NAVIKA

Navigating Indoor Spaces with Ease

Problem Statement

As ***freshers*** at PES University, we faced challenges navigating different blocks for seminars and talks due to a ***lack of clear indoor guidance***, leading to ***confusion and delays.***

Problem Statement

Navigating large indoor spaces like shopping malls, airports, and hospitals can be challenging due to complex layouts and insufficient signage, leading to confusion and frustration for visitors. Individuals with disabilities face even greater accessibility barriers.

Who Faces This Problem?

- General Visitors
- Individuals with Disabilities
- First-Time Visitors, Tourists

Associated Costs

- Time Wasted
- Safety Risks
- Accessibility Barriers

Specific Pain Points

- Poor Signage
- Complex Layouts
- Lack of Real-Time Updates
- Accessibility Issues
- Lost Time Finding Places

Addressing these challenges is essential to improve user experience, ensure safety, and promote inclusivity in large indoor environments.

Existing Solutions and Competition

Indoor Navigation Competitors Positioning

	ARway	Navigine	Resonai	Navika
Target Audience	Malls, Agencies, Hospitals	Malls, Universities, Hospitals	Malls and Retail	Malls, Universities, Hospitals
USP	No-code platform Mini-maps	Real-Time Location Systems (RTLS)	Personalized AR Data insights	Hybrid AI + AR Customer Centric
Key Feature	QR markers	Precise tracking Hardware integration	Recommendations Analytics, Personalization	Voice guidance Real-time updates
Tech	AR + QR codes	RTLS hardware	AR + Analytics	Hybrid AR + AI
Drawback	QR-dependence Complex setup Limited accuracy	Accuracy limitations Hardware dependency Battery maintenance	Complex setup Limited use cases Learning curve	Resolve the drawbacks

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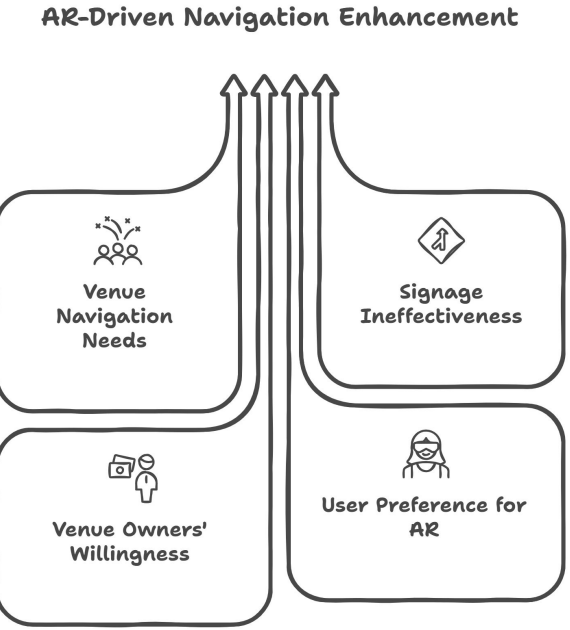
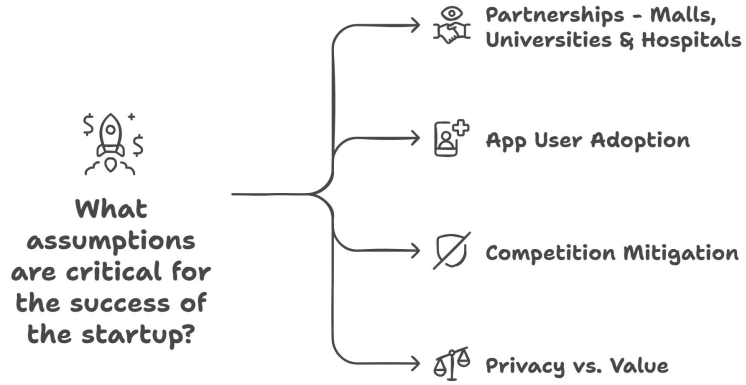
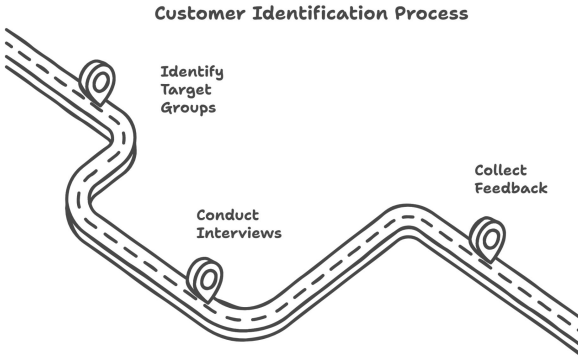
Customer Discovery



Hypothesis



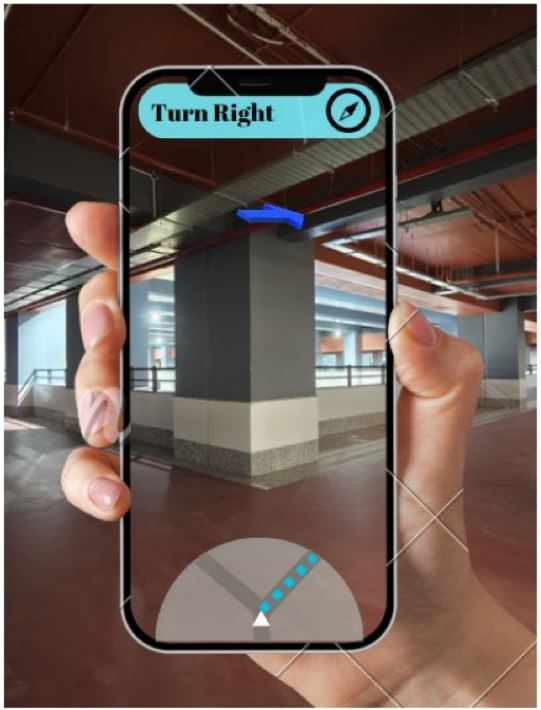
Assumptions



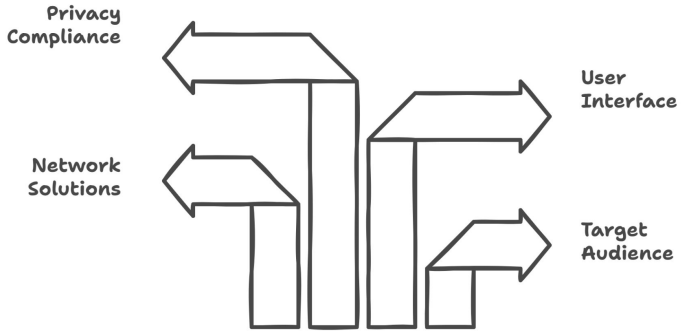
Interviews

Customer Discovery

Pretotype



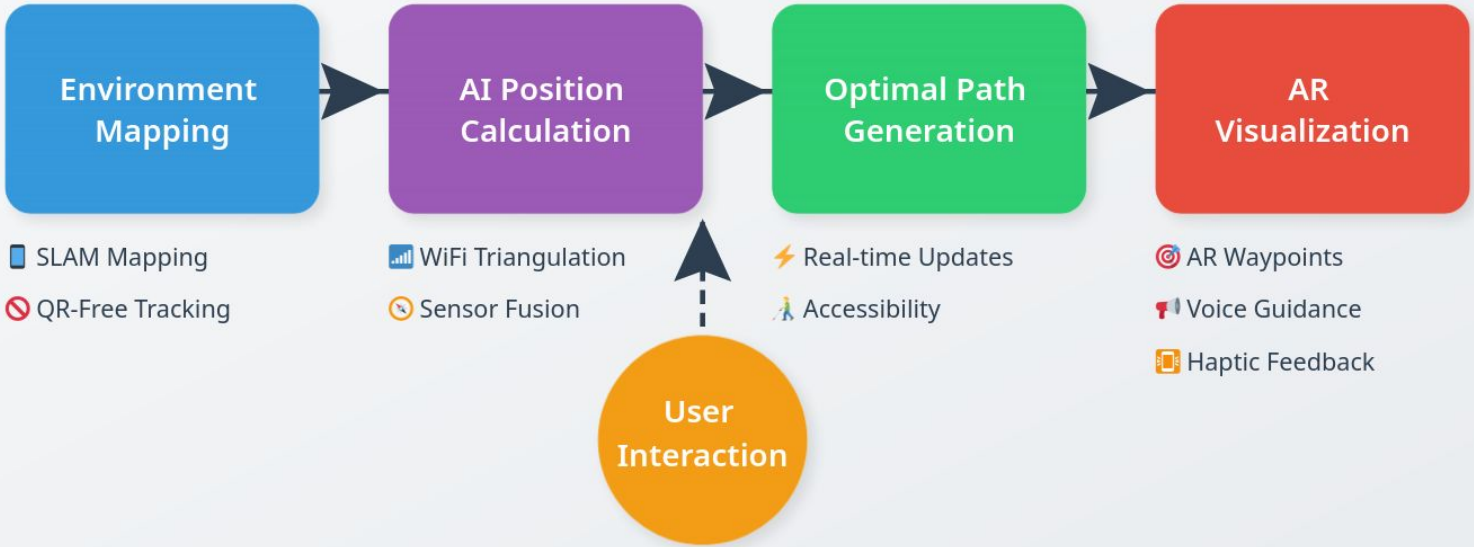
Pivots & Insights



Our Solution

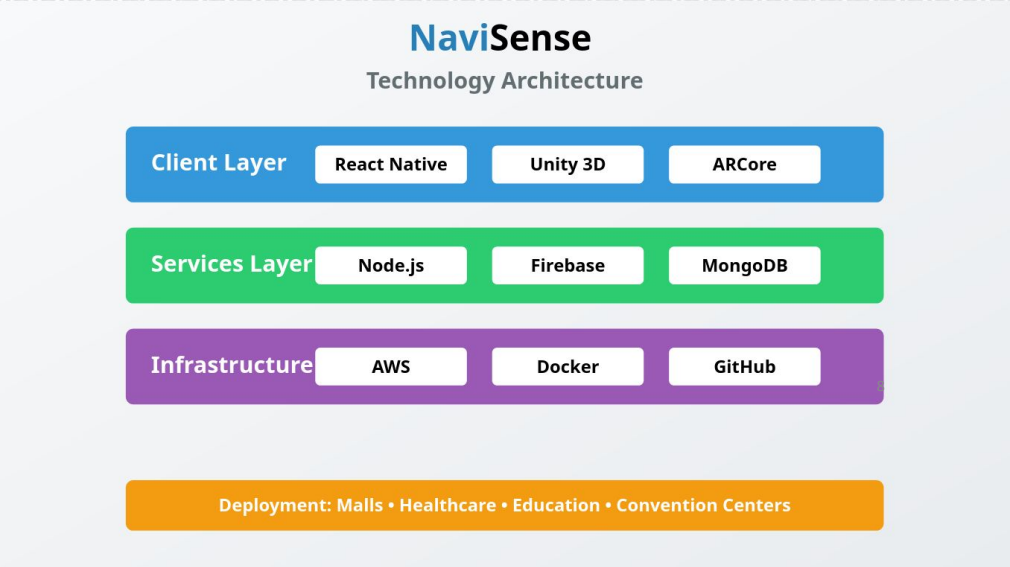
NaviSense

Hybrid AR + AI Navigation Workflow



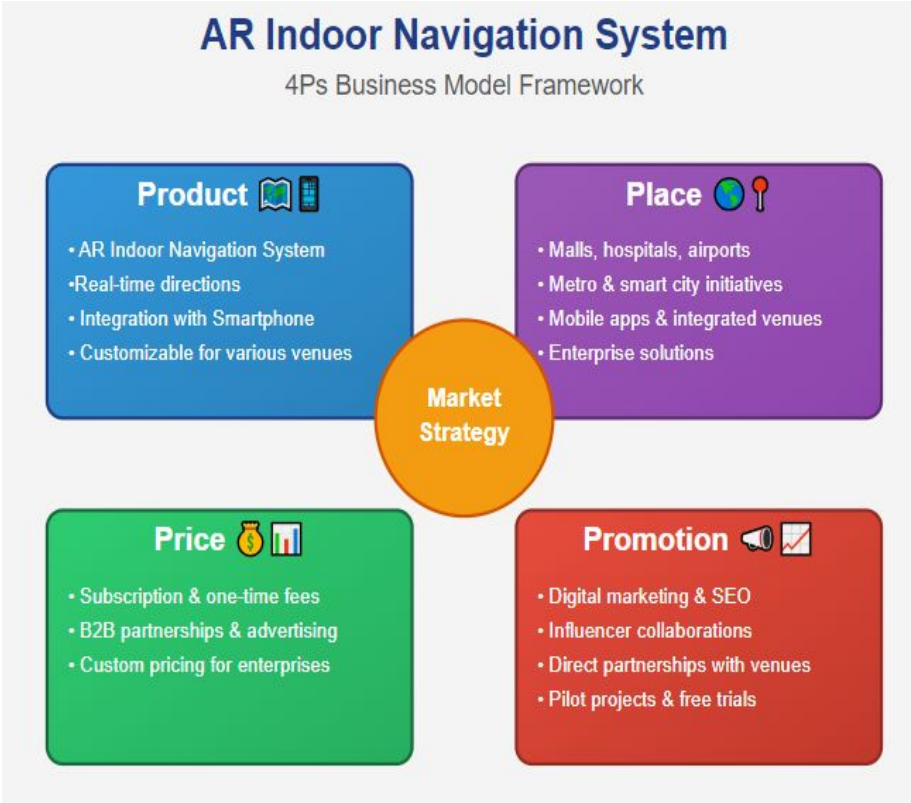
Our Solution

Technology Architecture



Key Points

Market Opportunity



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Profit Model

Expenses per quarter is ₹35,000 (Hosting & License costs)

Revenue Model - One Time Fee

(Small: ≤25,000 sqft | Medium: 25,001-75,000 sqft | Large: >75,000 sqft)

Small Business		Medium Business		Large Business	
Area:	25,000 sqft	Area:	75,000 sqft	Area:	> 75,000 sqft
Price per sqft:	₹2	Price per sqft:	₹1.5	Price per sqft:	₹1
Storage:	< 1 TB	Storage:	1 - 10 TB / >10TB	Storage:	> 10 TB
Storage Price:	₹500	Storage Price:	₹2,500 / ₹5,000	Storage Price:	₹5,000

Example: Mall | Sqft: 1,00,000 | Storage Price: ₹5,000 | Total: ₹1,05,000

Key Assumptions

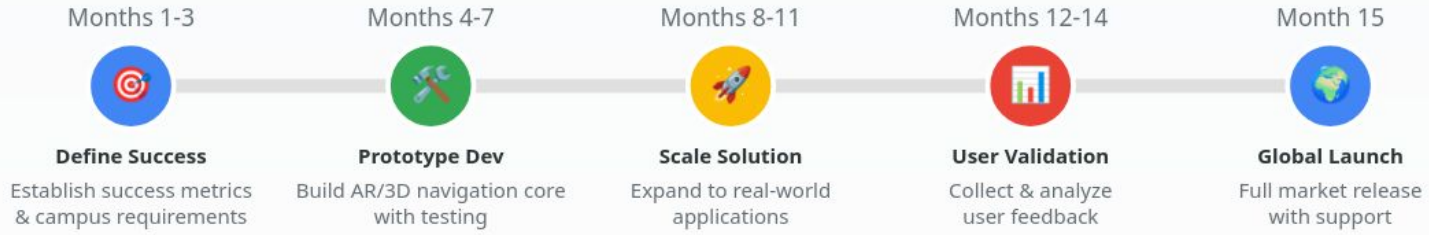
1. Growing Market
2. Accurate Technology
3. Strong Business Demand

Revenue Model - Subscription Charges

Small Business	Medium Business	Large Business
Quarterly Fee:	Quarterly Fee:	Quarterly Fee:
₹5,000	₹7,500	₹10,000

NAVIKA Implementation Roadmap

15-Month Timeline for Indoor Navigation Solution Deployment



Key Requirements

- High-performance GPUs for AR rendering
- Enterprise software licensing
- Cross-functional team (devs, designers, testers)

Implementation Strategy

- Agile development sprints
- Continuous user testing
- Phased feature rollout

NAVIKA: Customer Onboarding Journey

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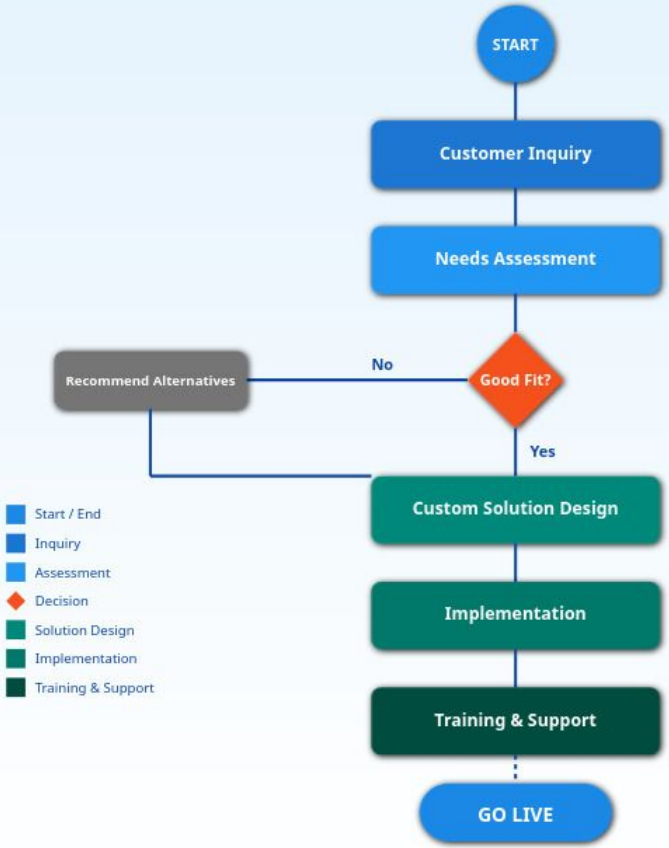

OUR TEAM

TEAM MunchMAX

Akash Madisetty

AI Engineer

Leading AI integration, developing voice navigation and computer vision for spatial awareness.

Amit Prakash

Technical engineer

Working on Spatial Navigation and optimizing Real Time Indoor mesh generation

Aniruddha K S

Operations & Finance Manager – Manages logistics, budgeting, and execution.

Marketing & Sales Strategist – Drives demand and ensures product reach.

Aneesh Bharadwaj K S

AI Engineer

Working on AR & AI integration using SLAM techniques.

Akanksh Rai

Backend Engineer

Handling API development, database management, security, performance and server-side integration.

Akarsh T

UI / UX Engineer

Web Tech Enthusiast Specializing in fast, scalable, and responsive web applications.

Focused on UI/UX, performance, and accessibility.

RESEARCH AND REFERENCES

1. Arway
2. Report on Indoor Navigation
3. Global Market Positioning
4. Indoor vs Outdoor Navigation Explained
5. Everything you need about Indoor Navigation
6. Grand View Research – India AR Navigation Market
7. Market Research Future – AR Indoor Navigation Market Report