



HOVER CHARGE ⚡

- AI-DRIVEN PLATFORM FOR REAL-TIME EV CHARGING STATION DISCOVERY, BOOKING, AND SMART ROUTE PLANNING



PROBLEM STATEMENT

PROBLEM

EVCHARGING STATIONS ARE LIMITED, UNEVENLY DISTRIBUTED,
AND SLOW, CAUSING RANGE ANXIETY AND INCONVENIENCE FOR
USERS. THIS HINDERS EV ADOPTION, INCREASING RELIANCE ON
GASOLINE & WORSENING AIR POLLUTION

IMPACT

EV OWNERS FACE RANGE ANXIETY, POTENTIAL BUYERS HESITATE
TO SWITCH, THE PUBLIC SUFFERS FROM AIR POLLUTION, FLEET
OPERATORS FACE DELAYS, AND GOVERNMENTS STRUGGLE TO
MEET CLEAN ENERGY

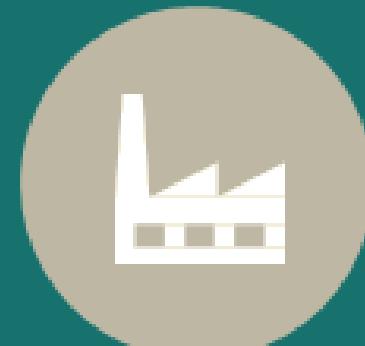


HoverCharge ⚡



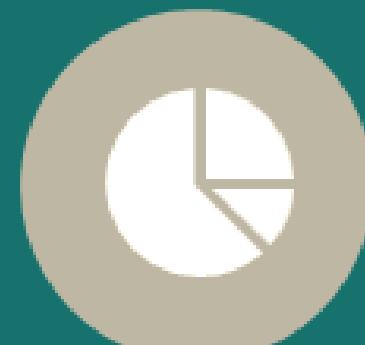
Area

Energy



Industry

Energy & Renewable
Resources



Domain

Smart Grid
Technologies

PROBLEM BEING SOLVED

EV OWNERS STRUGGLE WITH LIMITED ACCESS TO FAST AND RELIABLE CHARGING STATIONS. THIS LEADS TO INCONVENIENCE DURING DAILY COMMUTES AND LONG TRIPS, INCREASING RANGE ANXIETY. THE LACK OF WIDESPREAD CHARGING INFRASTRUCTURE ALSO DISCOURAGES POTENTIAL BUYERS FROM SWITCHING TO ELECTRIC VEHICLES.

SUPPORTING DATA

INDIA HAS ONE CHARGING STATION FOR EVERY 135 EVS, CAUSING RANGE ANXIETY FOR 58% OF POTENTIAL BUYERS.

SOURCE: FORVIS MAZARS REPORT ON EV ADOPTION IN INDIA 2024, AUTOCAR PRO, REUTERS

OUR SOLUTION

Solution

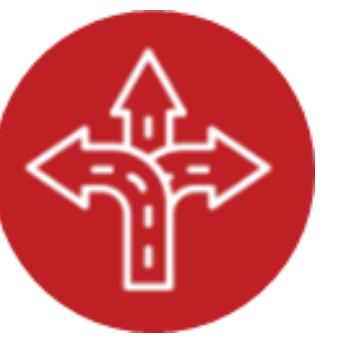
On-Demand Mobile Charging – Deploy charging vans that deliver power to EV owners wherever they are, reducing range anxiety and ensuring convenient charging access anytime, anywhere. 



Core Technologies/ Methodologies

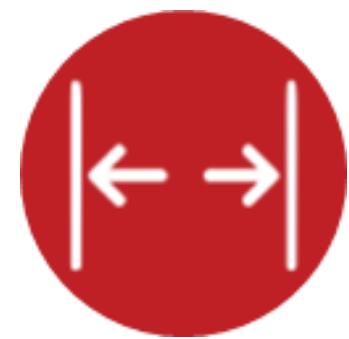
Oursolution will use React Native (app), AWS (backend), IoT for monitoring, AI for station recommendations, and Razorpay for seamless payments.





CURRENT ALTERNATIVES

As an EV owner – Using limited public charging stations, carrying portable chargers, or planning trips around charging stops. As a commuter – Relying on fuel-based vehicles or hybrid cars instead of EVs. As a fleet operator – Investing in additional EVs to avoid downtime or sticking to conventional fuel fleets.



GAPS IN CURRENT ALTERNATIVES

Current EV charging solutions have limited availability, long wait times, and high costs. Users struggle with range anxiety, slow charging speeds, and lack of convenient access to charging stations. Fixed infrastructure makes charging difficult during travel, reducing EV adoption.

SOLUTION DESIGN

01 OUR SOLUTION

On-Demand Mobile Charging –

Deploy charging vans that deliver power to EV owners wherever they are, reducing range anxiety and ensuring convenient charging access anytime, anywhere. 🚗



02 KEY FEATURES

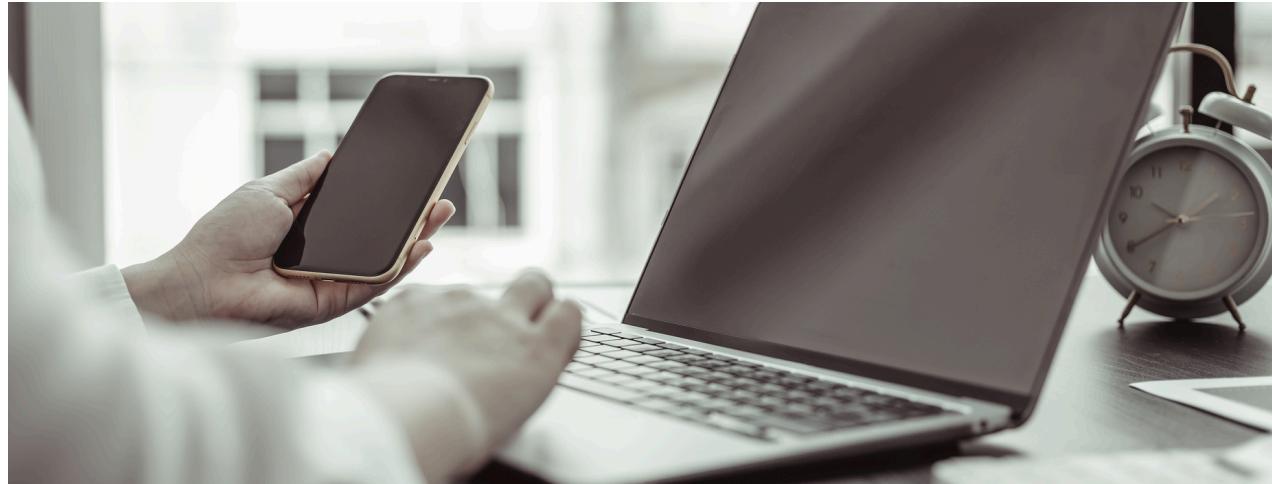
Our solution includes real-time charging station availability, AI-based route optimization, mobile app booking, digital payments, IoT monitoring, and user reviews for reliability.

03 Uniqueness

AI-driven route optimization, real-time station data, IoT-based monitoring, and seamless digital payments make our solution highly efficient, user-friendly, and unique in the EV charging space.

PROTOTYPE

SOLUTIONS OF THE PROBLEMS



01

Prototype Format

prototype is a digital app for booking and physical model demonstrating mobile charging van service.

02

Functionality included in the Prototype

Prototype includes: real-time station availability, AI route optimization, app booking, digital payments, IoT monitoring, & user reviews

02

Functionality NOT included in the Prototype

Prototype excludes : Full payment integration, advanced AI, comprehensive IoT data, scalability features, edge case handling, & admin tools.

COMPETITORS

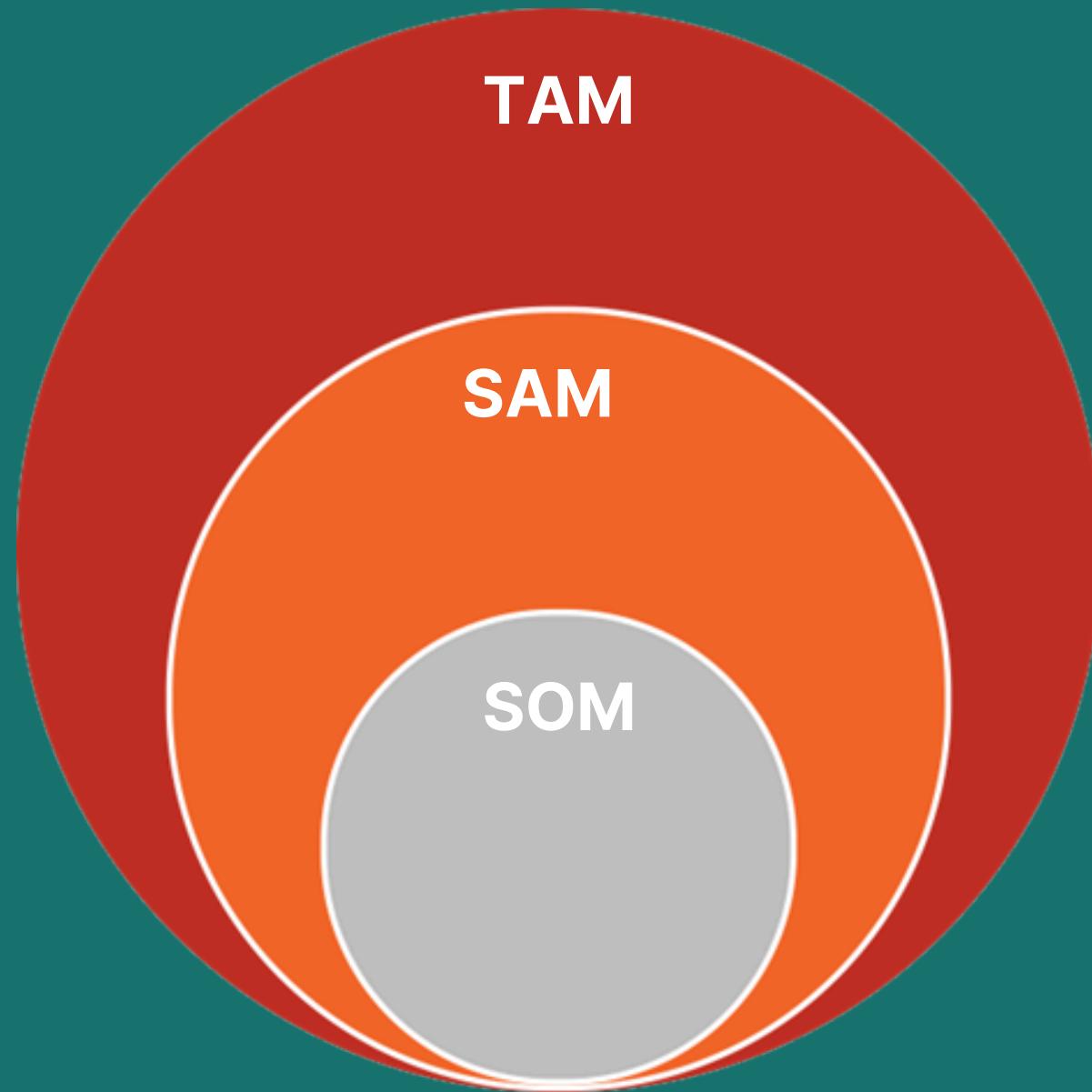
DIRECT

- SparXcharge
- SETRANS
- Mobility ZAPME
- BoostEV

INDIRECT

- VoltUp
- Tata Power EZ Charge
- Tesla
- Supercharger
- WiTricity

MARKET SIZE



Total Available Market (TAM)

The Total Available Market (TAM) represents the entire potential demand for our product or service, reflecting the vast landscape of opportunities awaiting exploration and market capture.

HoverCharge's TAM is the global market ~\$60B

Serviceable Available Market (SAM)

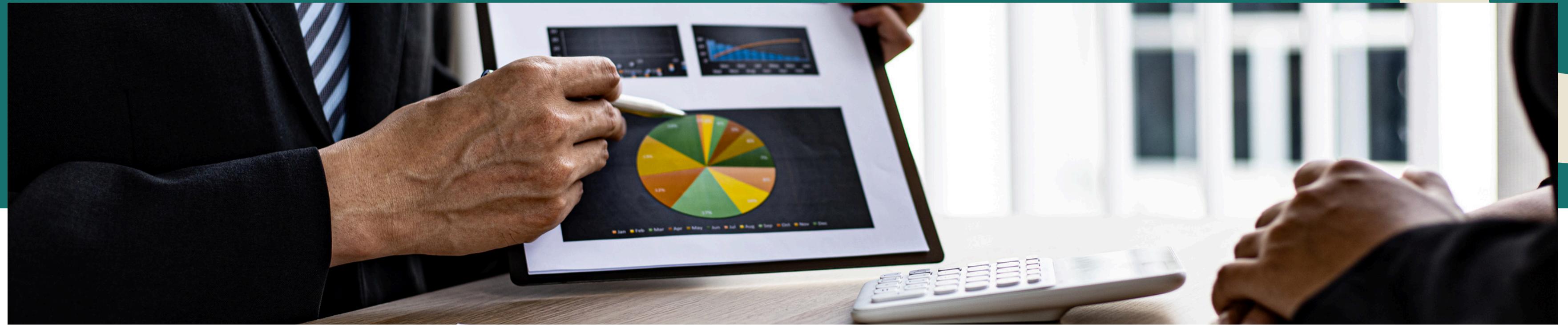
The Serviceable Available Market (SAM) represents the specific segment of the Total Available Market where our product or service can be realistically and effectively offered, defining the target audience for our strategic market approach.

SAM: \$1.3B urban India EV charging by 2030

Serviceable Obtainable Market (SOM)

The Serviceable Obtainable Market (SOM) signifies the realistic and achievable portion of the Serviceable Available Market where our business aims to capture market share, emphasizing our practical and strategic approach to market penetration.

SOM estimate is ₹10.22 Crore in the first 2 years



REVENUE MODELS

Revenue Model (Primary)
Pay-per-Use Model

Revenue Model (Secondary)
Subscription Model

FINANCIALS

CLIENT'S SATISFACTION



Revenue Models/Streams

- Pay-per-Use Model
- Subscription Model

Pricing:

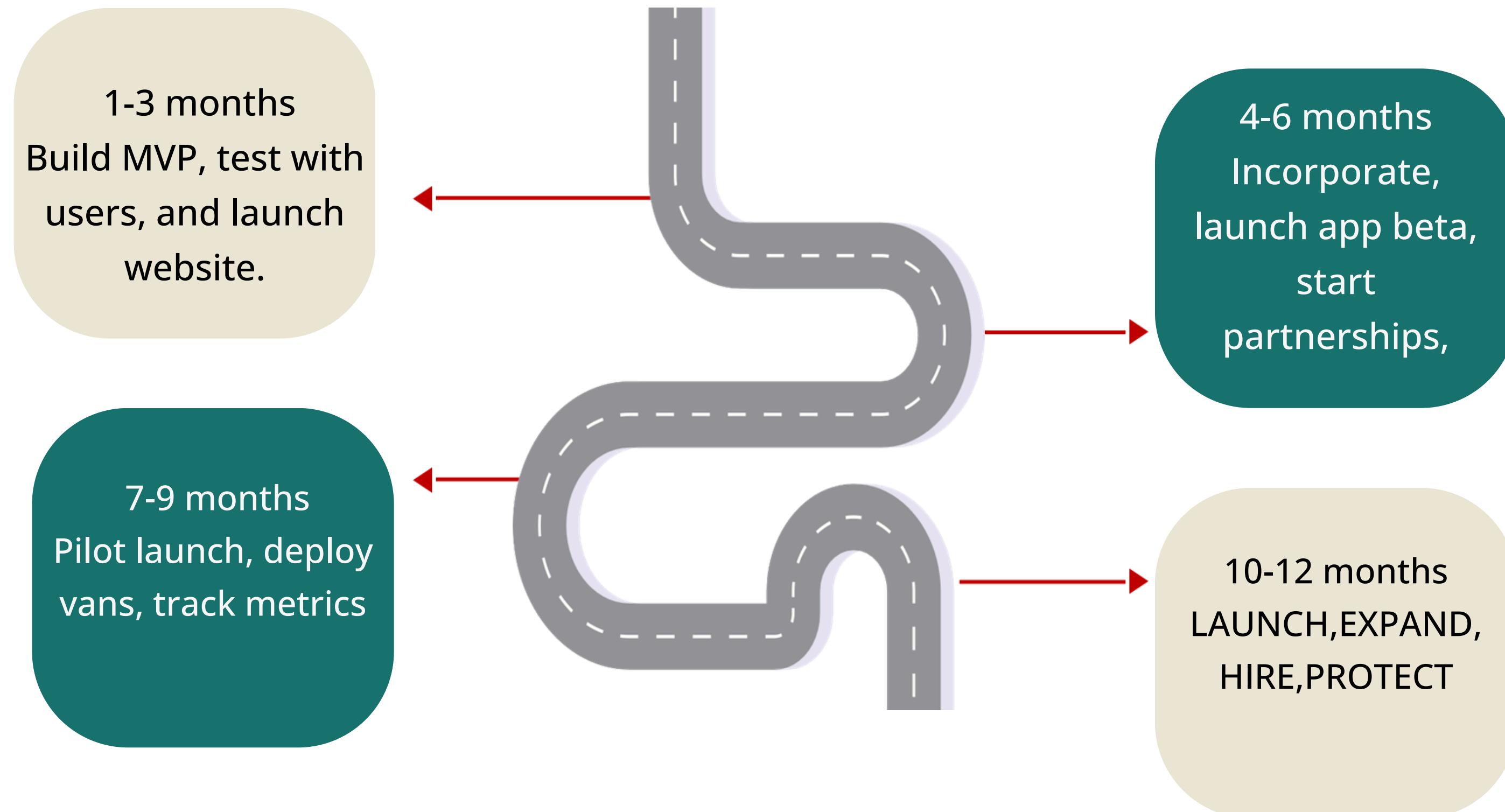
Unit of Sale: Usage or Subscription

Selling price per unit:

₹10 per minute or
₹499/month

NEXT STEPS

HoverCharge⚡



VENTURE VIABILITY

HoverCharge 

STRENGTHS

HoverCharge's key strengths include a strong problem-solution fit, innovative on-demand mobile EV charging, and AI-driven route optimization. The venture targets a fast-growing market with high demand, has positive user feedback, a clear GTM strategy, and a strong tech foundation using AI, IoT, and mobile apps.

AREAS OF IMPROVEMENT

HoverCharge needs to improve financial clarity, especially around pricing, break-even analysis, and funding sources. Enhancing AI route accuracy, expanding suburban coverage, refining the prototype's payment features, and boosting marketing execution will strengthen growth and user adoption.



VENTURE SUMMARY

HoverCharge 

OVERVIEW

"HoverCharge is an AI-powered EV charging platform solving India's critical infrastructure gap. With just 1 charger per 135 EVs (vs. the global 1:20 ratio), range anxiety stalls adoption. Our solution combines real-time station discovery, on-demand mobile charging vans, and smart route optimization to make charging as convenient as refueling. Leveraging IoT and seamless payments, we serve urban professionals, fleets, and businesses — cutting emissions, oil imports (\$160B/year)"

Mission

HoverCharge accelerates India's shift to sustainable mobility by eliminating EV range anxiety. We combine AI-driven charging discovery, on-demand mobile vans, and smart routing to make charging as easy as refueling. Our tech bridges infrastructure gaps, cuts emissions, and empowers users with reliable, accessible solutions—driving mass EV adoption.

Social/Economic Relevance

"India's 1.6M+ annual pollution deaths and \$160B oil imports demand urgent EV adoption, but 58% avoid EVs due to charging anxiety (Mazars 2024). With just 1 charger per 135 EVs vs 1:20 globally, infrastructure gaps worsen air quality, energy security, and climate goals. HoverCharge's mobile solutions bridge this gap, enabling cleaner cities, energy

THANK YOU

TEAM HOVER CHARGE

CONTACT US:

Ph no: 7989107910

<https://dhanush-bheemsetty.github.io/Hover-Charge>