



PM School Live Challenge #197

Improving Navigation Screen on Google Maps

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Google Maps

Google Maps, a web & app based platform that provides comprehensive geographical information and navigation assistance. It features satellite imagery, aerial photography, street maps, 360° interactive panoramic street views, real-time traffic updates, and route planning for various modes of travel.

Some Key Features

-  GPS-enabled Services
-  Geographic Information System (GIS) Services
-  Real-Time Traffic Maps
-  Geocoding & Geopositioning
-  Routing & Navigation
-  Satellite Imagery
-  Thematic & navigation maps

Some Key Statistics

1B+

Monthly Active Users (MAUs)

5M+

Apps & websites use Google Maps Platform

200+

Operates and updates data for countries

50+

Countries are offered by real-time traffic conditions

10k +

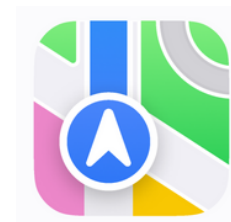
Locations, including airports, shopping malls indoor maps are featured

98%

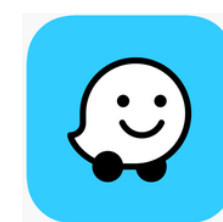
Inhabited world is covered by using satellite imagery

Source: wifitalents.com/statistic

Competitors



Apple Maps



Waze Maps



Mapbox



BingMaps

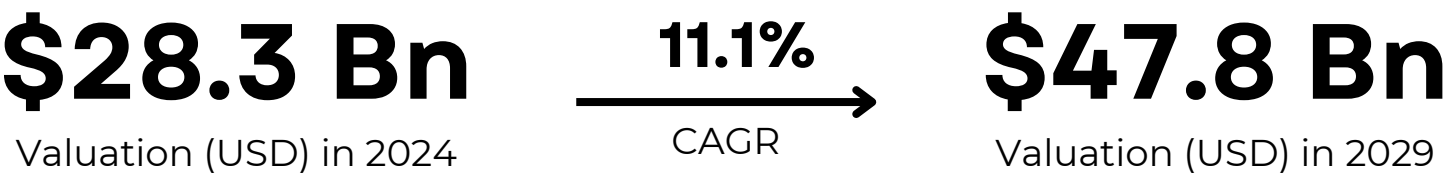


HereWeGo



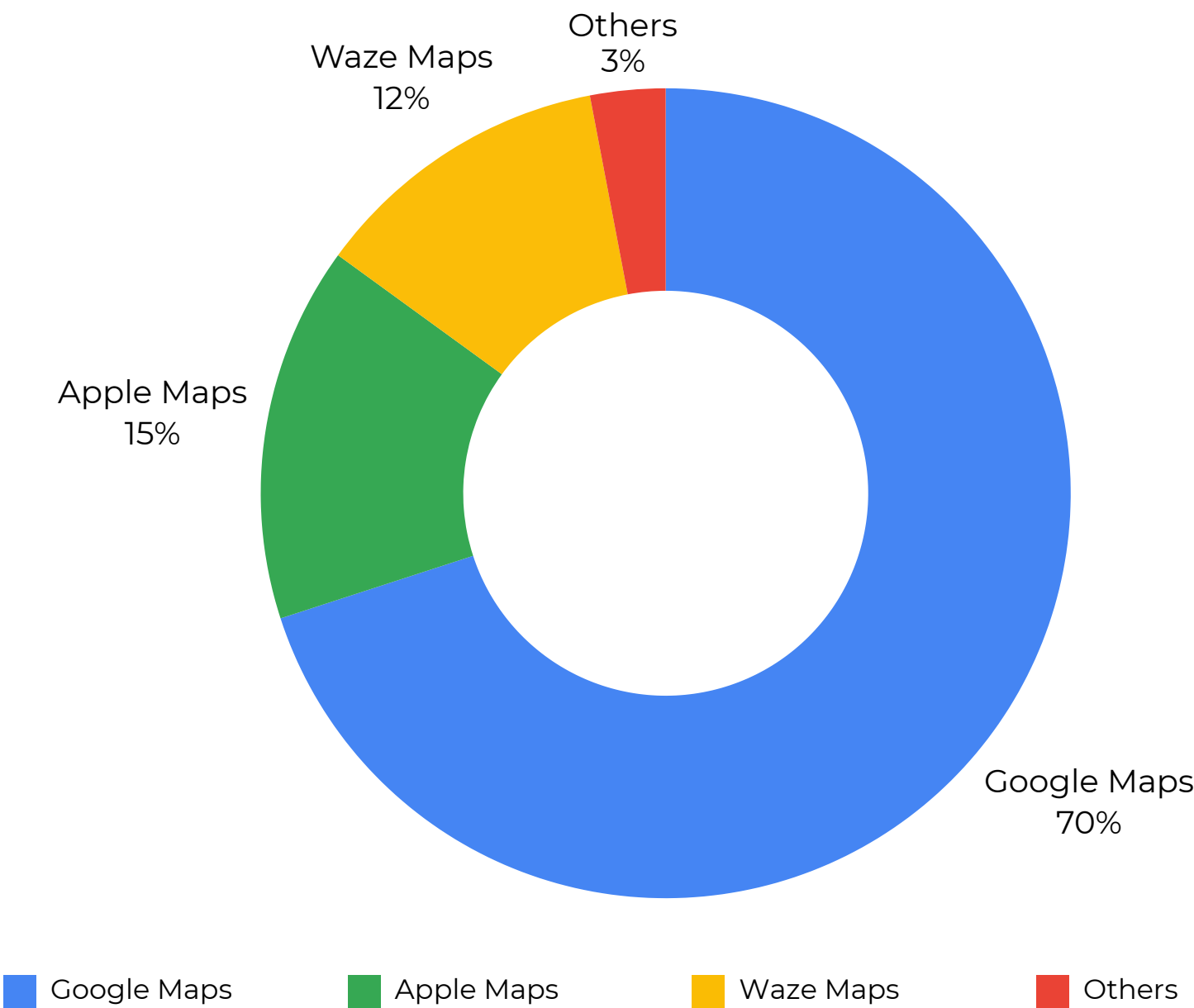
Map Quest

Digital Map Market

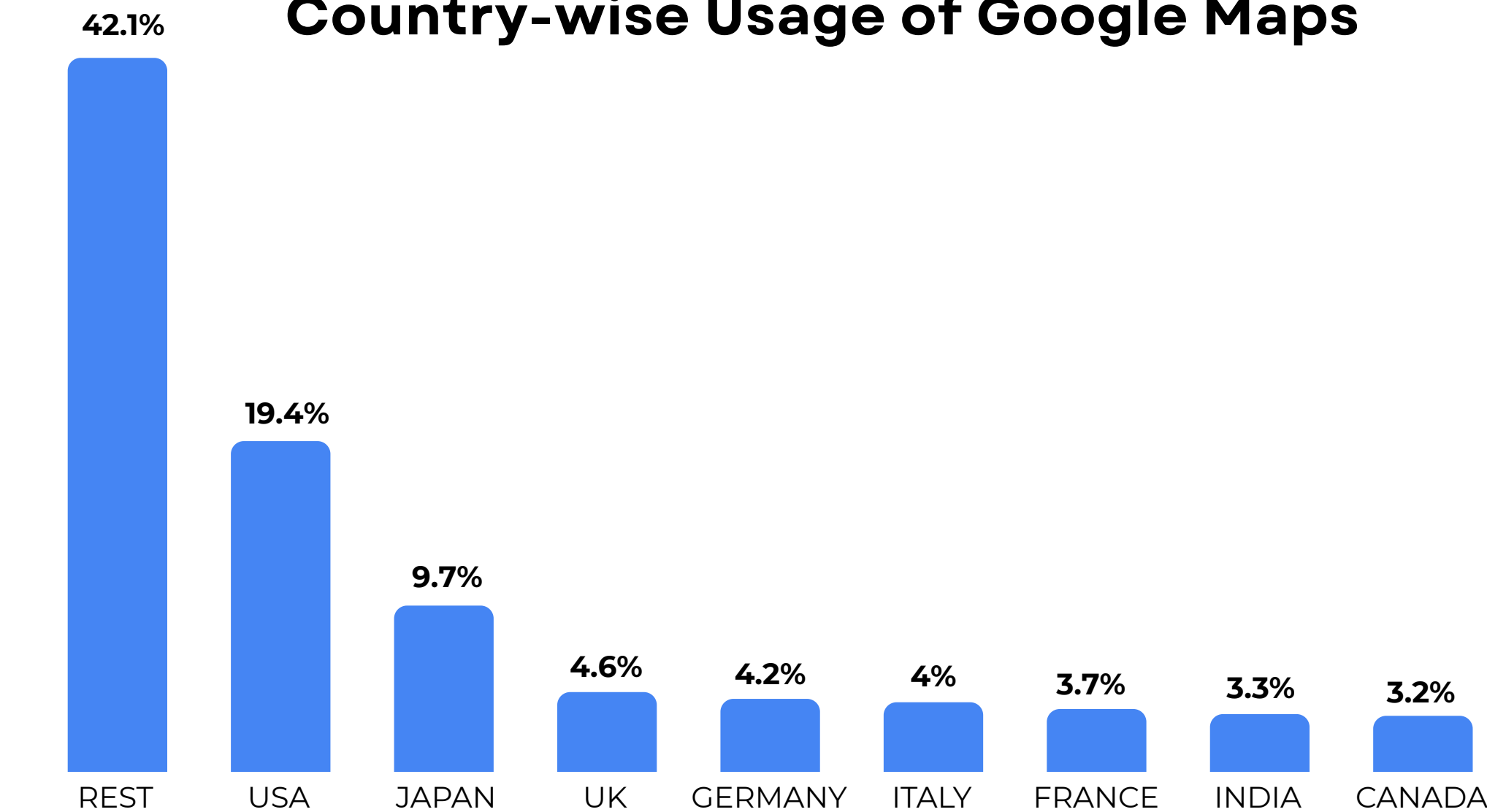


Source: marketsandmarkets

Market share



Country-wise Usage of Google Maps



Source: brizfeel.com



In 2023, Google Maps earned USD 11 billion, with 82% (USD 9 billion) from Google AdWords and the rest from APIs. It supports economic growth by offering navigation, marketing, shop locations, promotions, and reviews.

Anushmita
20 years
College student



Anushmita is a engineering student in a bustling city, lives in a small apartment near her university. She cycles everywhere, enjoying its health benefits and minimal expenses. She often rides to college, cafes, and occasionally takes the train to visit family or explore new places.

- struggles to find safe cycling paths to her favorite spots, and steep inclines are challenging with a heavy backpack.
- often struggles to get accurate, real-time information about train schedules and platforms.

- needs detailed maps highlighting road inclines and navigation tools prioritizing cycling-friendly routes.
- needs real-time updates on train schedules and platforms for smooth travel.

Ankan
35 years
Product Designer



Ankan is a corporate professional working in a high-rise office. He lives in a suburban area and commutes daily to his office by car or sometimes by cab . He is busy balancing his demanding job with family responsibilities and often has to navigate through heavy city traffic.

- Ankan's daily commute is often disrupted by numerous traffic signals, leading to unpredictable delays.
- When Ankan takes a cab, he often finds it difficult to predict the cost and compare it with other cab service providers.

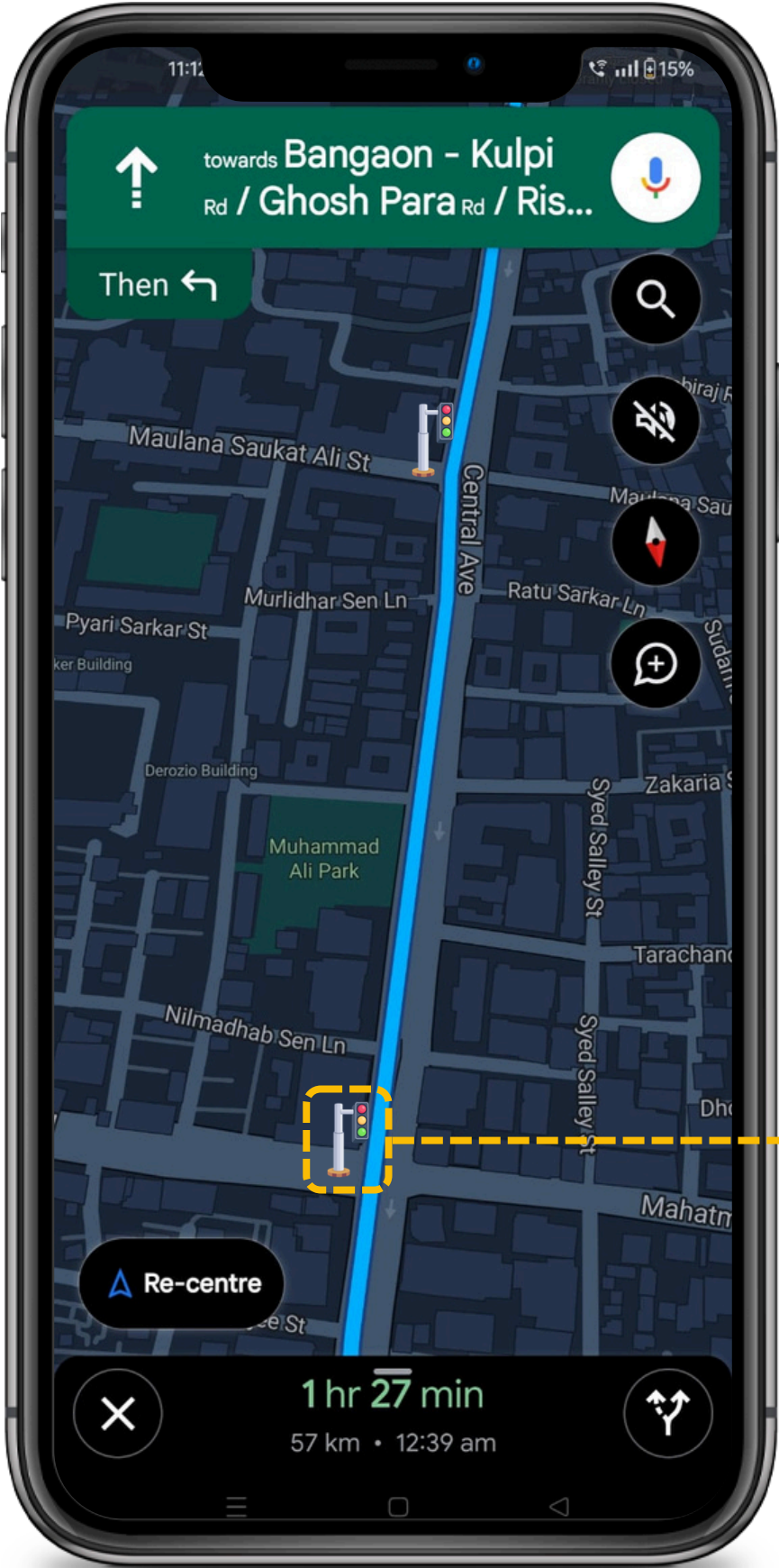
- Requires smart navigation that helps him avoid frequent stops at traffic signals.
- Needs a tool to estimate cab fares accurately before booking, especially during peak hours.

BACKGROUND

PAINPOINTS

NEEDS

#1 Traffic Signal Tracker



The Traffic Signal Tracker is a new feature in Google Maps designed to enhance user navigation by providing detailed information about traffic signals along their route. This feature identifies and highlights the locations of traffic signals at road junctions, allowing users to better plan their journeys.

Before starting a trip, users can view which roads have more or fewer traffic signals and receive estimated delays caused by these signals. This information helps users choose the most efficient route, potentially reducing travel time and improving overall driving experience.

User Benefits

Enhanced Route Planning

Time Savings

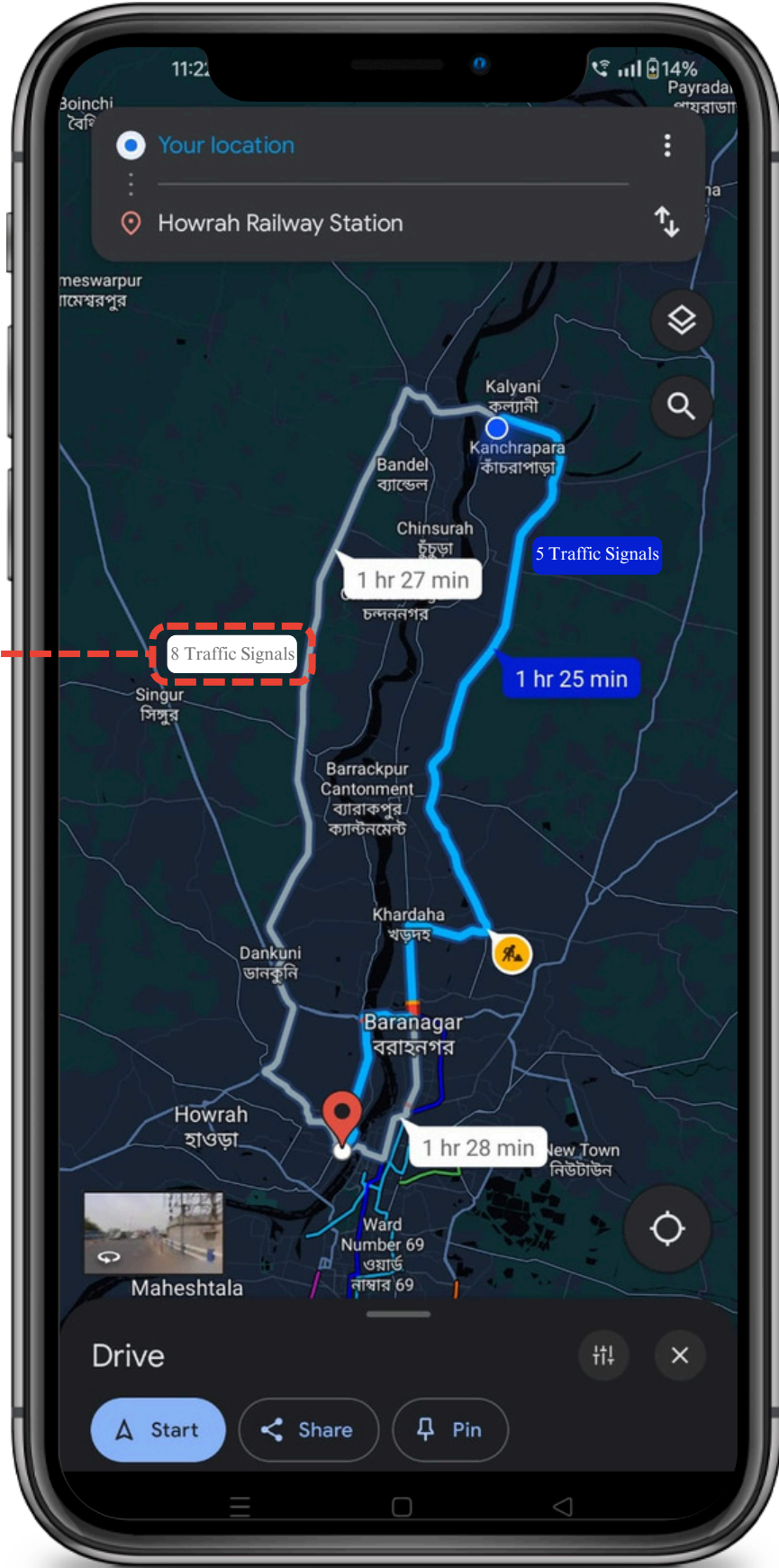
Improved Driving Experience

Success Metrics

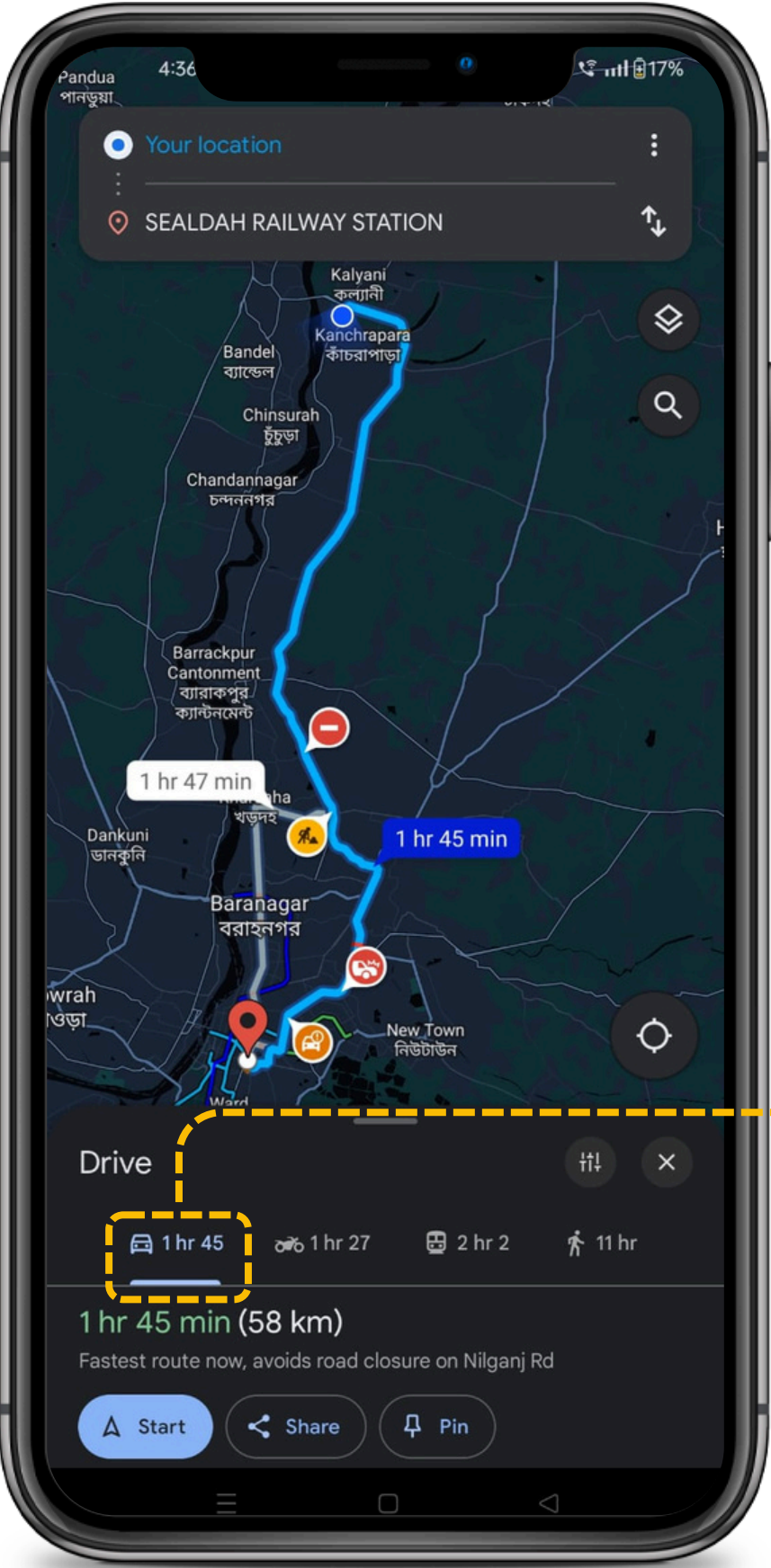
User Satisfaction

Route Efficiency

Increased Engagement



#2 RideRates



The Ride Rates feature in Google Maps is designed to provide users with real-time information about cab fares for their selected journey. When users are in drive mode and input their source and destination, the feature displays the available cab service providers and their respective rates for the journey.

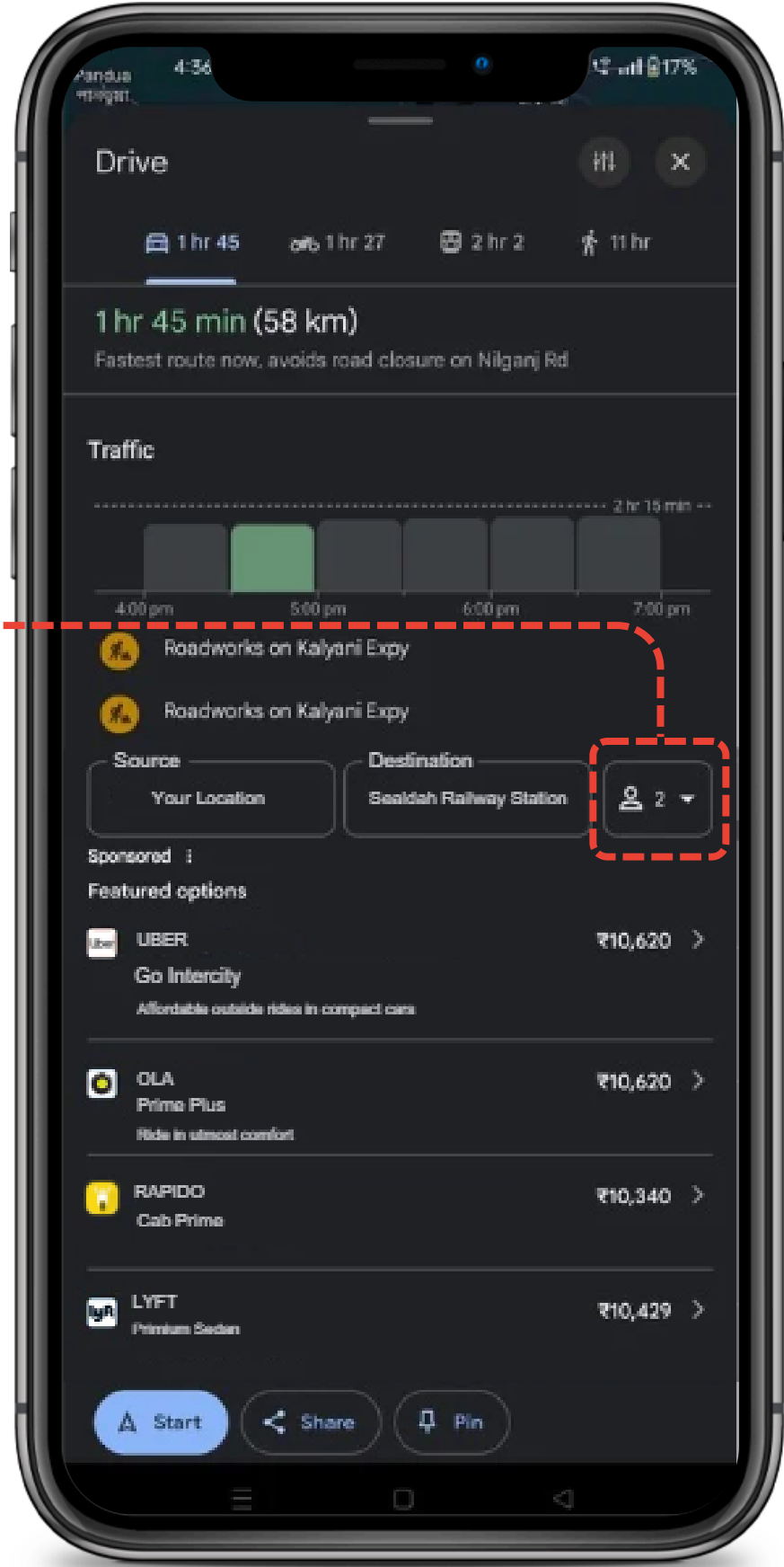
Users can also specify the number of passengers, and the feature will adjust the fare estimates accordingly. This allows users to compare different cab options and choose the most cost-effective and convenient service for their needs.

User Benefits

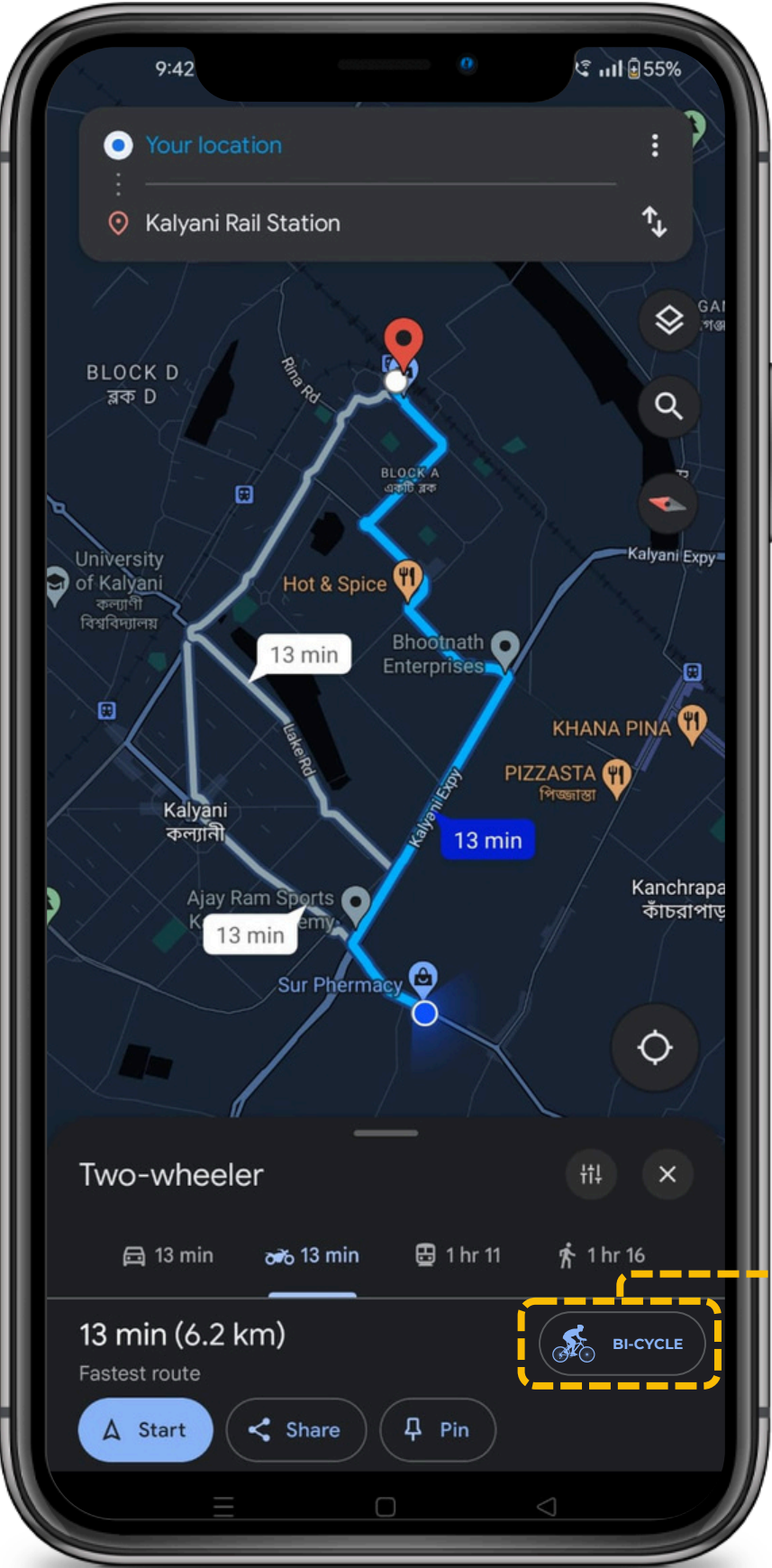
- Cost Transparency
- Time Savings
- Convenience

Success Metrics

- User Satisfaction
- User Adoption Rate
- Booking Conversion Rate



#3 CycleEase



The Cycle Ease feature in Google Maps is designed to enhance the cycling experience by providing users with the most favorable routes and detailed road information. When users are in two-wheeler mode and select their source and destination, they can choose the cycle mode option.

This mode highlights the most cycle-friendly routes, indicating paths with dedicated bike lanes, low traffic, and safe road conditions. Additionally, Cycle Ease provides information on road inclinations and declinations, helping users plan their journey more efficiently and avoid challenging hills.

User Benefits

Improved Route Planning

Personalized Experience

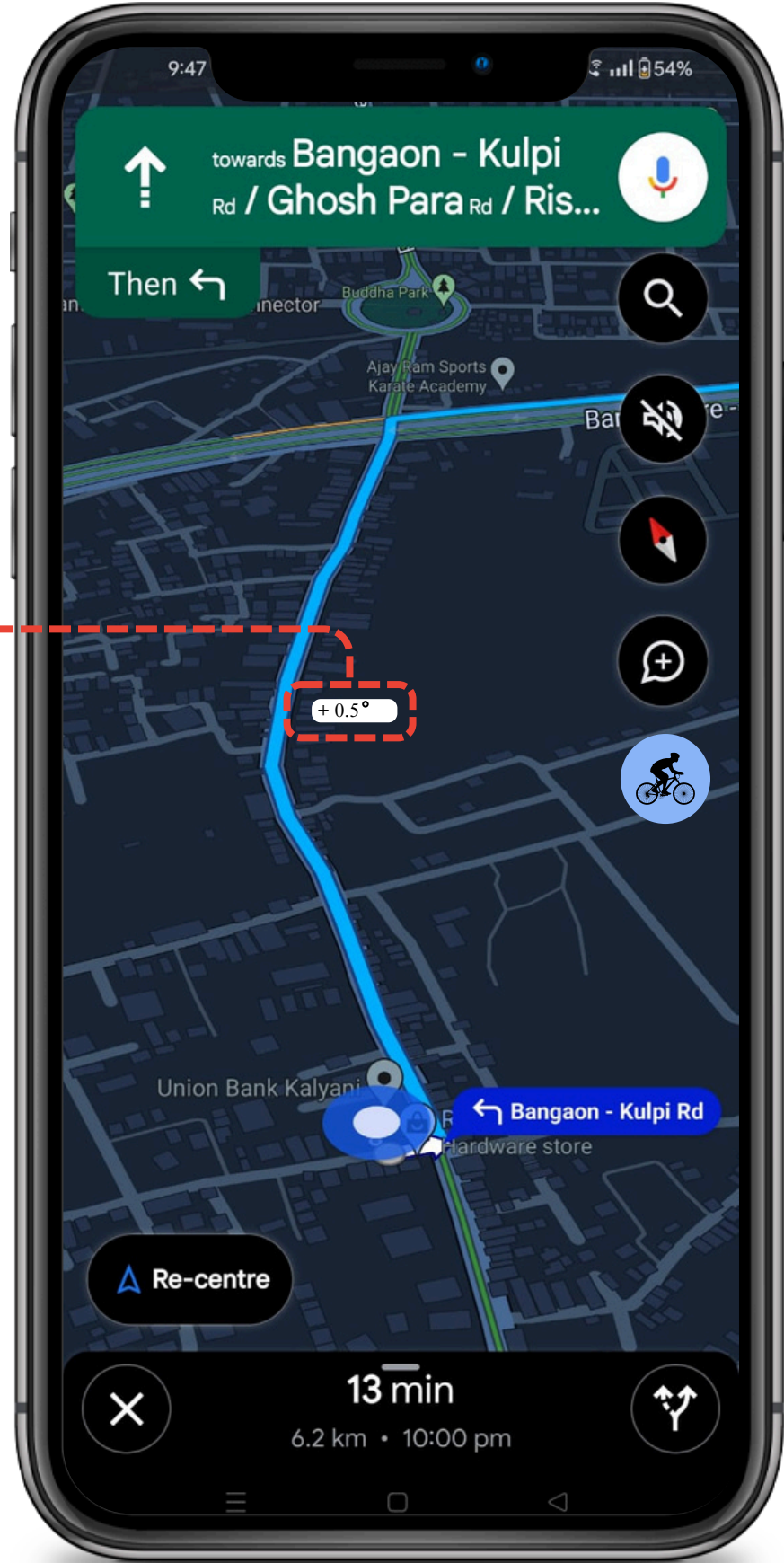
Enhanced Safety

Success Metrics

Increase in Cycling Activity

Safety Improvement

Route Efficiency

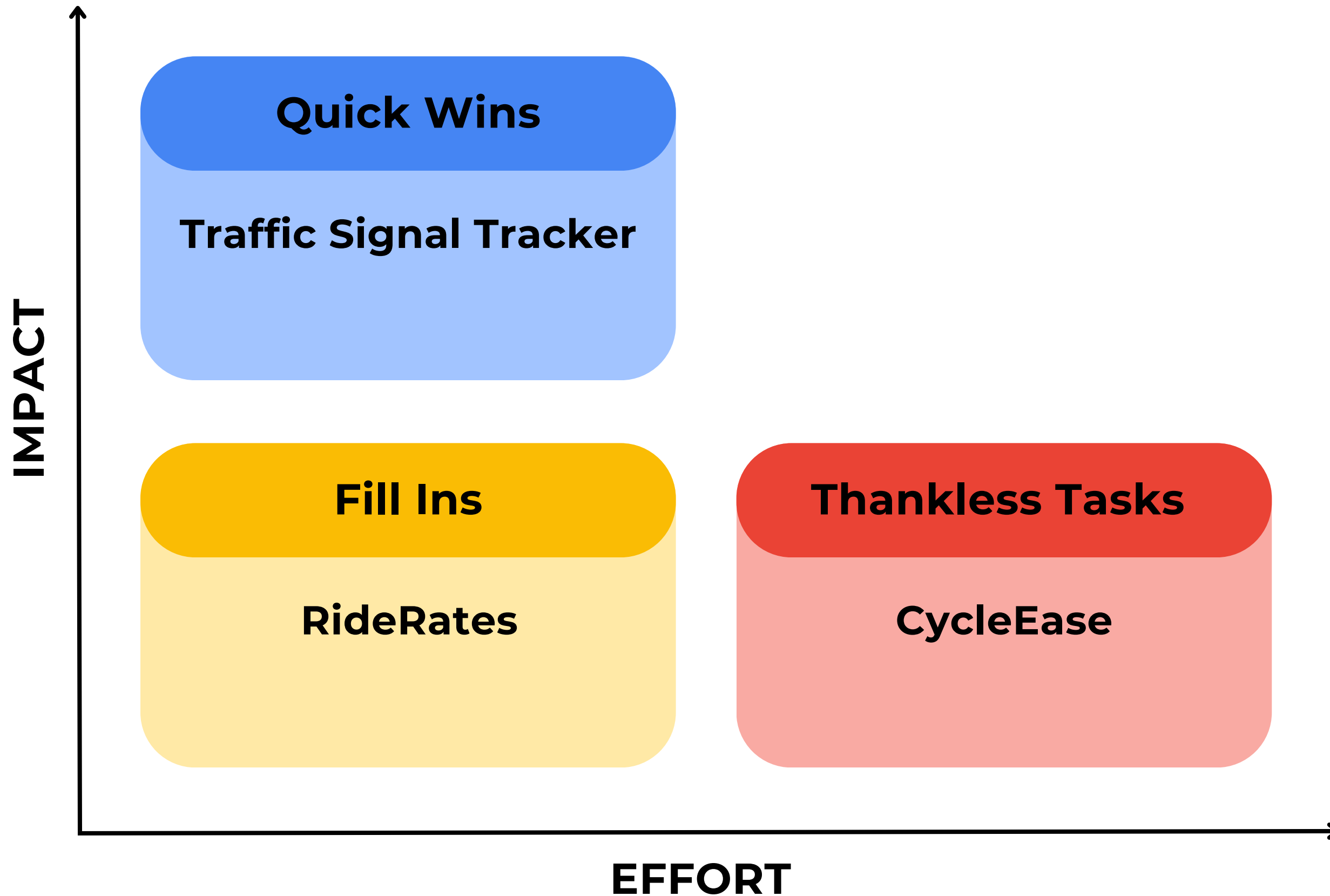


Features Prioritization

RICE Framework

FEATURES	REACH (0-100%)	IMPACT (0-10)	CONFIDENCE (0-100%)	EFFORT (0-10)	SCORE
Traffic Signal Tracker	75	8.5	75	5	0.956
RideRates	75	7.5	85	5.5	0.870
CycleEase	60	7	70	6	0.490

Impact/Effort Matrix



Priority List

1. **Traffic Signal Tracker**
2. **RideRates**
3. **CycleEase**

Major Metrics

North
Star
Metric

User Engagement Rate =

$$\frac{\text{Total Google Maps Users}}{\text{Total Active Users of Features}} \times 100$$

This metric indicates how frequently users interact with these new features and find them valuable in their daily navigation needs.

L1 Metric

Feature Adoption Rate =

$$\frac{\text{Total Google Maps Users}}{\text{No. of Users Using a Specific Feature}} \times 100$$

This metric measures how many users are adopting each of the new features within Google Maps.

L2 Metric

User Retention Rate =

$$\frac{\text{Total Users of Feature in Previous Period}}{\text{Number of Returning Users}} \times 100$$

This metric measures how many users continue to use the new features over time, indicating their ongoing value.

L3 Metric

Average Usage Frequency =

$$\frac{\text{Total Users of Features}}{\text{Total Interactions with Features}}$$

This metric measures how many users are adopting each of the new features within Google Maps.

Go-To-Market Strategy

Pre-Launch

- **User Research and Testing:** Conduct comprehensive user research and beta testing with a diverse group of users to gather feedback and ensure the features meet user needs.
- **Partnerships and Integrations:** Establish partnerships with cab service providers and local cycling communities to integrate relevant data and ensure a robust launch.
- **Marketing Teasers:** Create teaser campaigns on social media and within the Google Maps app to generate buzz and anticipation for the new features.

Launch

- **Feature Announcement:** Announce the new features with a detailed blog post, press release, and social media campaign highlighting their benefits and how to use them.
- **In-App Tutorials:** Implement in-app tutorials and notifications to guide users through the new features and encourage adoption.
- **Influencer Collaboration:** Partner with influencers in the transportation and cycling communities to promote the features and provide authentic endorsements.

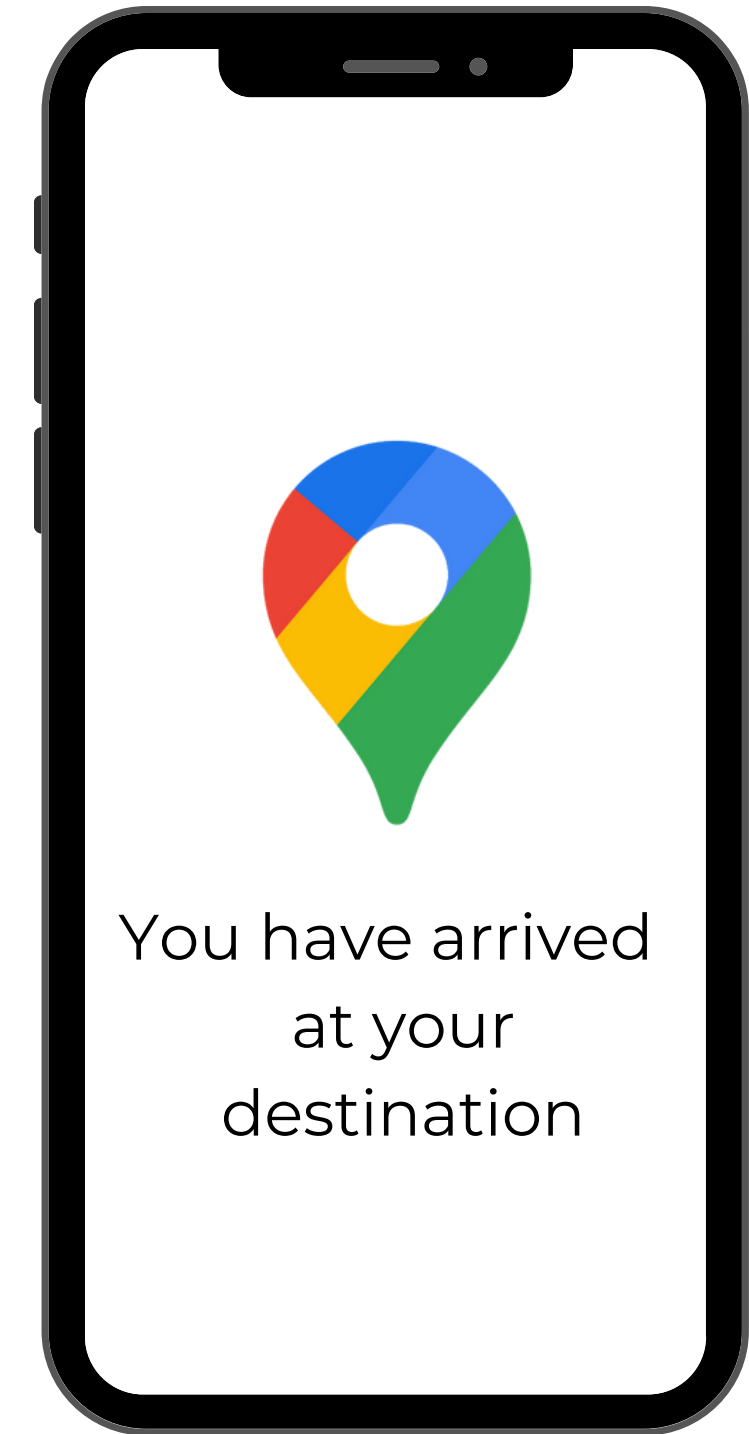
Post-Launch

- **User Feedback Loop:** Continuously collect user feedback through surveys and app reviews to identify areas for improvement and address any issues promptly.
- **Feature Refinement:** Regularly update the features based on user feedback and data analytics to enhance functionality and user satisfaction.
- **Ongoing Marketing:** Maintain user engagement with ongoing marketing efforts, including email newsletters, social media updates, and success stories from users who have benefited from the new features.



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Thank You



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