

This was a recent case study I was asked to complete as part of the interview process a company I was talking with.

I never had the chance to present it as the day after submitting I was informed they hired an internal candidate.

The company I was interviewing with was not Uber.

Product Manager Case Study (Uber)

Prompt

You are a product manager at Uber and your goal is to improve the first-time booking experience for new riders. Through data analysis, you have identified that the manual rider verification process is the main pain point that needs improvement. Attached to this prompt, you will find the current state user flow for the rider verification process.

How can you streamline the rider verification process to make it faster for new riders to book their first ride on Uber, while ensuring security and compliance?

Deliverable

A concise document or google docs (2-4 pages) outlining the proposed solution. This may include:

- An explanation of how you plan to improve the current process
- User stories or mockups to illustrate the user flow
- Technical and design requirements, testing criteria, and maintenance and support needs (if applicable)
- Your evaluation of using third-party API services (like Twilio), in-house development or another option and a justification for your choice
- A rollout plan that considers potential risks, impact, and customer experience considerations

What this is NOT

A product vision exercise

A market research or competitive assessment activity

A multi-day effort

Notes

We are not looking for a solution. It's more about how you think about solving a problem and your ability to communicate your ideas effectively. Most of all, have fun! Good luck.

Case Study

Streamlining the Rider Verification Process at Uber

By

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Improve the Rider Verification Process at Uber

Problem:

The current process for rider verification is manual and limiting, resulting in a significant bottleneck for new riders.

Proposed solution:

2-step verification: Strike a balance between security, compliance, and user experience.

Step 1: Automated identity verification

Implement automated identity verification by leveraging artificial intelligence (AI) and machine learning (ML) algorithms. These technologies can swiftly process ID documents (i.e. driver's licenses, passports), facial recognition, and additional biometric data.



Step 2: Selfie verification

Utilizing Plaid's "selfie verification" facial comparison and 3D facial landmark analysis, selfie verification provides a second layer of security by comparing the uploaded selfie to the image from the verified ID. More on Plaid's services [here](#).

Goal:

The success of the process can be measured by the reduction in time needed for verification and the increase in successful first-time bookings while still maintaining a high level of security.

Technical & Design Requirements; Testing Criteria

Design Requirements: A simple, intuitive UI, clear instructions for verification process, and design considerations for accessibility.

Testing Criteria: Usability testing during the design phase to gain user feedback, verify each user story, writing automated tests whenever possible, and end-to-end pressure-test to ensure the solution is scalable.

Technical Requirements: AI/ML capabilities for automated ID verification, robust backend to handle these processes, and secure servers to maintain user data. Solution shall adhere to local laws and regulations. Available on Android, iOS, and as a web app.

Build vs. Buy: While in-house development offers more control, portions of these requirements would require substantial resources and time. Given the complexity of the ID verification process, it would be beneficial to leverage a third-party service like Plaid, which already offers robust identity verification services that can return results in less than 30-seconds and is available in 200 countries and territories. Using Plaid would accelerate the development and rollout process and allow us to leverage their expertise in this domain. More information on Plaid's "Identity Verification" and "Selfie Verification" [here](#).

Uber:

- On-device image upload and quality check
- ID duplication check
- Fallbacks, exceptions, and failure reasons within UI
- Document and ID storage
- Selfie upload
- User's verification results/history
- Human review of unsupported document types (rare)
- Human review of selfie declines (rare)

Plaid:

- ❖ Document:
 - Support verification
 - Classification
 - Fraud detection
 - Authenticity check
 - Transcription
- ❖ "Selfie verification"

User Stories, Tech Tasks, & Workflow

As a New Rider:

- I want a quick and easy sign-up process so that I can book a ride quickly
- I want to upload any form of state or nationally issued ID to verify my identity
- I want to know the reason at the time my ID is rejected
- I want to re-upload my ID when my ID is rejected
- I want to be assured that my personal information is secure when I sign up
- I want all messaging to appear in my selected dialect
- I want to know the reason at the time my selfie isn't able to be verified

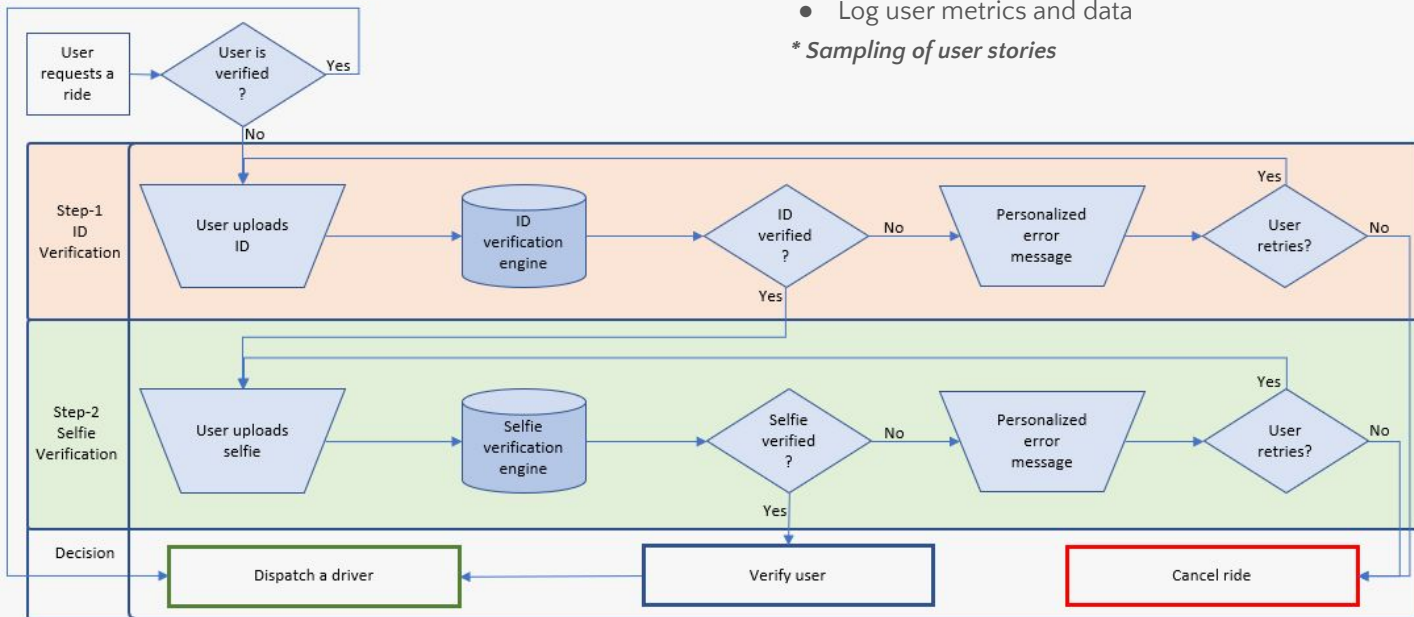
As an Identity Manager:

- I want a Support team member to review any images the verification engine can not verify
- I want any ID already in use to be rejected
- I want new riders to provide a selfie to verify they are the person in the ID

Tech tasks:

- Integrate with Plaid APIs and SDK
- Store unique user ID and verification info
- Store uploaded images for 120-days
- Store verification reason codes per user
- Log user metrics and data

** Sampling of user stories*



Rollout Plan

Phase 1: Dev & Test

- Develop the new verification process
- Rigorous testing, both internally and with a select group of beta users
- Train Support Team on new processes
- Collaborate with Marketing and Sales to update collateral



Phase 2: Pilot

New users on Android devices in **Bahamas** (98), **Jamaica** (87), and **Puerto Rico** (86)

Success:

- >95% new riders successfully verified
- Verification lead time of <90 seconds



Phase 3: Partial Rollout

New users on Android, iOS, and web app in **Canada** (33)

Success: >99% new riders successfully verified



Phase 4: Full-Roll P1

New users on Android, iOS, and web app in the **US** (3); gateway to GA

Success: >99.99% new riders successfully verified



Phase 5: Full Rollout

Additional countries will be added until the solution is fully deployed.

Success: Deployed in every country Uber is available

Potential risks: Possible pushback from users due to privacy concerns, potential technical issues with new system, latency on image upload, and possible compliance issues depending on region.

Impact: Improved user experience, faster verification, increased safety & security for both riders and drivers, and potentially more first-time bookings.

Customer experience considerations: Ensure the process is user-friendly, provide clear communication about what data is being collected and why, and offer robust customer support throughout the process.

Thank You