order from the customer to dispatch from the warehouse

- **Average Time to Receive and Store Inventory:** Ensure restocking processes are smooth and inventory is available on time by monitoring the time taken to receive and store inventory.
- **Stockout and over-stockout rate:** Determine the percentage of times medicines are out of stock and unavailable for orders, while also tracking excessive inventory levels that could lead to unnecessary costs.
- **Storage Condition Compliance Score (SCCS):** This score averages the percentage of time the storage area remains within the recommended temperature and humidity ranges. Calculating SCCS ensures product quality and safety by maintaining optimal storage conditions, reducing spoilage, and ensuring regulatory compliance

**Interviewer:** That seems reasonable. Is there any other metric you'd like to include?

**Aman:** I would also include the expiry or waste rate of medicines as an important metric for the inventory management system.

**Interviewer:** Great! Now, what would you propose as the North Star Metric for this?

**Aman:** The North Star Metric for Tata 1mg's inventory should reflect the primary goal of ensuring the availability and reliability of medicines. I would propose a composite metric that integrates the Inventory Accuracy Rate, Order Fulfillment Accuracy Rate, and Quality Control. This would align with our core objective of efficiently managing inventory to meet customer demand reliably.

**Interviewer:** That sounds comprehensive and aligned with our objectives.

## 4.5 Airbnb Dashboard Metrics

**Interviewer:** As the CPO of Airbnb, what are the metrics you would prioritize on your dashboard?

**Vijay:** Before proceeding, do you mind if I ask a couple of clarifying questions?

**Interviewer:** Sure, go ahead.

**Vijay:** I'm thinking of Airbnb as an online platform that allows users to book short-term accommodations, ranging from private homes to unique stays like cabins or treehouses, in locations worldwide. It connects hosts who want to rent out their space with travellers seeking affordable and personalized lodging options. Users can also book experiences, such as tours or activities, offered by locals in various destinations. Is there anything else you'd like to add or clarify?

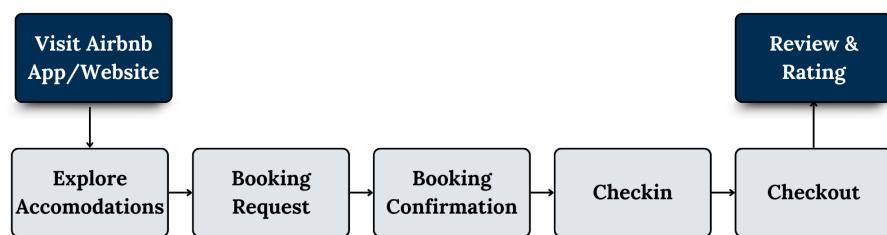
**Interviewer:** For this case, don't consider Airbnb experiences.

**Vijay:** Okay. Why are we looking to prepare a dashboard? Is Airbnb planning to introduce any new features?

**Interviewer:** Airbnb isn't introducing any new features, but it aims to monitor the company's overall health daily.

**Vijay:** Great! To move forward, I will first outline the customer journey, which will help us define the key metrics necessary for effectively tracking the company's overall performance.

**Interviewer:** Okay.



**Vijay:** For evaluation, I would focus on the following metrics for each stage:

**Acquisition:** This stage focuses on attracting new users to the platform. Key metrics to help measure the effectiveness of acquisition strategies:

- **Cost Per Acquisition (CPA):** Measure the cost of acquiring each new user.

- **Click-Through Rate (CTR):** Assess the effectiveness of ad campaigns in driving traffic.
- **Conversion Rate:** Track the percentage of visitors converting to sign-ups or app downloads.

**Activation:** This stage measures how successfully new users are onboarded and start engaging with the platform. Key metrics here would include:

- **User Onboarding Completion Rate:** Measure the percentage of users who complete the onboarding process.
- **Time to First Booking:** Monitor the average time from sign-up to the first booking.
- **Number of Listings Viewed:** Track the number of listings viewed by new users to gauge early engagement.

**Retention:** This stage focuses on keeping users engaged over time and ensuring they continue using the platform. Key metrics for this stage are:

- **Churn Rate:** Calculate the percentage of users who stop using the platform.
- **Customer Retention Rate:** Measure the percentage of users who return after a specific period (e.g., one or six months).
- **Repeat Booking Rate:** Track how frequently users make additional bookings.
- **Monthly Active Users (MAU) & Daily Active Users (DAU):** Measure overall user engagement and activity levels.

**Referral:** This stage assesses the platform's ability to grow through user referrals and the success of referral programs.

- **Referral Rate:** Calculate the percentage of users who refer new customers.
- **Viral Coefficient:** Measure the number of new users generated per existing user through referrals.
- **Cost Per Referral:** Track the cost associated with acquiring new users through referral programs.
- **Referral Conversion Rate:** It measures how many users, after being referred, sign up and complete a booking.

**Revenue:** This stage tracks the platform's ability to generate income and assess user profitability.

- **Average Revenue Per User (ARPU):** Measure the revenue generated per user over a specific period.
- **Gross Booking Value (GBV):** Calculate the total value of bookings made on the platform.
- **Net Revenue:** Account for deductions like service fees and cancellations to get a clearer picture of actual earnings.
- **Lifetime Value (LTV):** Estimate the total profit associated with a user's long-term relationship with the platform.

**Interviewer:** Finally, what key steps do you consider most crucial for Airbnb, and why?

**Vijay:** While all stages are important, I believe acquisition, retention, and revenue are particularly crucial for the overall performance of Airbnb.

Acquisition is essential because bringing in new guests and hosts is crucial for growth. Retention is perhaps the most critical metric, as keeping users engaged and returning is essential for long-term success. High retention rates indicate that users find real value in the platform. Lastly, revenue is the ultimate measure of success, reflecting how effectively we're converting user engagement into financial returns and validating our monetization strategies.

**Interviewer:** How would you ensure that focusing on these metrics drives the right actions within your product team?

**Vijay:** To drive the right actions, I would align each metric with specific goals and actionable insights. For example, if we notice a decrease in activation rates, we would concentrate on improving the onboarding process to increase user engagement. When encountering retention challenges, analyzing user feedback will help us identify and address the reasons behind user churn. By linking metrics to targeted actions and regularly reviewing performance data, we can make informed decisions that lead to continuous improvements in our product and user experience.

**Interviewer:** Okay Great!

## 4.6 Swiggy Performance Metrics

**Interviewer:** Swiggy tracks various metrics to measure its performance. Can you identify some key metrics Swiggy might use?

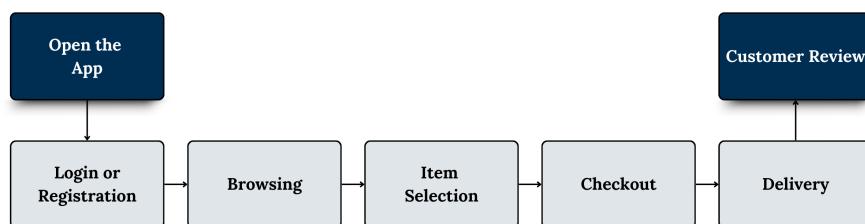
**Alok:** Sure. To begin with, Swiggy is a platform that connects customers with restaurants and provides food delivery through a network of delivery partners. To identify relevant metrics, it's essential to consider Swiggy's key stakeholders: restaurant partners, customers, and delivery partners.

**Interviewer:** Sounds good.

**Alok:** Each stakeholder is crucial to Swiggy's ecosystem, and their experiences affect the platform's performance. So to refine key metrics, we can start by analyzing their journeys. Is there a specific stakeholder you'd like to prioritize, or should I cover all three?

**Interviewer:** For this analysis, focus on the customers.

**Alok:** To gain a clear understanding of key metrics, it's important to first map out the user journey on Swiggy. The typical user journey follows these steps:



In this journey, the user goes through 5 stages:

**Awareness:** This stage focuses on attracting new users to the platform. Relevant metrics for this stage could include:

- **Number of App Visits:** Tracks the volume of traffic visiting the app.
- **Number of New Customers Acquired:** Measures how many new users sign up during this stage.

**Engagement:** In this stage, customers explore the app, browse restaurants, and interact with the platform. Key metrics here include:

- **Average Time Spent on the App:** Measures how long users stay engaged with the platform.
- **Bounce Rate:** Tracks the percentage of users who leave the app without

taking any action.

**Conversion:** After adding products to the cart, the user reviews the cart and checks out. Relevant metrics for this stage include:

- **Cart-to-Order Conversion Rate:** Tracks the percentage of users who complete a purchase after adding items to their cart.

**Retention:** In this stage, Swiggy focuses on encouraging repeat orders by offering personalized deals and maintaining reliable service. Key metrics for this stage include:

- **Repeat Purchase Rate:** Tracks the percentage of customers who place multiple orders over a specific period.
- **Churn Rate:** Measures the percentage of customers who stop using the platform.

**Referral:** In this stage, satisfied customers recommend Swiggy to others, helping to attract new users. Key metrics include:

- **Net Promoter Score (NPS):** Measures customer satisfaction and the likelihood of recommending Swiggy to others.
- **Referral Conversion Rate:** Monitors the percentage of referred users who sign up and place an order.

Together, these metrics ensure that Swiggy delivers a consistent, high-quality experience to its customers.

**Interviewer:** Great analysis! Now how would you measure and address the gap between displayed and actual delivery time, and what key performance metrics would you track to improve delivery accuracy?

**Alok:** To reduce the disparity between the displayed delivery time and the actual delivery time, I'd focus on improving the Estimated Time of Arrival (ETA) by optimizing the delivery process. This involves breaking down the process into three key components: food preparation, the delivery partner's travel to the restaurant, and the delivery partner's travel to the customer's location.

By accurately predicting the food preparation time, we can synchronize the timing of delivery partner assignments, ensuring they arrive at the restaurant just as the food is ready. This approach minimizes waiting times and reduces the gap between expected and actual delivery time.

**Interviewer:** Okay. So, how would you synchronize these activities effectively?

**Alok:** I would implement real-time data tracking and predictive analytics to synchronize these activities effectively. By continuously monitoring the progress of food preparation and the delivery partner's location, we can dynamically adjust the timing of their assignments. The goal is to have the delivery partner reach the restaurant precisely when the food is ready for pickup. Additionally, optimizing the delivery partner's route to the customer's location based on real-time traffic and distance data ensures a smooth and timely delivery.

**Interviewer:** That's right.

# GUESSTIMATES

## 5.1 How to Solve Guesstimates

A guesstimate combines logical guessing and estimation, allowing you to demonstrate your thought process and problem-solving skills. The aim is not to find an exact answer but to explain your reasoning clearly and effectively. Focus on making valid assumptions, securing the interviewer's agreement with your approach, and walking them through your structured thinking. Break down the problem logically, utilize techniques like performing magnitude checks against industry benchmarks, and keep track of your calculations to catch mistakes and adjust your assumptions when needed.

Here are some examples of guesstimates:

- How many smartphones are sold in India per year?
- What is the market size of ride-sharing services in New York City?
- Estimate the number of trees on the IIT Kanpur campus.

The guesstimates can be approached in the following steps:

1. **Clarify the Scope:** Before starting, it's essential to clarify what exactly is being asked. Scoping helps set the boundaries of your estimation:
  - **Ask Questions:** Clarify the criteria for your estimate. For example, if you're estimating the number of coffee shops in New York City, clarify if you should include only branded outlets or independent cafes as well.
  - **Define Exclusions:** Clarify if certain elements should be left out to keep the problem manageable (e.g., excluding part-time users in a market-sizing problem).
2. **Segment the Problem:** Once the scope is clear, break the problem down into smaller parts. This segmentation helps you create a more accurate and reasonable estimate.

- **Identify Starting Point:** Begin with a key data point such as population size, area, or number of households. Identify bottlenecks that limit capacity and flow, such as the number of checkout counters at a grocery store or the seating capacity in a restaurant. These can serve as key starting points for your estimation.
  - **Segment based on Relevance:** Focus on the most relevant segments for your estimates, such as income levels or urban vs. rural areas when analyzing demand for electric cars.
3. **Make Logical Assumptions :** After segmentation, start making reasonable assumptions. Assumptions help fill gaps where data might be unavailable.
- **Apply Benchmarks:** Utilize established benchmarks to simplify estimates. For example, assume the average household size is 4 people or the average car owner uses their vehicle for 2 hours per day.
  - **Use Multipliers:** Break down estimates into smaller, manageable quantities. For example, if estimating the number of shoes sold in a year, assume each person buys 2 pairs annually.
4. **Choose the Right Approach:** There are different approaches to guesstimates, and the right one depends on the nature of the problem:
- **Top-Down Approach:** Start with a large number and break it down into smaller segments.  
Example: Estimate the number of movie theatres in India by first estimating the total population, then segmenting by urban vs rural areas, and finally assuming a certain number of theatres per region.
  - **Bottom-Up Approach:** Start with a specific unit or individual estimate and extrapolate it across a larger population.  
Example: Estimate the number of ice cream cones sold in a city by starting with the sales at one shop and multiplying it by the number of shops.

## 5.2 ATMs in India

**Interviewer:** Guess the number of ATMs in India.

**Alok:** Sure, let's break it down step by step. The total population of India is around 1.3 billion. For this estimation, we assume that 70% of the population is rural and 30% is urban.

**Interviewer:** That sounds right. Let's focus on the ATM estimation for both urban and rural areas.

**Alok:** Okay. Let's proceed by calculating the number of households in both urban and rural areas. Assuming there are 4 people in an average household for simplicity:

- Rural population = 70% of 1.3 billion = 900 million
- Urban population = 30% of 1.3 billion = 400 million

Thus, the number of households would be:

- Rural households = 900 million / 4 = 225 million
- Urban households = 400 million / 4 = 100 million

**Interviewer:** That looks good.

**Alok:** Next, we estimate the number of ATM cardholders in both rural and urban areas. Let's assume:

- 70% of rural households have ATM cards
- 90% of urban households have ATM cards

This gives us:

- Rural ATM cardholders = 70% of 225 million = 160 million
- Urban ATM cardholders = 90% of 100 million = 90 million

**Interviewer:** What would be the next step?

**Alok:** Now, let's account for households with multiple ATM cards. In urban areas:

- Let's assume 10% of urban households have 2 ATM cards, and the rest 90% have 1 ATM card:
  - Total urban ATM cardholders =  $(10\% \times 90 M) \times 2 + (90\% \times 90 M) \times 1$
  - Total urban ATM cardholders = 18 million + 81 million = 99 million
- For rural areas, we can assume that each household has only 1 ATM card:
  - Total rural ATM cardholders = 160 million

**Interviewer:** How do you estimate the number of ATMs based on these numbers?

**Alok:** To estimate the number of ATMs, I would suggest using the ratio of card-holders per ATM. Based on general data, we can assume that in urban areas, 1 ATM typically serves approximately 500 users, while in rural areas, 1 ATM serves approximately 2,000 users.

**Interviewer:** That sounds reasonable. Let's move forward with those assumptions. How would you proceed with the calculations?

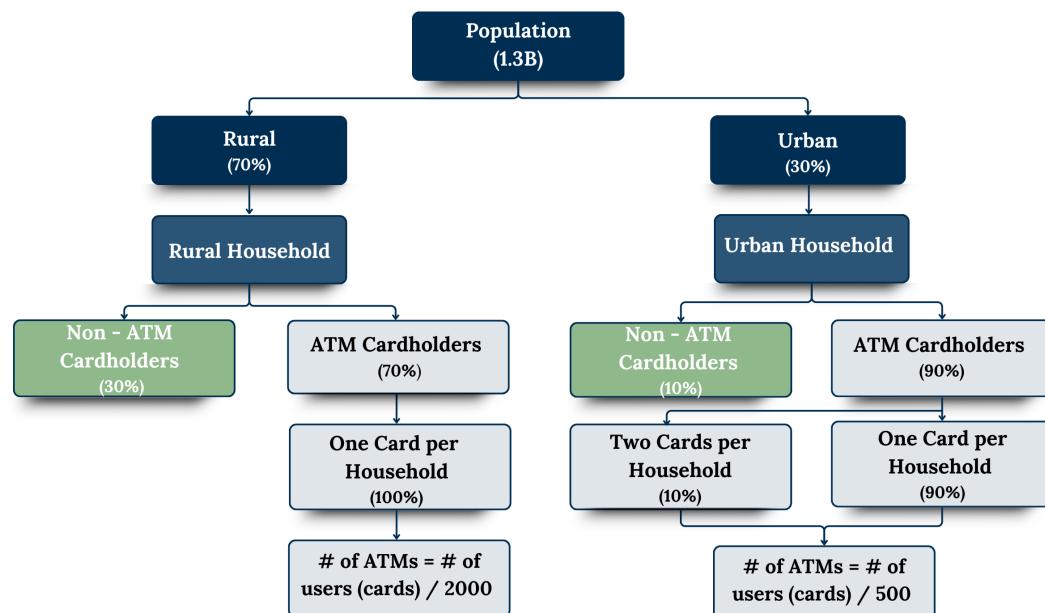
**Alok:** Using these ratios, we get:

- Number of ATMs in urban areas = 99 million / 500  $\approx$  200,000 ATMs
- Number of ATMs in rural areas = 160 million / 2,000  $\approx$  80,000 ATMs

So, the total number of ATMs in India would be approximately:

- Total ATMs = 200,000 (urban) + 80,000 (rural) = 280,000 ATMs

**Interviewer:** That's a pretty solid estimation.



### 5.3 Soaps Bought in Kanpur

**Interviewer:** Estimate the number of soaps bought in Kanpur in a year. Start by stating the factors that can affect this number.

**Shreya:** Sure! The factors that influence the yearly soap consumption are:

- **Population Size:** A larger population leads to higher soap consumption.
- **Income Levels:** Higher income allows for premium soap purchases and possibly higher usage rates.
- **Consumer Preferences:** Health consciousness and awareness can increase the frequency of soap usage.
- **Product Availability:** The accessibility of bar soaps vs. liquid soaps affects consumption patterns.
- **Seasonal Variations:** Although we assume uniform usage, typically hotter weather might increase the frequency of bathing and soap usage.

**Interviewer:** Good points. Now proceed with the estimation.

**Shreya:** I have a couple of clarifying questions. Are we focusing only on soaps used for bathing, or should we include those used for washing utensils or clothes as well?

**Interviewer:** For this estimation focus only on soaps used for bathing.

**Shreya:** Understood. Are we considering both bar soaps and liquid soaps for bathing?

**Interviewer:** Yes, include both.

**Shreya:** Got it. Should I factor in seasonal variations?

**Interviewer:** No, assume the usage is consistent throughout the year.

**Shreya:** Ok. I'm not sure about the population of Kanpur. Should I estimate that as well?

**Interviewer:** Consider Kanpur's population to be the same as Delhi's.

**Shreya:** Understood. Delhi's population is approximately 30 million, so we will consider Kanpur's total population as 30 million. Should I focus only on the urban area of Kanpur?

**Interviewer:** Yes, focusing on the urban area is fine.

**Shreya:** Got it. I'll assume that 30% of Kanpur's population lives in urban areas. That gives us 9 million people in the urban area. To estimate soap consumption, I'll further segment the urban population into three income groups: upper class, middle class, and lower class. Let's assume the distribution is 5% upper class, 30% middle class, and 65% lower class.

**Interviewer:** Sounds reasonable. How will you proceed with the estimation?

**Shreya:** Here's my plan:

1. Upper Class (5% of Urban Population = 450,000 people)
  - Bar Soap Usage: 50% of the upper class prefers bar soap. Typically, one bar of soap lasts two months. Each person uses about 6 bars per year.
    - Total annual bar soap consumption:  $225,000 \times 6 = 1,350,000$  bars.
  - Liquid Soap Usage: 50% of the upper class prefers liquid soap, and a bottle lasts about two months. Each person uses about 6 bottles per year.
    - Total annual liquid soap consumption:  $225,000 \times 6 = 1,350,000$  bottles.
2. Middle Class (30% of Urban Population = 2,700,000 people)
  - Bar Soap Usage: A bar soap lasts about two months. 85% use bar soaps, with each person using about 6 bars per year.
    - Total annual bar soap consumption:  $2,295,000 \times 6 = 13,770,000$  bars.
  - Liquid Soap Usage: 15% use liquid soap, with a bottle lasting three months. Each person uses about 4 bottles per year.
    - Total annual liquid soap consumption:  $405,000 \times 4 = 1,620,000$  bottles.
3. Lower Class (65% of Urban Population = 5,850,000 people)
  - Bar Soap Usage: Bar soap lasts two months. All 100% use bar soaps, with each person using about 6 bars per year.
    - Total annual bar soap consumption:  $5,850,000 \times 6 = 35,100,000$  bars.
  - Liquid Soap Usage: Assumed negligible in this segment due to cost.

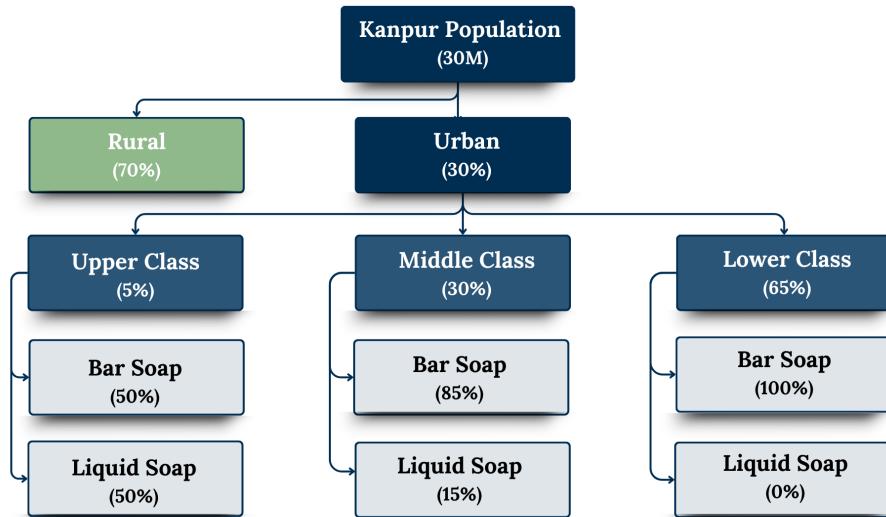
**Interviewer:** Got it. What's the total annual soap consumption?

**Shreya:** Combining all segments:

- Total bar soaps:  $1,350,000 + 13,770,000 + 35,100,000 = 50,220,000$  bars.

- Total liquid soaps:  $1,350,000 + 1,620,000 = 2,970,000$  bottles. So, the estimated total number of soaps bought in Kanpur in a year is approximately 53,190,000.

**Interviewer:** That's a well-structured estimation. Good job!



## 5.4 Pizzas Sold at a Domino's Outlet

**Interviewer:** Estimate the number of pizzas sold in a day at a Domino's outlet.

**Nitin:** Sure, I'll break this down step by step. To start, could you specify the location of the outlet? Sales may vary significantly between big cities and smaller towns.

**Interviewer:** Assume the outlet is located in Delhi.

**Nitin:** Got it. Should I consider both delivery and dine-in sales in the estimate?

**Interviewer:** Yes, include both delivery and dine-in sales.

**Nitin:** Understood. Are there any ongoing promotions or discounts on pizzas that we should account for?

**Interviewer:** Assume that no special offers are currently available.

**Nitin:** Alright. To begin this estimation, I'll make a few assumptions. First, I'll consider the number of stoves available for making pizzas and their utilization rate, as this will help determine the total production capacity.

**Interviewer:** Okay.

**Nitin:** Let's assume that this particular Domino's outlet has three stoves for making pizzas. Typically, two stoves would be dedicated to delivery orders, and one stove would handle dine-in orders. Does this distribution sound reasonable?

**Interviewer:** Yes, that seems fair.

**Nitin:** Next, we need to estimate how many pizzas a single stove can produce in an hour. Assuming the preparation time of one pizza is about 15 minutes, a single stove has a capacity for 4 pizzas at a time. Thus a single stove produces 16 pizzas in an hour. Does that seem like a reasonable estimate?

**Interviewer:** Yes, that works.

**Nitin:** Given that the outlet operates from 11 AM to 11 PM, that's a total of 12 hours of operation each day. For a more accurate estimate, let's break this down into peak and off-peak hours. Assume that 4 hours are peak hours and 8 hours are off-peak hours, with stoves operating at full capacity during peak hours and at around 50% capacity during off-peak hours.

**Interviewer:** That makes sense. How would you calculate the total number of pizzas?

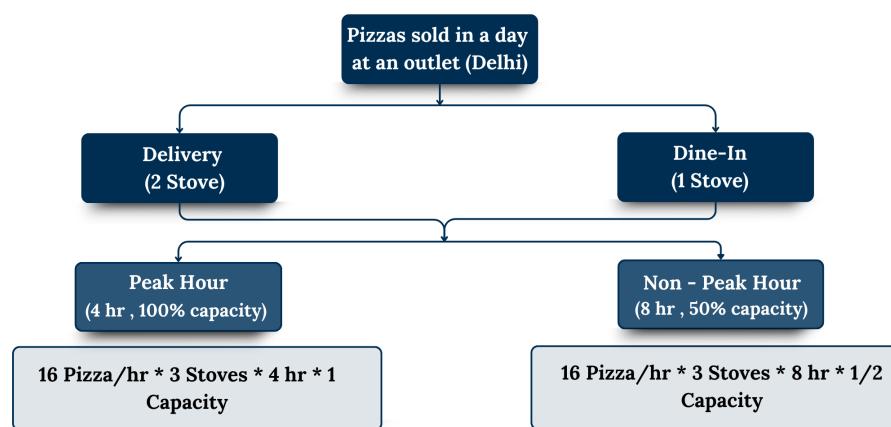
**Nitin:** Here's the breakdown:

- During Peak Hours (4 hours): Each stove produces 16 pizzas/hour.  
Total production = 16 pizzas/hour \* 3 stoves \* 4 hours = 192 pizzas during peak hours.
- During Off-Peak Hours (8 hours): Stoves operate at 50% capacity, producing about 8 pizzas/hour.  
Total production = 8 pizzas/hour \* 3 stoves \* 8 hours = 192 pizzas during off-peak hours.
- Total Pizzas per Day:  
Combined, the total number of pizzas made in a day = 192 (peak) + 192 (off-peak) = 384 pizzas/day.

**Interviewer:** That's a thorough analysis. What other factors could influence this number?

**Nitin:** Several factors could impact this estimate, including special promotions, holidays, local events, and the day of the week, as weekends typically see higher sales. Additionally, the efficiency of delivery operations and staff availability can also influence the number of pizzas produced and sold.

**Interviewer:** Great job.



## 5.5 Credit Cards Issued Annually

**Interviewer:** Estimate the number of credit cards issued in India annually.

**Vijay:** Sure. To confirm, are we focusing only on new credit cards issued, or should renewals be included as well?

**Interviewer:** Yes, focus on new credit cards issued within a year.

**Vijay:** Alright, to approach this problem, I'll start by considering the population of India, which is approximately 1.4 billion. From here, I'll segment the population based on age to identify the potential pool of credit card applicants. Shall I proceed with this approach?

**Interviewer:** Yes, go ahead

**Vijay:** To begin, I'll consider that approximately 30% of India's population is below 18 years of age, as India has a young demographic. This leaves us with 70% of the population as adults, which equates to about 980 million people who are eligible for credit cards. Is this a reasonable assumption?

**Interviewer:** Yes, that seems fine.

**Vijay:** Next, I'll further refine the potential market by segmenting the population based on economic status and location. I'll consider the urban-rural divide, as well as the different economic classes within those segments. I'll assume that 30% of India's population resides in urban areas, and the remaining 70% in rural areas. Is this acceptable?

**Interviewer:** Okay, the segmentation is proper. For this case consider only the urban population.

**Vijay:** Sure, the urban adult population would be 30% of 980 million, which is about 290 million. Within these segments, I'll further categorize them into different economic classes.

In the urban population:

- Upper Class: 30%
- Middle Class: 40%
- Lower Class: 30%

Is this segmentation approach fine?

**Interviewer:** Yes, this is fine.

**Vijay:** Okay. Now for the estimation of the potential number of credit cards issued in urban areas, I'm making a few assumptions. Let's assume urban households typically consist of about three adults. Upper-class families generally have two credit cards and don't change them frequently, likely every five years, since they are less influenced by benefits or rewards. In contrast, middle- and lower-class families usually have one credit card and tend to switch more often, approximately every two years, as they are more driven by discounts and offers. Does this sound reasonable?

**Interviewer:** Yes, that's reasonable.

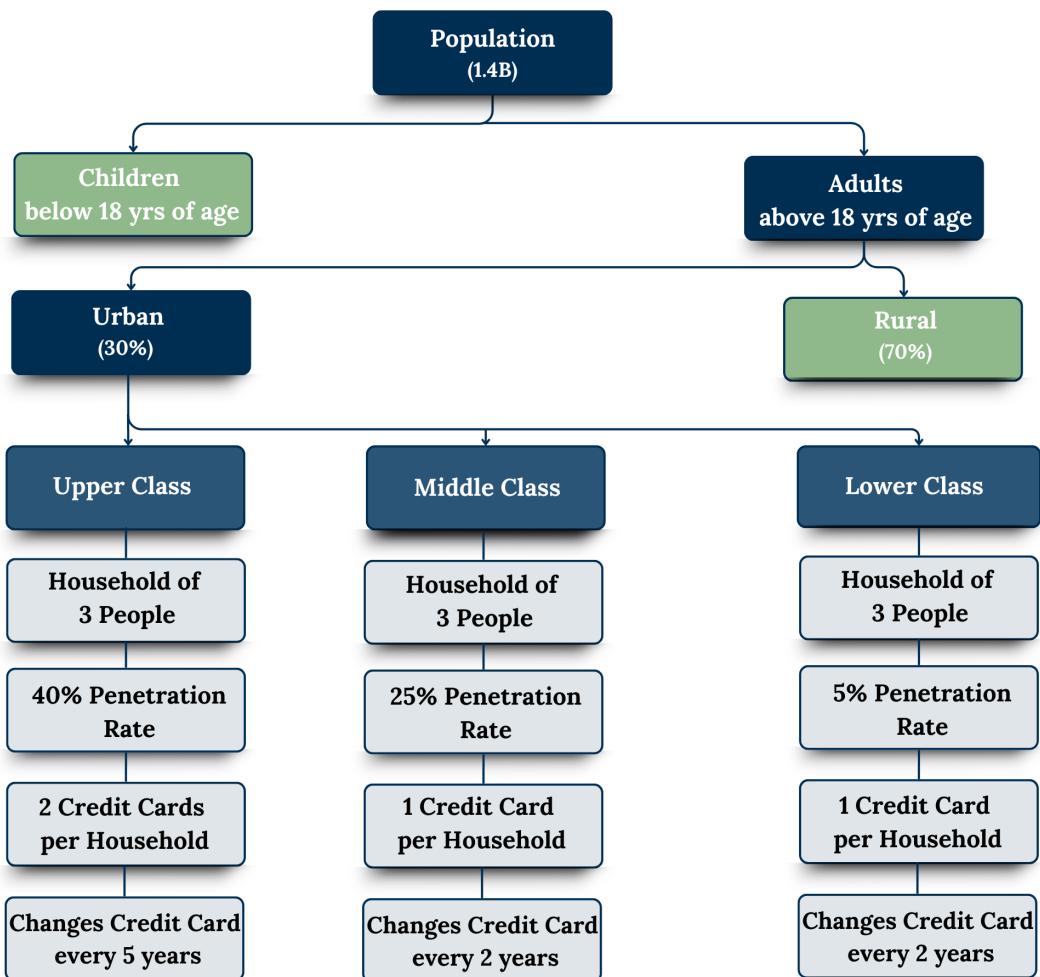
**Vijay:** To calculate the number of credit cards issued, here's the breakdown:

- Upper Class:
  - Population: 30% of 290 million = 90 million people.
  - Households: 90 million / 3 = 30 million households.
  - Penetration: 40% x 30 million = 12 million households.
  - Each household holds 2 credit cards: 12 M x 2 = 24 M cards.
  - If households change their credit cards every 5 years:
    - New cards issued annually = 24 M / 5 = 5 M cards.
- Middle class:
  - Population: 40% of 290 million = 116 million people.
  - Households: 116 million / 3 = 40 million households.
  - Penetration: 25% x 40 million = 10 million households.
  - Each household holds 1 credit card: 10 M x 1 = 10 M cards.
  - If households change their credit cards every 2 years:
    - New cards issued annually = 10 M / 2 = 5 M cards.
- Lower class:
  - Population: 30% of 290 million = 90 million people.
  - Households: 90 million / 3 = 30 million households.
  - Penetration: 5% x 30 million = 1.5 million households.
  - Each household holds 1 credit card: 1.5 M x 1 = 1.5 M cards.
  - If households change their credit cards every 2 years:
    - New cards issued annually = 1.5 M / 2 = 0.75 M cards.

Total number of credit cards issued annually:

$$5 \text{ M (Upper Class)} + 5 \text{ M (Middle Class)} + 0.75 \text{ M (Lower Class)} = 10.75 \text{ M}$$

**Interviewer:** That was a comprehensive approach. Thank you!



# MISCELLANEOUS CASES

## 6.1 How to Approach a Miscellaneous Case

There isn't a predefined framework for addressing miscellaneous product management cases, but the fundamental principles still apply. You need to approach the problem in a structured & logical way. The emphasis should be on thoroughly understanding the following core principles:

- **Understand the Core Problem:** Clarify the exact problem and outline its scope. Understand the goals, target metrics, and key stakeholders involved. Ask clarifying questions to ensure you're focusing on the right issue.
- **Know Your Audience:** Different users have different pain points. Segment your audience (e.g., new users vs. core users) and align your approach to meet both user needs and business expectations.
- **Map the User Journey:** Break down the user experience to identify where the bottlenecks are. Understanding the full journey—from onboarding to engagement—helps focus on the areas where the issue occurs.
- **Identify Key Metrics:** It involves selecting specific, measurable indicators that reflect the performance and success of a product or feature.
- **Weigh Business Trade-offs:** Every decision has a cost. Consider the balance between user experience, business impact, and resource investment. Evaluate the trade-offs before suggesting a solution—will it need too many resources compared to the benefits it offers?
- **Propose Actionable Solutions:** Offer clear, measurable recommendations. Ensure your solution not only solves the immediate problem but also aligns with the long-term product strategy. Clearly outline how success will be tracked.

## 6.2 Instagram Story Duration

**Interviewer:** What is your favourite product?

**Vijay:** My favourite product is Instagram.

**Interviewer:** Why do you like it?

**Vijay:** I love how Instagram blends social interaction with entertainment. It's easy to use, and features like Stories and Reels keep it fun and engaging. Plus, it tailors the experience to each user, making it feel more personal.

**Interviewer:** Great! Now, imagine you're the Head of Product at Instagram, and your team is debating whether to extend the duration of Stories from 24 to 48 hours. Would you approve or reject this proposal? Why?

**Vijay:** Before I decide, can I ask a few questions?

**Interviewer:** Sure, go ahead.

**Vijay:** Stories are meant to be a quick way for users to share moments, but unlike posts, they disappear after 24 hours. Is that right?

**Interviewer:** Yes, that's correct.

**Vijay:** So, the idea is to extend the lifespan of Stories from 24 to 48 hours. Our goal would be to see if this benefits users while staying aligned with our product goals, right?

**Interviewer:** Exactly.

**Vijay:** Our main user base includes regular users sharing their daily moments, as well as creators and brands using Stories for engagement and marketing. Understanding these groups will help assess the impact of this change.

**Interviewer:** How do you determine what they need?

**Vijay:** Regular users like the temporary nature of Stories, which drives quick interaction. For creators and brands, a longer duration could help them reach more viewers and improve engagement. However, we need to be careful not to lose the sense of urgency, which could lead to lower engagement over time.

**Interviewer:** How would you balance their needs?

**Vijay:** We need to find a middle ground. A longer duration could benefit creators and brands, but we shouldn't compromise the experience for regular

users. One option is to beta test the 48-hour duration with a subset of users and gather data. Another idea could be to introduce a "Second Chance" feature, allowing users to re-share their high-performing Stories for another 24 hours without making all Stories last longer.

**Interviewer:** Would you prioritize any group?

**Vijay:** Not necessarily. The goal is to enhance the overall experience. If the data shows that the 48-hour duration boosts engagement, we can lean into it. But if users feel overwhelmed by the extra content, we should reconsider. It's about balancing the user experience with the needs of creators.

**Interviewer:** How would you measure success?

**Vijay:** We'd look at engagement rates—views, replies, interactions—before and after the change. We'd also track metrics like daily active users and time spent on Stories. For creators and brands, conversion rates would be key. User feedback is crucial for understanding their feelings about the change.

**Interviewer:** What about technical challenges?

**Vijay:** Extending the duration means more data storage and server load, especially for high-engagement users and brands. We'd also need to adjust the algorithm to surface 48-hour content.

**Interviewer:** How would you assess the trade-offs?

**Vijay:** I'd focus on whether this aligns with Instagram's vision. If our goal is to keep content fresh and engaging, we don't want to dilute that with longer stories. But if this change improves engagement without causing user fatigue, it could be worth the trade-off. The technical costs, like increased storage, need to be weighed against the potential benefits of higher engagement.

**Interviewer:** What would your final recommendation be?

**Vijay:** I'd recommend starting with a beta test to see how extending story durations affects engagement and user sentiment. If the results show increased engagement without negative impacts, we could roll it out more broadly. If not, we should stick to 24 hours or explore the "Second Chance" feature to give more control over extending story visibility without changing the overall structure.

**Interviewer:** That's a thoughtful approach.

## 6.3 Food Ordering Journey

**Interviewer:** Tell your user journey while ordering food through an app.

**Shreya:** Sure! Can you clarify whether the app is already installed or if I'm downloading it for the first time?

**Interview:** Let's assume you're an existing user with the installed app.

**Shreya:** Okay. Initially, I'll start the app. From there, I'll have a few options depending on what I want. If I have a specific dish in mind, like biryani from a certain restaurant, I'll go straight to the search bar, type in 'biryani restaurant,' find the restaurant I want, select the dish, and proceed to checkout.

**Interviewer:** What other options do you consider?

**Shreya:** If I'm open to options and don't have a specific restaurant in mind, I'll start by typing a broad term like 'biryani' into the search bar. The app would then show a list of restaurants offering biryani. From there, I could browse through the choices and select a restaurant based on reviews, ratings, or my past favourites.

If I'm just browsing with no particular dish in mind, I'll start on the home screen and look through the carousel of offers and featured items. This section often highlights promotions and popular choices, such as special deals at Pizza Hut or discounts at other restaurants. I'd browse through these to see if anything catches my eye.

**Interviewer:** Once you've decided on your order, what would you do next?

**Shreya:** After selecting an item, I'll add it to my cart. I'll then review the cart to ensure everything is correct. At this stage, I'll also check for any available coupons or discounts that could be applied. Additionally, I'll make sure to select any required cutlery options if the app offers them.

**Interviewer:** Can you elaborate on the checkout process?

**Shreya:** Certainly. Once everything in the cart looks good, I'll proceed to the payment options. This step involves selecting a payment method, such as a credit card, debit card, or digital wallet. After completing the payment, I'll confirm the order. The app would then provide an estimated delivery time and keep me updated on the status of my order.

**Interviewer:** What if there were issues or additional requirements during the

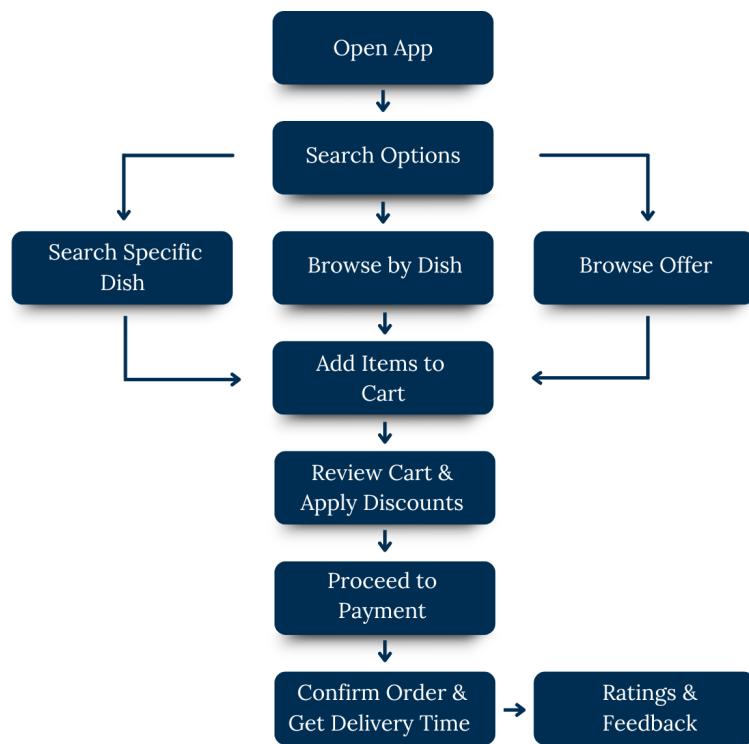
process?

**Shreya:** If any issues come up, like a payment failure or a need to change the delivery address, the app provides options to resolve these issues quickly. It would also be helpful to have customer support accessible through the app if needed.

**Interviewer:** Is there anything else you'll consider in designing this user journey?

**Shreya:** Yes, after completing the meal, I'll want to rate the restaurant based on the food quality and taste. This rating system would not only provide feedback to the restaurant but also help other users make informed decisions.

**Interviewer:** Great insights!



## 6.4 Flight Delay Management

**Interviewer:** You work at the boarding gate of an airport and one flight has been delayed. The passengers are getting increasingly frustrated. What would you do in this situation?

**Nitin:** First, I'd like to understand the cause of the delay. Could you please tell me why the flight is delayed?

**Interviewer:** The flight is delayed due to severe weather conditions at the destination airport.

**Nitin:** Understanding that safety is the top priority, we need to manage the passenger's frustration and provide them with alternative solutions. Let me break down my approach:

First, it's vital to communicate transparently with the passengers. I would make an immediate announcement explaining the cause of the delay. The communication will emphasize that the delay is necessary for their safety, which should help calm some of their frustration.

**Interviewer:** That makes sense. But what if the delay continues for a longer period? How would you handle the needs of different passengers?

**Nitin:** At that point, I'd want to get a sense of who needs what kind of assistance. I'd suggest a quick digital or physical survey to understand the specific needs of the passengers. We could categorize them into four main groups:

- **Elderly & medically urgent passengers:** Individuals with health issues or age-related concerns who require special assistance during travel.
- **Business travellers :** Professionals attending meetings or work-related events, typically balancing tight schedules.
- **Tourists:** Travelers exploring new destinations, often with a fixed itinerary but open to adjustments based on circumstances.
- **Flexible travellers :** Individuals with non-urgent schedules who can easily adapt their travel plans, often prioritizing convenience over strict timelines.

**Interviewer:** Interesting. How would you cater to these different groups?

**Nitin:** I'd tailor solutions based on their needs.

- For **elderly & medical passengers**, it's essential to arrange alternative

flights or transport options whenever possible to minimize delays. Providing access to more comfortable waiting areas, such as lounges, can help them relax during their wait. Additionally, offering immediate assistance for any medical needs, including access to medical personnel or supplies, ensures that their specific requirements are met promptly.

- For **business travellers**, prioritizing rebooking on the next available flight is crucial to minimize disruptions to their schedules. Access to business lounges equipped with Wi-Fi, charging stations, and workspaces allows them to maintain productivity while they wait.
- **Tourists** can be provided with meal vouchers or discounts at airport restaurants. We could provide them with the earliest easy rebooking options and discount vouchers, allowing them to adjust their itineraries seamlessly.
- For **flexible travellers**, providing compensation such as travel vouchers or discounts on future flights serves as a goodwill gesture that acknowledges their patience. Small tokens of appreciation, like gift cards or airport shopping discounts, can enhance their overall experience.

**Interviewer:** What if some passengers become frustrated or angry? How would you handle that?

**Nitin:** That's where empathy and personal attention come into play. I'd set up a dedicated customer service desk near the gate with trained staff to handle concerns face-to-face. It's important to make people feel heard and understood. At the same time, I'd keep providing regular updates about the situation—estimated departure time, weather conditions, and what we're doing to resolve the delay. It helps passengers feel informed and reduces anxiety. And finally, small comforts like refreshments or comfort items can go a long way in calming people down and making them feel taken care of.

**Interviewer:** How would you ensure that all of this is implemented effectively?

**Nitin:** It's all about coordination. I'd work closely with both the airport management and the airline's customer service team to make sure everything runs smoothly. For example, we'd need to coordinate lounge access, rebooking options, and distributing vouchers. I'd also continuously monitor the weather situation and adjust our plans accordingly. Effective teamwork and communication are essential. Additionally, I'd set up a feedback loop—either through a

quick survey or direct feedback from passengers—so we can gauge their satisfaction in real-time and make adjustments if needed.

**Interviewer:** That's a solid plan. Is there anything else you'd do after the situation is resolved?

**Nitin:** Yes, I'd conduct a post-event debrief with the team. We'd analyze what went well, what didn't, and how we can improve for next time. The feedback from passengers would be valuable for this too. It's all about continuous improvement, making sure we're even better prepared for future cases.

**Interviewer:** Great! You've covered both the operational side and the customer experience well.

## 6.5 Kitchen Preparation Time

**Interviewer:** Zomato tracks kitchen preparation time. What factors do you think might affect this preparation time?

**Shreya:** I'd define kitchen preparation time as the duration it takes for a restaurant to prepare an order before it is picked up for delivery. It's a crucial metric that impacts both the customer experience and overall efficiency in the restaurant. Is this fine?

**Interview:** Yes, proceed further.

**Shreya:** I'd break down the factors into two categories: internal and external. Internal factors are things that are directly within the restaurant's control, like the complexity of the dish, the number of staff, and the condition of the equipment. External factors are more situational, like power outages, order volumes, or issues with ingredient supply.

**Interviewer:** Let's dive into the internal factors first. What do you think has the biggest influence?

**Shreya:** The complexity of the dish is probably the most significant. Dishes that require multiple ingredients, advanced cooking techniques, or longer cooking times will naturally take longer to prepare. For example, something like a biryani would take much longer than a simple salad or sandwich.

**Interviewer:** Right, that's straightforward. What about other internal factors?

**Shreya:** Another key factor is the kitchen staff. The number of chefs on duty and their level of experience can significantly impact how fast orders are prepared. An experienced, well-coordinated team can operate efficiently, speeding up preparation time. Conversely, understaffed or inexperienced team can cause delays.

**Interviewer:** Makes sense.

**Shreya:** The condition and layout of kitchen equipment are also crucial. If the kitchen is equipped with modern, well-maintained appliances, it speeds up the process. Outdated or malfunctioning equipment can slow things down. Also, restaurants with large or diverse menus might struggle more because they have to manage a wide variety of dishes at once.

**Interviewer:** Good points. Now let's talk about external factors. What can impact kitchen prep time from outside the restaurant?

**Shreya:** Power outages are a major issue. Without a reliable backup, kitchen operations might come to a halt, causing significant delays in orders. High order volumes, especially during peak times, can also slow things down. Additionally, ingredient shortages or delivery delays disrupt kitchen efficiency.

**Interviewer:** Given all these factors, how would you manage or mitigate these challenges?

**Shreya:** To manage these challenges, I would suggest the following solutions:

- **Inventory management:** Implement a robust system to track ingredient availability and predict demand accurately. This ensures that ingredients are always in stock, minimizing disruptions caused by missing items.
- **Staff optimisation:** Analyse order trends and implement a dynamic staffing system to ensure that the right number of chefs are available based on real-time demand and expected peak times. Training programs to enhance staff skills can also lead to faster preparation time.
- **Equipment maintenance and workflow optimization:** Regular maintenance of kitchen equipment is critical to avoiding downtime. Restaurants should also consider optimizing kitchen layouts to reduce unnecessary movement and streamline the cooking process, allowing for faster preparation times.
- **Menu management:** Simplifying the menu or categorizing dishes based on preparation time can help streamline operations. Highlighting quick-preparation dishes allows the kitchen to manage time better and can help balance the kitchen workload more effectively.

**Interviewer:** That's helpful. How would you handle peak times specifically?

**Shreya:** Kitchens can adopt the practice of preparing ingredients for common dishes in advance. For high-demand items, kitchens can use batch cooking methods during peak times to ensure quicker fulfilment. On top of that, using kitchen display systems can streamline communication between the front-of-house and back-of-house, thus improving efficiency. Using dynamic staffing could also help in handling such peak hours.

**Interviewer:** And what about customer expectations? How would you manage that during busy times?

**Shreya:** Communication is key here. Setting clear, realistic waiting times in the app during busy hours can help manage expectations and reduce frustration. Customers are more likely to be patient if they know exactly how long their food will take. Also, using in-app notifications to inform customers if there's a delay and offer compensatory incentives, such as discounts on future orders can help to maintain customer satisfaction.

**Interviewer:** Great suggestions. Anything else you'd like to add?

**Shreya:** I'd say continuously reviewing customer feedback is vital. It helps pin-point operational bottlenecks and gives insight into what's working and what's not. Over time, this helps refine the preparation process and ultimately improves the customer experience.

**Interviewer:** Great analysis! Thanks for sharing your thoughts!

# MEET OUR TEAM

## Team 2023-24



**Utkarsh Gupta**



**Rutvik Nawade**



**Nishita**

## Team 2024-25



**Nishant Verma**  
Coordinator



**Keerthi Chandra**  
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**Varad Sikchi**  
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**Pranjali Singh**  
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**Abhishek L | Chirag Goyal | Dipanshu Raj | Harisen**

**Mahi Mittal | Mukund Singhal | Nakul | Neeru Nagra | Tanmay**

*Thankyou & All the Best*