



Improving Navigation screen on Google Maps

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Problem Statement

Google Maps, used by over 1 billion people, struggles with unclear road differentiation, lacks personalized navigation for cars and two-wheelers, and has insufficient real-time updates. These issues cause navigation errors and user frustration, needing better clarity and personalization.

Value Propositions

1. **Enhanced Clarity**: Improved road differentiation reduces navigation errors and user frustration
2. **Personalized Experience**: Tailored navigation for cars and two-wheelers offers safer and more relevant routes.
3. **Accurate Updates**: Real-time traffic information enhances route planning and reliability.

1 Billion
MAU

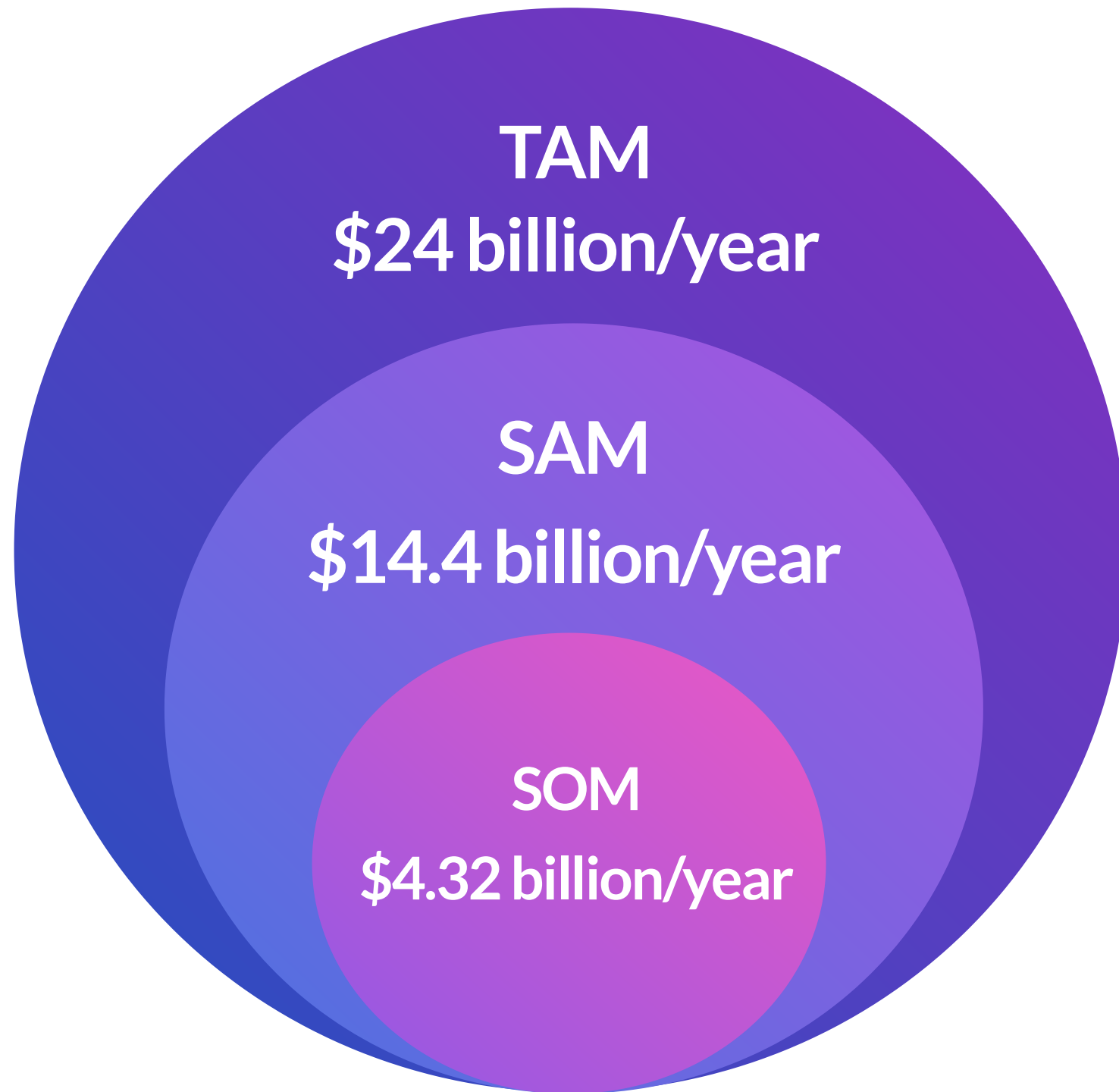
1 Billion
KM driven
daily using
app

Google Play
Store
Rating: 4.2

10B
Downloads
on Google
Play Store

Market Sizing

Total Market



Calculation & Assumptions:

Taking Top-Down approach,

MAU = 1 Billion users and Assume ARPU = \$5 per month.

Assume 30% of users are car drivers: $0.30 * 1B = 300 \text{ M users}$.

TAM (Cars) = $300 \text{ M users} * \$5/\text{month} * 12 \text{ months} = \18 B/year .

Assume 10% of users are 2-wheeler drivers: $0.10 * 1B = 100 \text{ M users}$.

TAM (2W) = $100 \text{ M users} * \$5/\text{month} * 12 \text{ months} = \6 B/year .

Total TAM = $\$18 \text{ B/year} + \$6 \text{ B/year} = \underline{\$24 \text{ B/year}}$.

Assume 60% of car users are available: $0.60 * 300M = 180 \text{ M users}$.

SAM (Cars) = $180 \text{ M users} * \$5/\text{month} * 12 \text{ months} = \10.8 B/year .

Assume 60% of 2-wheeler users are available: $0.60 * 100M = 60 \text{ M users}$.

SAM (2W) = $60 \text{ M users} * \$5/\text{month} * 12 \text{ months} = \3.6 B/year .

Total SAM = $\$10.8 \text{ B/year} + \$3.6 \text{ B/year} = \underline{\$14.4 \text{ B/year}}$.

Assume 30% car users Adoption rate: $0.30 * 180M = 54 \text{ M users}$.

SOM (Cars) = $54 \text{ M users} * \$5/\text{month} * 12 \text{ months} = \3.24 B/year .

Assume 30% 2-wheeler Adoption rate: $0.30 * 60M = 18 \text{ M users}$.

SOM (2W) = $18 \text{ M users} * \$5/\text{month} * 12 \text{ months} = \1.08 B/year .

Total SOM = $\$3.24 \text{ B/year} + \$1.08 \text{ B/year} = \underline{\$4.32 \text{ B/year}}$.

User Personas



Car Driver Chris



Two-Wheeler Tina



Errand Esha

Background	<ul style="list-style-type: none"> • Age: 35 • Location: Town <-> City (daily) • Occupation: Vice President 	<ul style="list-style-type: none"> • Age: 35 • Location: Urban area • Occupation: Software Engineer 	<ul style="list-style-type: none"> • Age: 24 • Location: City center • Occupation: Student
Goals & Needs	<ul style="list-style-type: none"> • Clear differentiation between highways and local roads to avoid traffic. • Real-time updates on accidents and road closures to optimize commute time. 	<ul style="list-style-type: none"> • Routes that avoid highways and heavy traffic areas. • Safety alerts specific to two-wheeler riders, such as slippery roads or high wind areas. 	<ul style="list-style-type: none"> • Easy-to-understand navigation for occasional use, such as visiting friends or shopping. • Quick and accurate updates on traffic and road conditions.
Pain Points	<ul style="list-style-type: none"> • Confusion with current road visuals leading to missed exits. • Inaccurate traffic updates causing delays 	<ul style="list-style-type: none"> • Difficulty finding safe and efficient routes that avoid high-traffic areas. • Limited information on road conditions that specifically impact two-wheeler riders. 	<ul style="list-style-type: none"> • Difficulty in distinguishing between different types of roads and routes. • Frustration with outdated or inaccurate real-time updates.

Suggested features - 1/4

Feature #1: Enhanced Road Differentiation

Description	<ul style="list-style-type: none">• Improve visual differentiation between various types of roads using distinct color-coding and patterns.
Pain-Points resolved	<ul style="list-style-type: none">• Reduces confusion between highways, local streets, and toll roads.• Enhances clarity in complex or densely populated areas, leading to fewer navigation errors.
Input costs	<ul style="list-style-type: none">• Development and design costs for updating the UI.• Testing and user feedback collection to ensure effectiveness.
Other benefits	<ul style="list-style-type: none">• Improved user satisfaction due to easier navigation.• Potential reduction in user complaints and support queries related to navigation errors.

Suggested features - 2/4

Feature #2: Driver mode customization

Description	<ul style="list-style-type: none">• Introduce customizable driving modes tailored for car drivers and two-wheeler riders, offering specific routes, notifications, and safety alerts.
Pain-Points resolved	<ul style="list-style-type: none">• Provides tailored routes and safety alerts for different types of vehicles.• Reduces the risk of two-wheelers being directed onto unsuitable roads.
Input costs	<ul style="list-style-type: none">• Development costs for implementing mode-specific features.• Research and data collection on user preferences and requirements.
Other benefits	<ul style="list-style-type: none">• Increased user engagement through personalized experiences.• Enhanced safety for two-wheeler riders with mode-specific alerts.

Suggested features - 3/4

Feature #3: Real-time road condition updates

Description	<ul style="list-style-type: none">• Integrate real-time updates about road conditions, including traffic incidents, road closures, and construction zones, using user-generated reports and AI-driven insights.
Pain-Points resolved	<ul style="list-style-type: none">• Provides timely information on road conditions, improving route planning.• Reduces frustration from unexpected traffic incidents or road closures.
Input costs	<ul style="list-style-type: none">• Costs for AI integration and data processing.• Infrastructure costs for handling increased data input and processing.
Other benefits	<ul style="list-style-type: none">• Higher user trust and reliability in the app.• Potential for increased user contributions and engagement.

Suggested features - 4/4

Feature #4: Safety alerts for 2 wheelers

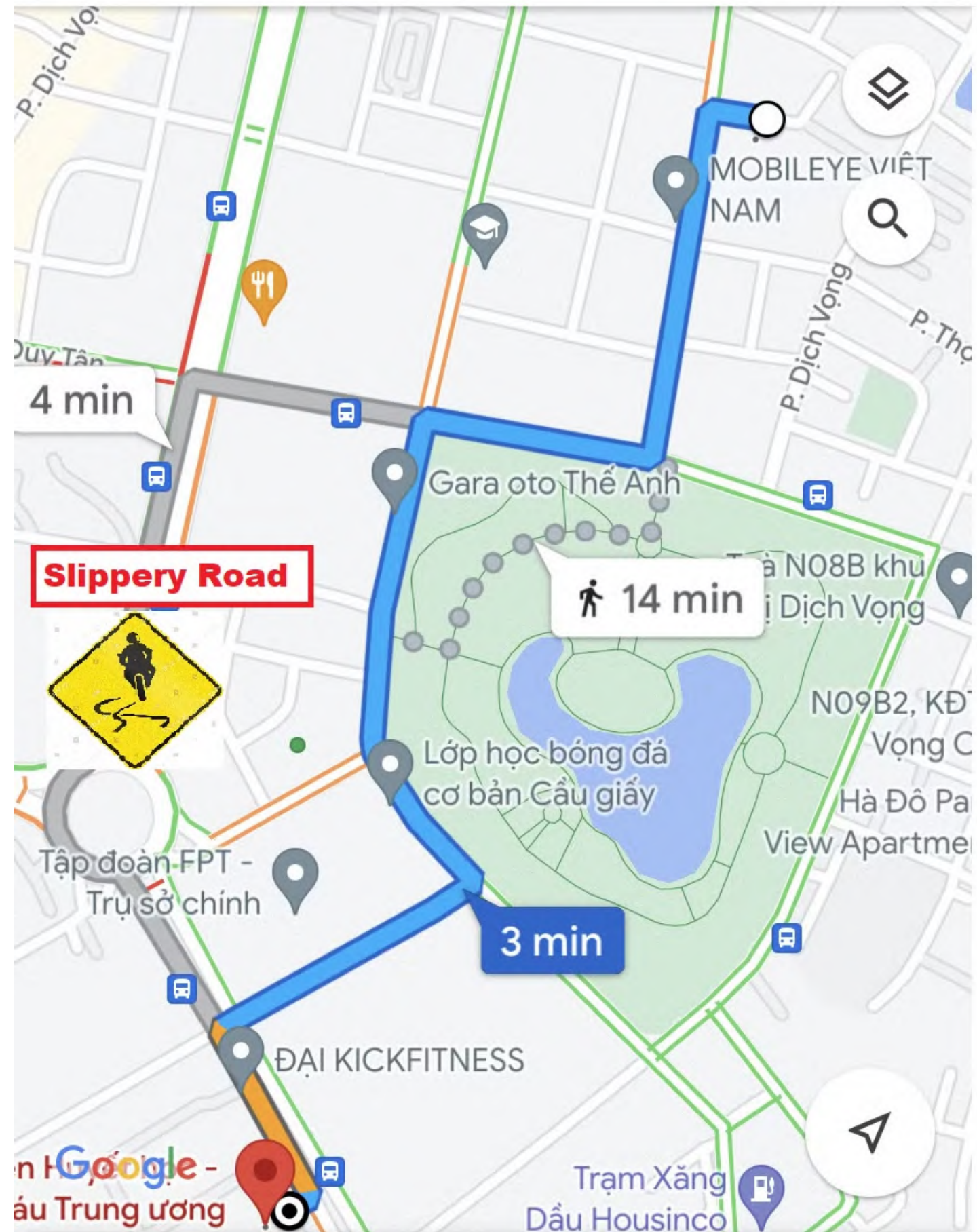
Description	<ul style="list-style-type: none">• Implement safety alerts specifically for two-wheeler riders, such as warnings for slippery roads, high wind areas, and heavy traffic zones.
Pain-Points resolved	<ul style="list-style-type: none">• Enhances safety by alerting two-wheeler riders to potential hazards.• Provides peace of mind with real-time safety information tailored to two-wheelers.
Input costs	<ul style="list-style-type: none">• Development costs for integrating safety alert features.• Ongoing costs for maintaining and updating hazard databases.
Other benefits	<ul style="list-style-type: none">• Potential to attract more two-wheeler users to the platform.• Increased user satisfaction and loyalty due to enhanced safety features.

Prioritization by RICE scoring

Feature	Reach (# of users)	Impact (out of 3)	Confidence (out of 10)	Effort (in person-months)	RICE score = (R*I*C) / E	RICE Priority Rank
1. <u>Enhanced Road Diff.</u>	30% of 1B = 300M users	3	9	30	243,000M	<u>2</u>
2. Driver mode customization	20% of 1B = 200M users	3	8	40	192,000M	4
3. Real-time Road condn. updates	15% of 1B = 150M users	4	8.5	50	255,000M	3
4. <u>Safety alerts for 2-wheelers</u>	40% of 1B = 400M users	4	8	35	448,000M	<u>1</u>

Wireframe for Feature #1: Safety alerts for 2-wheelers

🚗 4 min 🚲 3 min 🚇 — 🚶 14 min 🚶 🛩



Success Metrics (Performance metrics) to be tracked

Feature	Success Metric to be tracked
1. Enhanced Road Differentiation	<ul style="list-style-type: none">> User Engagement:<ul style="list-style-type: none">● Percentage of two-wheeler riders enabling safety alerts.● Frequency and types of safety alerts received by users.> User Retention:<ul style="list-style-type: none">● Increase in the retention rates of two-wheeler riders using Google Maps.● Higher user satisfaction scores among two-wheeler riders.
2. Safety alerts for Two-wheelers	<ul style="list-style-type: none">> User Engagement:<ul style="list-style-type: none">● Percentage of two-wheeler riders enabling safety alerts.● Frequency and types of safety alerts received by users.> User Retention:<ul style="list-style-type: none">● Increase in the retention rates of two-wheeler riders using Google Maps.● Higher user satisfaction scores among two-wheeler riders.

GTM Strategy

1. Market Research and Analysis:

- Conduct surveys and focus groups.
- Analyze competitors.
- Segment the market (commuters, two-wheeler riders).

2. Product Development and Testing:

- Launch beta versions.
- Collect feedback and iterate.

3. Positioning and Messaging:

- **Value Proposition:**
 - Road Differentiation: "Navigate with clarity."
 - Safety Alerts: "Ride safely with real-time alerts."

- 4. **Key Messages:** Emphasize improved user experience and safety.

5. Marketing and Promotion:

- **Pre-Launch:** Teasers on social media, early access for loyal users.
- **Launch:** Press release, influencer partnerships, social media ads.
- **Post-Launch:** Share user success stories and tips.

6. Distribution and Partnerships:

- Optimize app store pages.
- Partner with car and motorcycle brands.

7. Monitoring and Evaluation:

- Track engagement, adoption, and feedback.
- Use data for continuous improvement.