

nextleap
Product Manager
Fellowship

Graduation Project

Reducing Ride Cancellations in OLA



ola



Overview



India's largest ride-hailing platform, offering a wide range of mobility solutions, diversifying travel options across borders in one of the world's most rapidly scaling industries.

Problem Statement

User Research

Problem Definition

Proposed Solution

Key metrics

Products & Services (*Start/Acquired/Investment year)



Ride-Hailing
(Cab-aggregator)
*2010



Ola Electric
(Electric Vehicles)
*2017



Ridlr
(Public Transport app)
*2012



Vogo
(Scooter sharing)
*2018

Key Statistics

250+ Cities

India*, Australia, UK, NZ

10 Cr+

Registered Users

15 Lac+

Driver Partners

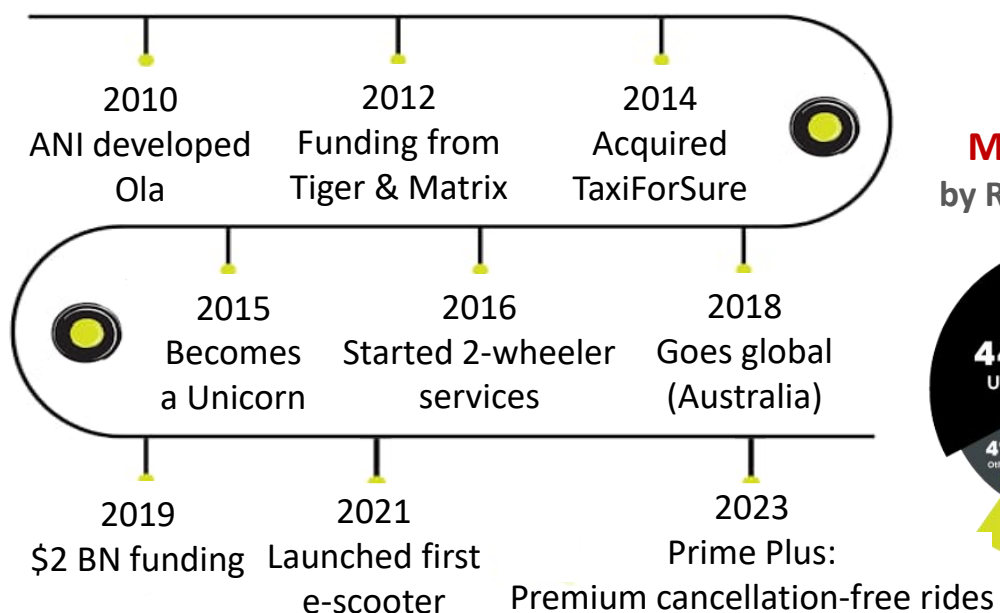
100 Cr+

Rides every year

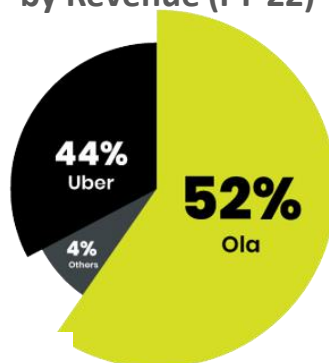
*Ola took over India before it expanded to other countries

Source

Timeline



Market Share by Revenue (FY'22)



Source



Business & Revenue Model: OLA

Ola's business model centers on:

- Average of **15-20% commission** from each ride, calculated fares based on time and distance
- Additional fees for advanced bookings and airport services
- **Surge pricing during high-demand** periods
- Convenience fees for specific pick-up and drop-off locations

SWOT Analysis



STRENGTHS

- First Mover: Early entry in India.
- Product Range: Offers wide range vehicles, bikes to luxury cars.
- Tech-Savvy: Uses advanced data analytics.

- Global Reach: Expanding internationally.
- Diversification: Into electric vehicles and food delivery.



OPPORTUNITIES

*India

WEAKNESSES

- Control: Limited oversight on drivers.
- Customer Support: Below-par service.
- Internet Reliance: Needs stable internet.

- Regulations: Issues like London license.
- Competition: From other ride-hailing services.
- COVID-19: Potential impact on business.

THREATS

Competitor Analysis

Year of Inception*
of cities
Google play rating
Local Courier (Parcel)



2010

250+

4.3/5

NO

Uber

2013

150+

4.1/5

Yes



2015

100+

4.6/5

Yes



Problem Statement

Persistent high rates of **ride cancellations**, eroding user trust and creating financial & operational inefficiencies in Ola.

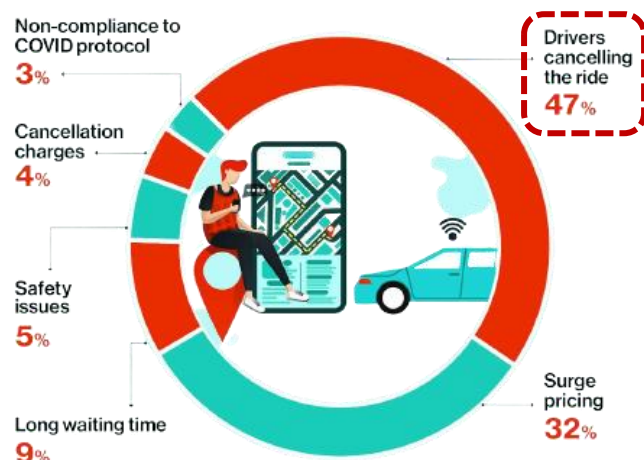
When Do Cancellation Charges Apply?

- ✓ Rider cancels after cab arrival
- ✓ Driver cancels after 5-min wait

79%+

Of user complaints are about ride cancellation

Top concern for App-based Cab users



Source

Cost of rising Ride Cancellation

Financial Impact

- Lost revenue from service fees
- Lost future opportunities in Cross-Promotions.

User Experience

- Erosion of trust and reliability
- Negative influence on ride wait times

Operational Impact

- Need for real-time re-routing and its computational cost
- Additional strain on customer service

Long-Term Impact

- Loss of competitive edge in market
- Lowered Net Promoter Scores (NPS)
- Regulatory intervention

INSIGHTS
Ola, Uber may soon face fines for frequently cancelling rides in Maharashtra
November 1, 2023

Business to Product Outcomes

Link →

Reduce Ride Cancellations

rides canceled by Drivers

rides canceled by Passengers

rides canceled due to Platform Malfunctioning

Proposed Solution

Key metrics



User Personas



Driver Persona: Ramesh

- **Age:** 35 years, 3yrs Ola experience
- **Tech Comfort:** Less tech-savvy
- **Goals:**
 1. Maximizing daily earnings.
 2. Having clear, hassle-free rides.

Pain Points:

- Unclear payment methods
- Unsure of real-time ETAs
- Quick ride acceptances lead to uninformed choices.
- Stressed about having a high rating



Rider Persona: Priya

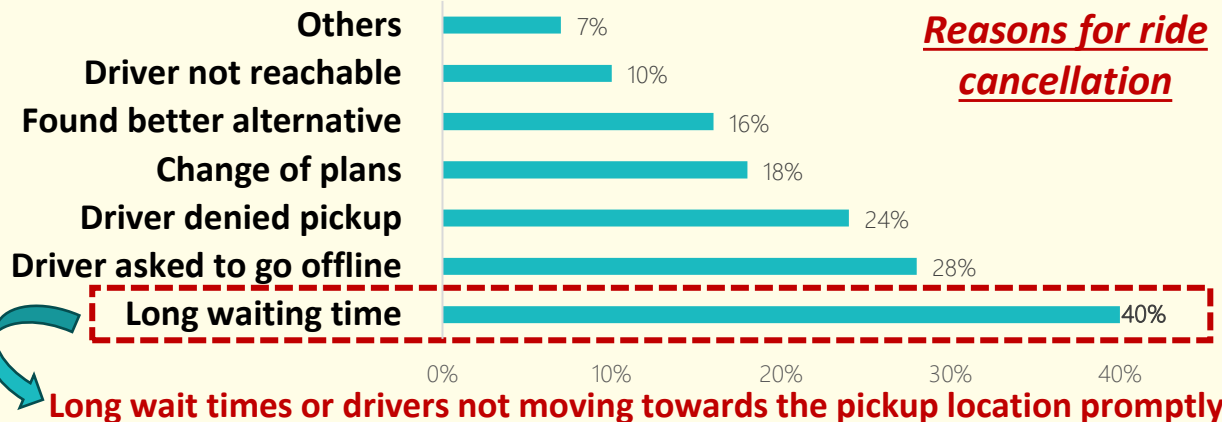
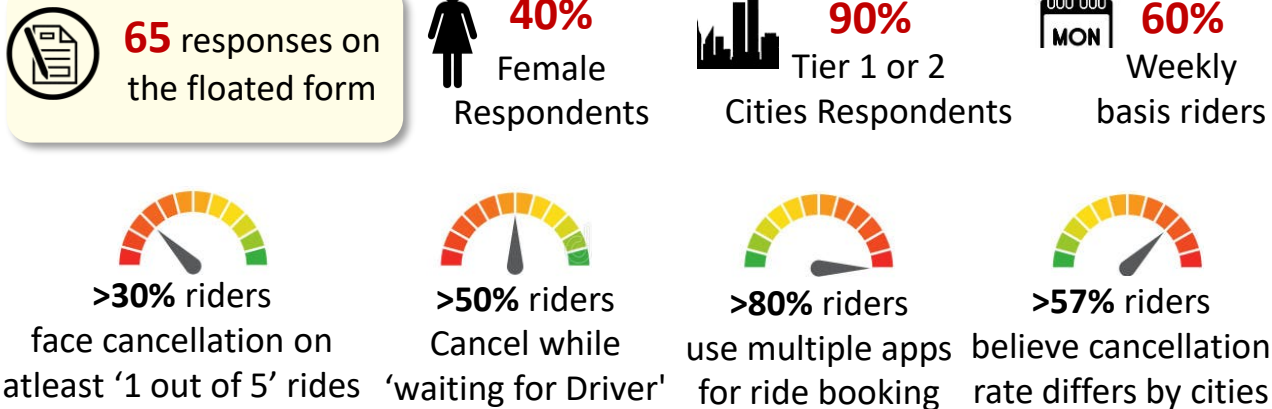
- **Age:** 28 years
- **Tech Comfort:** Tech-savvy
- **Goals:**
 1. Safe and timely travel.
 2. Transparent ride experiences.

Pain Points:

- Frequent ride cancellations
- Finding a ride during peak hours
- Payment disconnect with drivers
- Unexpected fare surges
- Ensuring safety during night rides

Riders Survey Insights

[Survey Link](#)

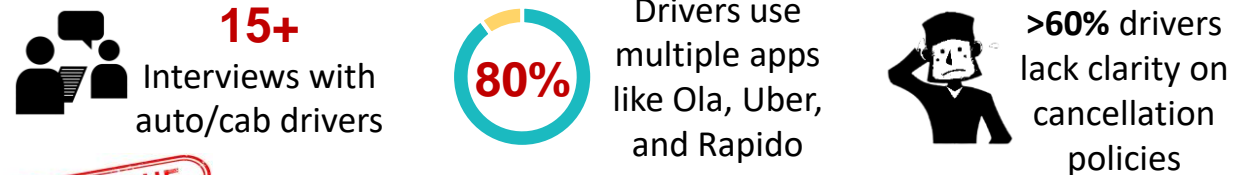


Suggestions from Riders

Strict policies for drivers: If a driver accepts the ride, then he should not be allowed to cancel

Transparency & Improved communication: After booking a ride, an assurance call from the driver could be useful

Driver Interview Insights



KEY ISSUE

>85% Drivers acknowledged **Drivers rush to accept the rides (due to FCFS system), without checking destination & payment mode, leading to cancellations, if the factors don't meet their preferences.**

Long-Distance Aversions: 10/15 drivers avoid lengthy routes due to risk of cancellations from rider side, fuel prices surge and traffic bottlenecks.

App Multiplicity: 12/15 drivers juggle between apps like Ola, Uber, and Rapido, often leading to cancellations for a better fare.

Payment mode: Prefer cash payments for immediate expenses like refueling.

"Traffic uncertainty & multiple app options for riders make long routes risky."

Google Map Inconsistencies: 9/15 drivers observed a change in ride distance post accepting, leading to unpredictability.

Contact Hurdles: 5/15 drivers face cancellations due to unresponsive riders.

"When I see a different distance after accepting a ride, I feel cheated."

Rating Impact: Only 5/15 drivers are fully aware of the repercussions of cancellations on their ratings and incentives.

Mixed Opinions: Drivers often have conflicting views on platform policies.

"I just learned that too many cancellations could suspend my account!"

Problem Identification: Understanding the multi-faceted Ride Cancellation issues in OLA

What is the true Problem?		Who are the customers facing the problem?	How do we know it is a real problem?
Riders	<div>1. Longer wait times in arrival of rides</div> <div>2. Multiple options availability, i.e., better price, quicker rides on competitor apps</div> <div>3. Driver’s asking for offline ride at the same price to avoid commission</div>	Riders <div>1.Urban Professionals: Rely on Ola for daily commuting, highly time-sensitive.</div> <div>2.Students: Budget-conscious, short distance trips.</div> <div>3.Tourists: Unfamiliar with the city, dependent on reliable service.</div>	Primary Research <div>•30%+ of riders face cancellations frequently due to long wait times & driver non-compliance.</div> <div>•On the driver side, there's a clear aversion to long-distance routes and multiple app usage, leading to cancellations.</div>
	Drivers <div>1. Rash acceptance of rides by drivers, especially during peak hours without looking at the basic ride information</div> <div>2. Better ride request at competitor app before picking up the accepted ride</div>		
What is the value generated by solving the problem?			Why should we solve the problem now?
For Consumers <div>•Riders: Enhance reliability, leading to increased usage, translating to cost and time efficiency. With fewer cancellations, Ola can better utilize data analytics to offer more personalized ride options.</div> <div>•Drivers: More completed rides means better earnings, resulting in less time and fuel spent on rides that get canceled leading to higher job satisfaction.</div>		For Business <div>•Revenue: A decrease in cancellations directly correlates with increased revenue.</div> <div>•Brand Equity: Solving this issue will significantly improve Ola's brand image, making it more competitive in the market.</div> <div>•Customer Service: Fewer cancellations mean less strain on customer service, reducing operational costs.</div>	<div>•Market Dynamics: Ride-sharing market is projected to grow rapidly with a CAGR of 48.5% from 2022-30, and is becoming increasingly competitive.</div> <div>•Brand Enhancement: Diversifying into electric scooters and push from govt. to use shared mobility, resolving this issue can improve brand perception.</div> <div>•Technological Capability: Advances in data analytics, ML & AI, equip us to address this issue effectively.</div>

Source

Designing
Solution

1

Dynamic ML-driven
Ride Allocation

An **ML algorithm** that allocates ride requests to drivers based on **multi-factors** like proximity, historical acceptance rates, real-time traffic, and demand patterns.

2

Mandatory Preview Window
with Enhanced Info. Display

Introduce a 3-second "**Preview Window**" for drivers per ride request. This pause allows a review of destination, payment mode, and **traffic-adjusted ETAs**. **Post-window, drivers can accept or reject the ride.**

3

Driver Incentive
Re-Design

Revamp the driver compensation model to **directly link a portion of their earnings with their cancellation rates**, using a system of rewards and penalties to lower cancellations.

Solution

How it Solves?

Risk/Challenges

- ✓ Batches ride requests to drivers, **prioritizing drivers more likely to complete rides.**
- ✓ Reduces hasty acceptances and subsequent cancellations.

- ❖ Effective algorithm performance relies on accurate and up-to-date data collection.
- ❖ Real-time variables increase the system's computational needs, which could lead to latency.

- ✓ Brief pause lets drivers digest key info, **reducing rash acceptances** and cancellations.
- ✓ Traffic-adjusted ETAs and payment clarity offer **accurate commitments**, minimizing delays.

- ❖ Added seconds could impact ride confirmation time, needing ongoing monitoring.
- ❖ Real-time ETAs increase system demands, requiring reliable and fail-safe mechanisms.




- ✓ Financial incentive makes drivers cautious about ride acceptance and completion.
- ✓ Enhances service reliability, leading to increased customer satisfaction and loyalty.

- ❖ Initial resistance from drivers used to current incentive model.
- ❖ Balancing the new incentives such that they are compelling but not financially draining for Ola.

Prioritising
Solution

	Dynamic ML-driven Ride Allocation	Mandatory Preview Window with Enhanced Info. Display	Driver Incentive Re-Design
(R)each	Medium(6), affecting all drivers but requires data collection.	High(9), immediately visible to all drivers.	Medium(7), affect drivers but may face initial resistance.
(I)mpact	High(7), could significantly reduce cancellations.	Medium(6), would reduce but not eliminate cancellations.	High(8), financial incentives are powerful motivators.
(C)onfidence	Medium(5), require complex data science.	High(8), technologically simpler to implement.	Medium(6), requires a complete overhaul of existing incentive system.
(E)ffort	High(8), extensive data collection and algorithm development.	Low(4), a simple feature to add in Ola app.	Medium(5), requires creating awareness & incentive system revamp.
Score (R x I x C)/E	26.25	108	67.2

Impacts of Modified Preview Window

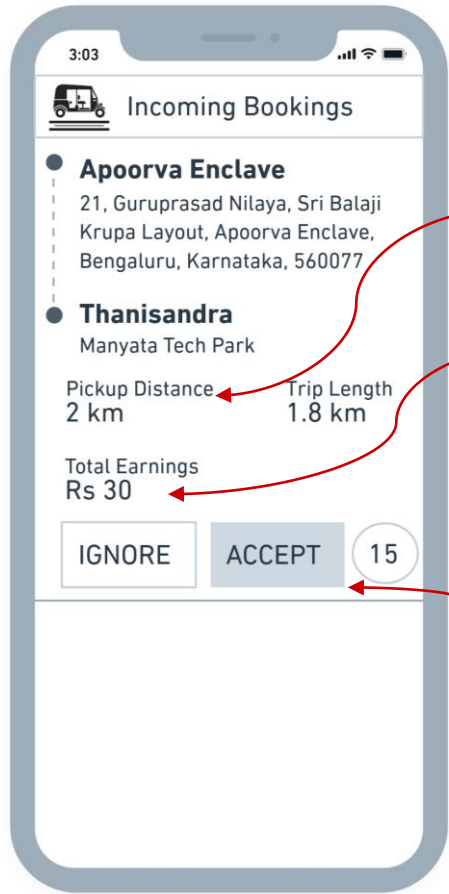
- **Pause on Acceptance**
Enforced 5-second pause ensures drivers fully review ride details, thereby reducing rash cancellations.
- **ETA for Pickup**
Estimated time to pickup offers a quick traffic snapshot, aiding drivers in minimizing cancellations due to route issues.
- **Payment Mode**
Displaying payment method upfront allows drivers to align ride acceptances with their payment preferences, reducing financial-based cancellations.



Mandatory Preview Window with Enhanced Info. Display

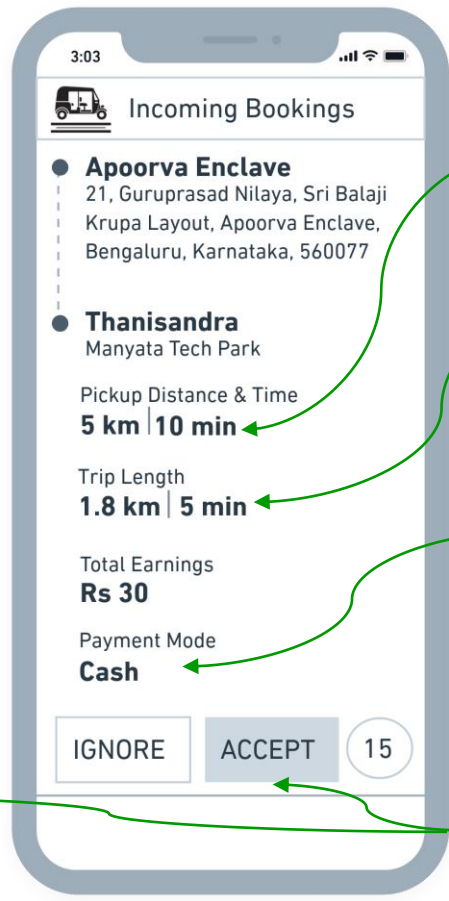
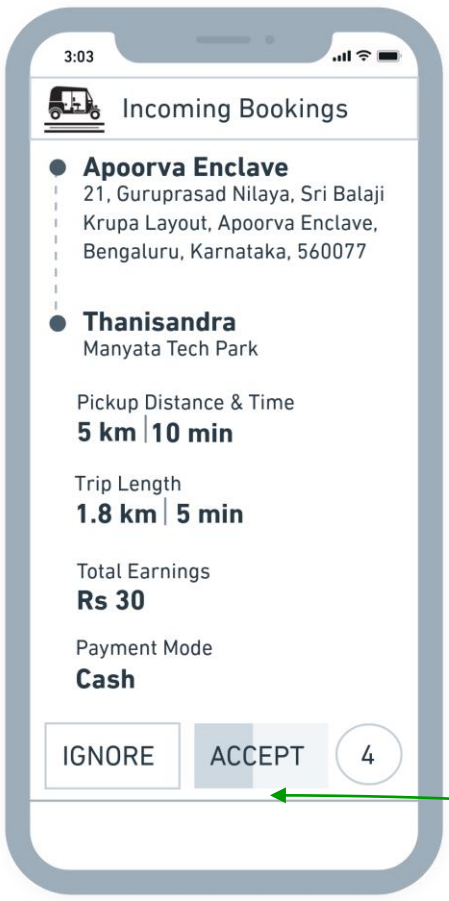
Wireframes

Current window



- Pickup ETA not displayed; drivers decide based on distance alone, and cancelling long routes
- Payment method hidden; post-call cancellations if not the preferred mode
- Allows Rash acceptance of rides, leading to more cancellations

Modified window



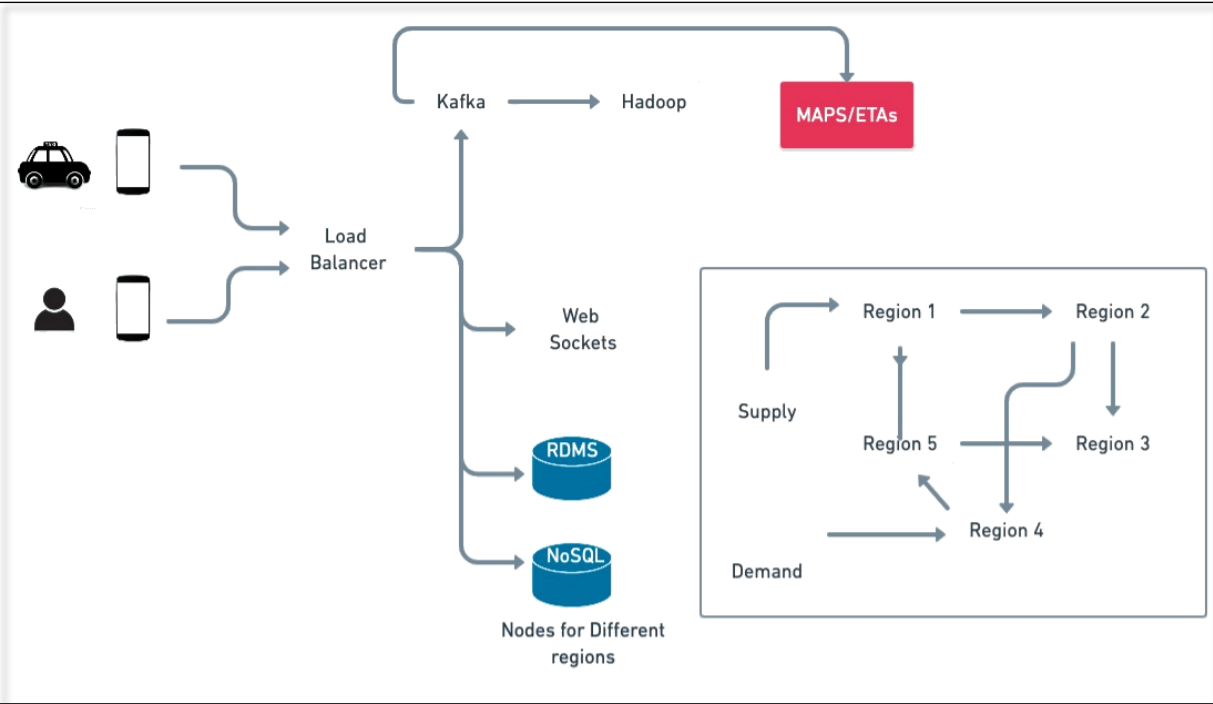
- + Pickup ETA clarifies if the distance indeed is a 'long ride', more prone to cancelled by rider
- + Real-time traffic-based trip durations aid drivers in choosing preferred rides
- + Displayed payment mode aids drivers in selecting preferred payment rides
- + Drivers' few-second wait ensures review of ride details before acceptance

Risk & Mitigation (Second-Order thinking)

- | | | | | | | | |
|---------------------------|---|---------------------------|---|---------------------------|---|---------------------------|---|
| <div>R</div> <div>M</div> | Driver frustration due to mandatory wait time initially.
Awareness about benefits of informed ride acceptance. | <div>R</div> <div>M</div> | Inaccuracies in displayed ETA or payment method.
Regular system checks and prompt technical support. | <div>R</div> <div>M</div> | "Long ride" still leading to cancellations despite ETA.
Further driver training on benefits of longer rides. | <div>R</div> <div>M</div> | Rider impatience with slower acceptance.
Educate riders about improved ride success rates. |
|---------------------------|---|---------------------------|---|---------------------------|---|---------------------------|---|

Mandatory Preview Window with Enhanced Info. Display

System Design



Measuring Success

North Star Metric

Ride Completion Rate: Successful transportation from point A to point B.

Monthly Active Users (MAU)	# of unique users in a month
Churn Rate	Rate at which users leave the platform
Ride Cancellation Rate	Rate at which booked rides are canceled
Average Waiting Time	Time between ride request and acceptance, aiming for reduction
Ride On-time Arrival	% of rides where drivers arrive within the predicted time
User Satisfaction Rate	Avg. rating of driver & rider through app feedback

Long-term Impact

Network Effect Reduced need for price surges due to fewer cancellations.	Driver Trust Higher driver retention, lowering onboarding cost.	Rider Experience Increased loyalty, leading to higher lifetime value per customer.	Brand value Enhanced public image, attracting partnership & investment.	Global Scaling Happier user base makes international scaling smoother.
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