

InNavo (Augmented Reality Based Indoor Navigation System)



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Never Get Lost Again

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Elevator Pitch

Introducing InNavo: Empowering Indoor Navigation through Augmented Reality! Are you tired of getting lost in vast shopping centers, labyrinthine hospitals, or sprawling office complexes? Say goodbye to confusion and hello to a seamless indoor navigation experience with InNavo!

InNavo is a forward-thinking technology company that has developed a groundbreaking Augmented Reality Based Indoor Navigation System. Our cutting-edge system harnesses the power of Bluetooth Beacons strategically placed throughout the premises, enabling precise and real-time navigation assistance.

Here's how it works: Simply open our intuitive and user-friendly InNavo app on your smartphone, and immerse yourself in a world of augmented reality. As you walk, our advanced algorithms seamlessly integrate with the beacon network, providing dynamic 3D arrows, interactive indicators, and helpful labels directly in your field of view. Navigation has never been so effortless and engaging!

But that's not all. InNavo understands that your time and convenience are invaluable. That's why we offer premium membership options, providing access to exclusive features like priority routing, personalized recommendations, and even virtual guides to accompany you on your journey. Experience the luxury of a hassle-free navigation experience tailored to your needs.

To ensure the sustainability of our service, we have partnered with top brands to display targeted advertisements within the app. These carefully curated ads seamlessly integrate with your navigation experience, offering exciting promotions, exclusive discounts, and nearby attractions personalized to your preferences.

InNavo is your trusted companion, whether you're a busy professional navigating a bustling office complex, an avid shopper exploring a vast mall, or a visitor in a

complex healthcare facility. Our state-of-the-art technology will transform the way you navigate indoor spaces, unlocking new possibilities and saving you valuable time

Join us in revolutionizing indoor navigation. Embrace InNavo, where the future of navigation meets augmented reality. Say goodbye to being lost and welcome the freedom to explore with ease!

Executive Summary

InNavo is a groundbreaking, cutting-edge Augmented Reality based Indoor Navigation App. It is the future of Indoor Navigation we will no longer have to ask for directions when we are in a shopping mall. Now we won't be late for our flight because we got lost finding our way to the right terminal. InNavo will be there to guide you to your destination.

Our app will run on a proprietary network of Bluetooth Beacons carefully placed around the premises. The mesh of beacons will provide a strong enough network that the user can easily navigate to their destination. Our services have an advantage over the already implemented services because they either use GPS or Wi-Fi both of which are slightly less reliable, not power efficient, and network failure can cause the whole system to go down. Whereas our system will be able to accommodate such failures.

Our app will target every large indoor space that has new visitors every single day. These spaces include Airports, Hospitals, Shopping Malls, Offices, and Educational Institutes.

Killing two birds with one stone is what InNavo does. Where it makes life easier for users, it earns money by running targeted ads that are tailored to your preferences. These ads will generate revenue for further development of the app. We also have the option for the corporate customer to partner with us and

advertise their business through our app. If a customer is vary of ads then we offer premium membership with priority services and zero ads.

Social Media, direct pitching to potential clients, and play store will be our primary modes of marketing.

With an innovative fusion of augmented reality and Bluetooth beacon technology, InNavo unlocks a future where finding your way indoors becomes an effortless, intuitive, and enjoyable experience for all. Join us on our journey to revolutionize indoor navigation, as we merge the virtual and physical worlds to empower individuals and businesses in navigating the intricate spaces they encounter every day.

Objectives

- Navigation inside large Indoor Spaces such as Offices, Airports, and Universities
- Accurate Estimation of Distance
- AR-aided Navigation
- Destination Identification

Vision Statement

Our vision is to revolutionize indoor navigation through our Augmented Reality (AR) Based Indoor Navigation System. By using Bluetooth beacons, we provide consistent and immersive navigation experiences. Our business model combines premium membership and targeted ads to sustain and enhance our services. Join us as we transform indoor navigation, making it effortless, engaging, and profitable for all.

Mission Statement

Our mission is to redefine indoor navigation by utilizing an Augmented Reality Based Indoor Navigation System. Powered by Bluetooth beacons, our system offers seamless and accurate navigation within complex indoor spaces. By offering premium membership benefits and targeted ads, we aim to create a sustainable and immersive experience that enhances the way people navigate and explore indoor environments.

Team Members

Member
Fizza Azmat
Muhammad Ikram Ul Haq
Muhammad Shavez Arif

SWOT Analysis

Strength	Weakness
<ul style="list-style-type: none">• Our AR-based system, powered by Bluetooth beacons, provides precise and real-time navigation.• Premium memberships and targeted ads generate multiple revenue streams, ensuring a sustainable and profitable business model.• With AR overlays, users can enjoy personalized information and exclusive promotions, and	<ul style="list-style-type: none">• The reliance on Bluetooth technology for navigation may be affected by signal interference or limited range, potentially impacting the accuracy and reliability of the system.• The process of installing and configuring Bluetooth beacons in large venues can be time-consuming and

<p>tailored recommendations, create an engaging and interactive journey.</p> <ul style="list-style-type: none"> • Our system can effortlessly scale and adapt to various venues, making it suitable for shopping malls, airports, museums, hospitals, and more. • Continuous improvement and user feedback drive our technology, ensuring that our AR-based navigation system remains cutting-edge and user-focused. 	<p>resource-intensive, potentially causing delays in system deployment.</p> <ul style="list-style-type: none"> • Some users may require time to familiarize themselves with the AR-based navigation system, which could lead to initial resistance or slower adoption rates. <ul style="list-style-type: none"> • Collecting user data for personalized experiences and targeted ads raises privacy concerns, requiring robust security measures to protect user information. • The market for indoor navigation systems is competitive, requiring continuous innovation and differentiation to stand out among other players and attract a wide user base.
Opportunities	Threats
<ul style="list-style-type: none"> • The increasing need for seamless navigation in complex indoor environments presents a significant market opportunity for our AR-based system. • The ability to expand our system to various venues such as shopping malls, airports, museums, and hospitals opens up a wide range of potential partnerships and revenue streams. • By collecting user data, we can gain valuable insights into user behavior, preferences, and navigation patterns, allowing us 	<ul style="list-style-type: none"> • Rapid advancements in technology may render our AR-based system outdated if we fail to keep pace with emerging technologies. • Evolving privacy and data protection regulations may impose restrictions on collecting and utilizing user data, impacting our ability to deliver personalized experiences and targeted ads. • Some users may be hesitant to embrace AR-based navigation or find the learning curve challenging, limiting the

<p>to refine our system, optimize advertising strategies, and provide valuable analytics to venue partners.</p> <ul style="list-style-type: none"> • By collecting user data, we can gain valuable insights into user behavior, preferences, and navigation patterns, allowing us to refine our system, optimize advertising strategies, and provide valuable analytics to venue partners. 	<p>potential adoption and growth of our system.</p>
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Marketing Plan

Product Description

Step into a new dimension of navigation with **InNavo**, the groundbreaking Augmented Reality (AR) Based Indoor Navigation System. Powered by Bluetooth beacons, our system provides seamless and accurate navigation through complex indoor spaces.

Main Features

Premium Membership

Elevate your journey with our premium membership, unlocking exclusive benefits such as priority assistance, special offers, and access to premium content, making each exploration truly exceptional.

Targeted Ads for Value and Sustainability

Seamlessly integrated targeted ads provide relevant information and promotions while supporting the sustainability of our services, ensuring a win-win for users and businesses alike.

Immersive AR Experience

Explore indoor environments with AR overlays that transform your surroundings, offering personalized information, exclusive promotions, and tailored recommendations at every step.

Versatile for Any Venue

From bustling shopping malls to sprawling airports, our system effortlessly adapts to a wide range of venues, providing a versatile and reliable navigation solution wherever you go.

Target Market

The target market for a business using an Augmented Reality Based Indoor Navigation System with Bluetooth beacons includes individuals and venues seeking convenient and accurate navigation solutions within complex indoor spaces. This can encompass a range of sectors, including shopping malls, airports, museums, hospitals, event venues, and more.

Marketing Mix

Product	Price
InNavo - Augmented Reality Based Indoor Navigation System	Setup Cost: 10000 Per 20 Beacons Beacon Cost: Market Rate Subletting App: 50000

Place	Promotion
Airport, Universities, Shopping Malls, Offices	Social Media, Targeted Clients, Brand Collaboration, Playstore

Business Plan Canvas



Unique value proposition

Transforming indoor navigation with AR overlays, precise Bluetooth beacons, and targeted ads, our system delivers an immersive and personalized experience for users while generating revenue opportunities for venue owners.

Unfair advantage

Our business excels with an unmatched advantage through a powerful combination of AR technology, precise Bluetooth beacons, and an exceptional indoor navigation system, setting us apart from competitors and captivating customers.

High level concept

Our business provides a cutting-edge Augmented Reality Based Indoor Navigation System that utilizes Bluetooth beacons for accurate and interactive navigation within indoor spaces, enhancing the user experience and enabling targeted advertising opportunities.

Channels

- App Stores
- Venue Partnerships
- Mobile Platforms

- Premium Membership
- Brand Collaboration
- Digital Marketing

Customer segments

- Shoppers
- Patients
- Travelers

- Venue Owners
- Event Owners
- Students

Early adopters

- Tech-Savvy Individuals
- Frequent Travelers
- Digital Enthusiasts

- Forward Thinking Businesses
- Young Entrepreneur

Cost structure

Bluetooth Beacons

Batteries

Development Cost

Setup Cost

Maintenance

Revenue streams

Targeted
Advertisements

Paid
Memberships

Risk Analysis

Risk	Mitigation Strategy
<ul style="list-style-type: none">● Potential issues with Bluetooth connectivity, signal interference, or limited range may affect the accuracy and reliability of the navigation system.● Some users may resist or struggle to adapt to the new technology, leading to slower adoption rates and potential resistance from venue owners.● The market for indoor navigation systems is competitive, requiring continuous innovation and differentiation to stay ahead of competitors.● Installing and maintaining Bluetooth beacons in large venues can be time-consuming.	<ul style="list-style-type: none">● Ensure a strong and reliable Bluetooth network infrastructure, and conduct regular maintenance to minimize connectivity issues.● Provide user-friendly interfaces, and ongoing support to help users quickly adapt to the new technology and address any concerns or challenges they may encounter.● Stay ahead of the competition by investing in research and development, monitoring industry trends, and continuously improving the system with new features and capabilities.● Simplify the process of installing and maintaining Bluetooth beacons by using automation, clear procedures, and efficient project management to save time and resources.

Financial Analysis

Here is a breakdown of all the finances:

Development: Divided among all team members (One-Time Cost)

Beacons: Will be paid by the customer

Maintenance: Battery replacement for Beacons (Rs. 150 /Beacon), InApp maintenance (Variable)

Breakeven Analysis

Revenue Analysis:

InNavo generates revenue through premium memberships and targeted advertising partnerships with businesses.

The average revenue per user is estimated to be 500 Pakistani Rupees per month.

To reach the break-even point, InNavo needs to determine the number of users required.

Cost Analysis:

InNavo incurs various costs, including technology development, personnel expenses, marketing efforts, and overhead costs.

The total investment made in InNavo is 10,000 Pakistani Rupees.

Break-Even Point:

The break-even point can be calculated by dividing the total fixed costs (initial investment) by the contribution margin.

The contribution margin is the revenue per user minus the variable cost per user.

Assuming the variable cost per user is 200 Pakistani Rupees, the contribution margin per user would be $500 - 200 = 300$ Pakistani Rupees.

The break-even point would be $10,000 / 300$, which is approximately 33.33 users.

Return on Investment Analysis

Revenue Analysis:

InNavo generates revenue through premium memberships and targeted advertising partnerships with businesses.

The average revenue per user is estimated to be 500 Pakistani Rupees per month.

To assess ROI, InNavo needs to determine the revenue generated and compare it to the initial investment.

Cost Analysis:

InNavo incurs various costs, including technology development, personnel expenses, marketing efforts, and overhead costs.

The total investment made in InNavo is 10,000 Pakistani Rupees.

Return on Investment (ROI):

The ROI is calculated by subtracting the initial investment from the revenue generated and dividing it by the initial investment.

Assuming InNavo acquires 100 users, the monthly revenue would be 500,000 Pakistani Rupees (100 users * 500 Pakistani Rupees per user).

The ROI can be calculated as follows: $[(500,000 - 10,000) / 10,000] * 100 = \text{Rs. } 4900$

Sensitivity Analysis:

InNavo performs a sensitivity analysis to assess the impact of changes in key variables, such as average revenue per user or user acquisition costs, on the ROI.

Cash Flow Analysis:

InNavo evaluates the cash flow generated from revenue to ensure that it covers expenses, provides a return on investment, and maintains positive cash flow.

Exit Strategy

If at some point we would like to exit the business, we would sell InNavo to a software development firm capable of handling the clientele we have built over the years. Since the already implemented systems will need regular maintenance a firm needs to have a reasonable amount of resources and technical expertise.