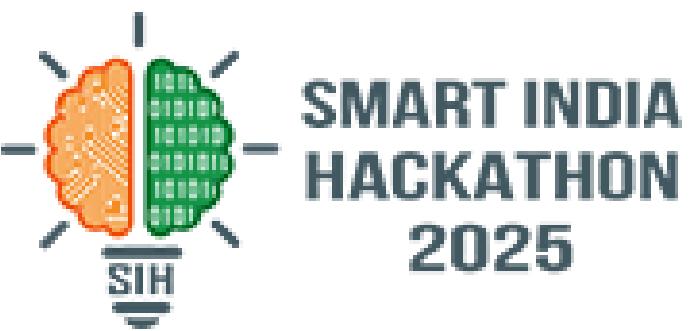


# SMART INDIA HACKATHON 2025



## TRIP IT

- Problem Statement ID – 25127

- Problem Statement Title-

**Student Innovation: Swadeshi for**

**Atmanirbhar Bharat - Blockchain & Cybersecurity**

- Theme- Blockchain & Cybersecurity

- PS Category- Software

- Team ID- 92203

- Team Name- Sinister Six\_1



**Trip it**  
PLAN IT & TRIP IT

## Sinister Six

## Problems in Travel & Tourism

### Unreliable Social Media Content

- Instagram/blog itineraries are unverified and outdated (67% influencer posts inaccurate)
- Hard for tourists to trust or follow safely

### Tourist Safety Risks

- Women face safety concerns → avoid certain destinations
- Missing cases & delays (avg. 72 hrs response)
- No internet support in remote areas
- Economic loss (₹450 cr annually in NE India)

### TOURIST SAFETY RISKS

#### WOMEN SAFETY RISKS



#### GAMIFIED REWARDS & LOCAL DISCOUNTS

Earn token for safety reports, itineraries, hidden gems



#### Social Itinerary Sharing & Remix

Share TripIt links directly on Instagram: travelers can remix itineraries like reels



#### Verified Travel ID (SBT)

Blockchain-based digital ID ensuring safe, trusted, and authentic journeys



#### Offline Mesh Chat (Bitchat)

Peer-to-peer emergency communication via Bluetooth/WiFi, no internet needed



#### Community Intelligence

Real-time tags ("Women-Safe Zone," "Hidden Gems," "Budget < ₹1000") validated by multiple travelers



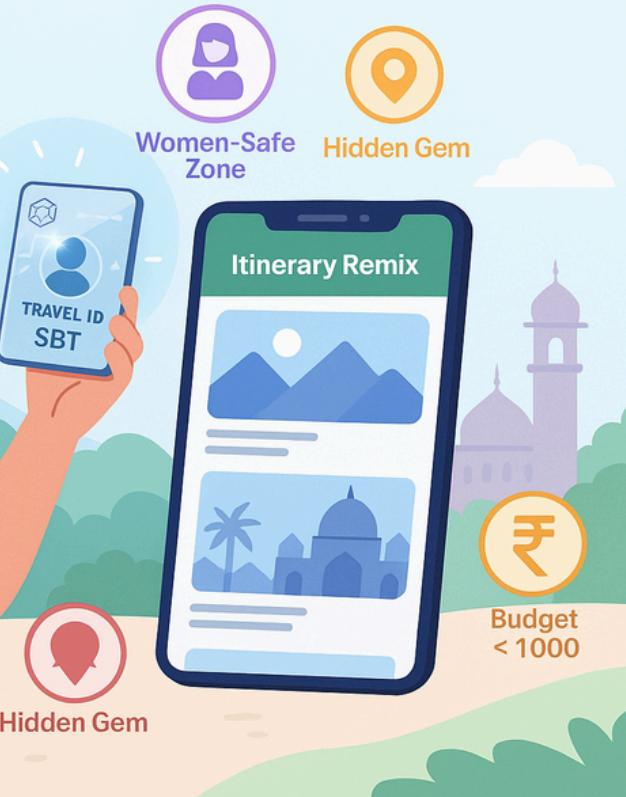
#### AI-Powered Safety

Smart anomaly detection and predictive alerts for safer journeys



#### Safe Group Formation

Verified companion matching and women-only travel groups



## Solution & Innovation

## Social Travel & Safety Features



### Blockchain Travel ID (SBT)

Verified digital ID for tourists, linked with Aadhaar/Passport to ensure safe and trust journeys



### Itinerary Remix & Sharing

Travelers can remix day-wise itineraries (like reels) and adapt them to budget, interests, and time



### Community Tags & Verified Content

Tags like "Women-Safe Zone," "Budget < ₹1000," "Hidden Gem," validated by multiple travelers



### Social Companion Matching

Verified profile-based matching for solo travelers, women-only groups, and interest-based partners



### Offline Mesh Chat & SOS

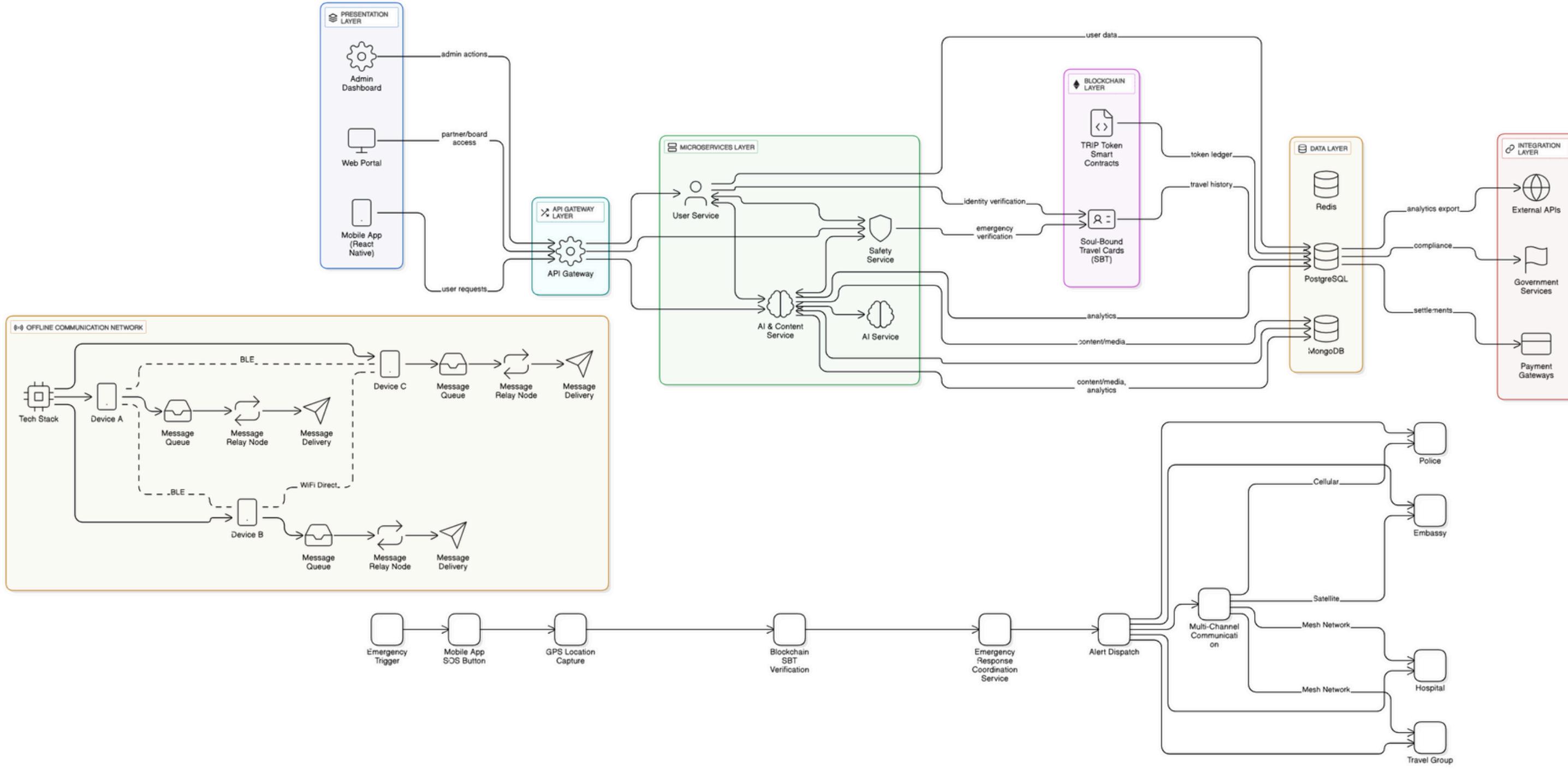
Peer-to-peer communication and emergency alerts in no-network areas



### Gamified Rewards & Local Discounts

Earn tokens for safety reports, itineraries, hidden gems → redeem for hotel/food discounts

# TECHNICAL APPROACH



## Mobile Application

- React Native, Expo, React Navigation
- React Native Maps, AsyncStorage
- React Native Voice

## Security

- HTTPS/SSL, OAuth 2.0
- AES-256 Encryption
- Role-based Access Control
- Bharat Stack for KYC

## Web Dashboard

- Next.js, React.js, Shadcn
- Chart.js

## Backend Services

- Node.js, Express.js, FastAPI, Python
- Socket.io, JWT Authentication

## Deployment

- AWS / Azure, Docker, NGINX, Vercel, Netlify

## AI/ML

- TensorFlow, Scikit-learn
- OpenCV, NLTK

## Database Stack

- PostgreSQL, MongoDB, Redis

## Blockchain

- Base Sepolia, Ethereum
- Solidity, Node.js SDK

The entire tech stack will be built and maintained on LTS (Long-Term Support) versions to ensure stability, security, and consistent updates

Prototype demo : [https://youtu.be/B\\_4eioCL81g](https://youtu.be/B_4eioCL81g)

# FEASIBILITY AND VIABILITY

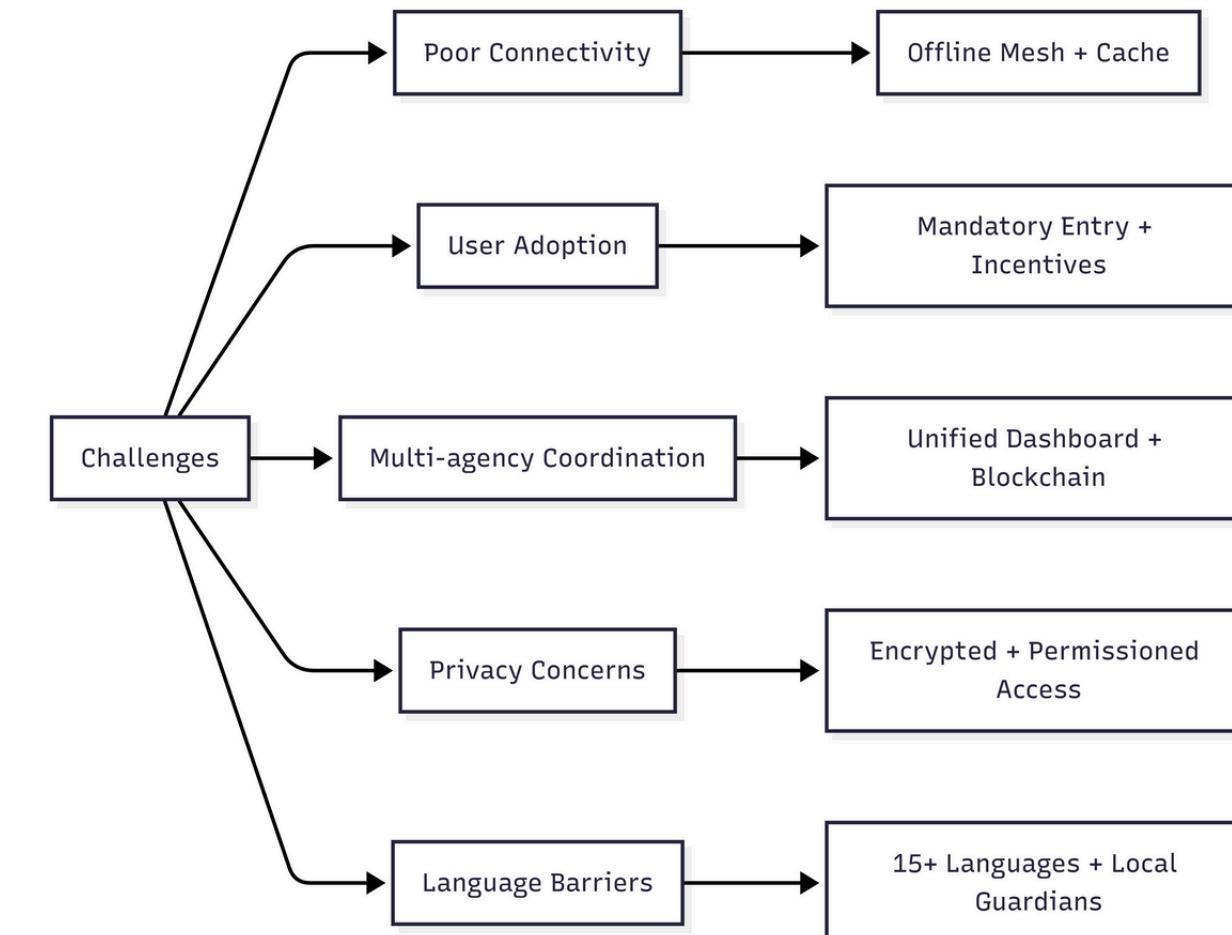
## Feasibility

- Digital Infrastructure:** India has ~806M internet users (55% penetration) and 1.12B mobile connections . With growing 5G coverage, most travelers can access Triplt; offline mesh mode covers low-connectivity zones.
- Digital ID Readiness:** Nearly all adults have Aadhaar. Triplt's Soul-Bound Travel Cards (SBT) can link securely with Aadhaar/passports . This matches the National Digital Tourism Mission, which promotes blockchain for e-Visa and verified services .
- Safety Gap:** ₹450 cr annual tourism loss in Northeast India due to safety ; 67% of solo women travelers avoid destinations over safety fears ; missing-person response averages 72 hrs . Triplt's blockchain ID and companion matching directly address these gaps.
- Proven Stack:** Uses React Native, Node.js, AES-256, blockchain, and Bluetooth/Wi-Fi mesh networking –all mature, implementable with existing expertise.
- Policy Alignment:** Fits Smart Cities' focus on IT/digitalization & women's safety , and aligns with India's ₹2,479 cr tourism budget (FY25) .

## Viability

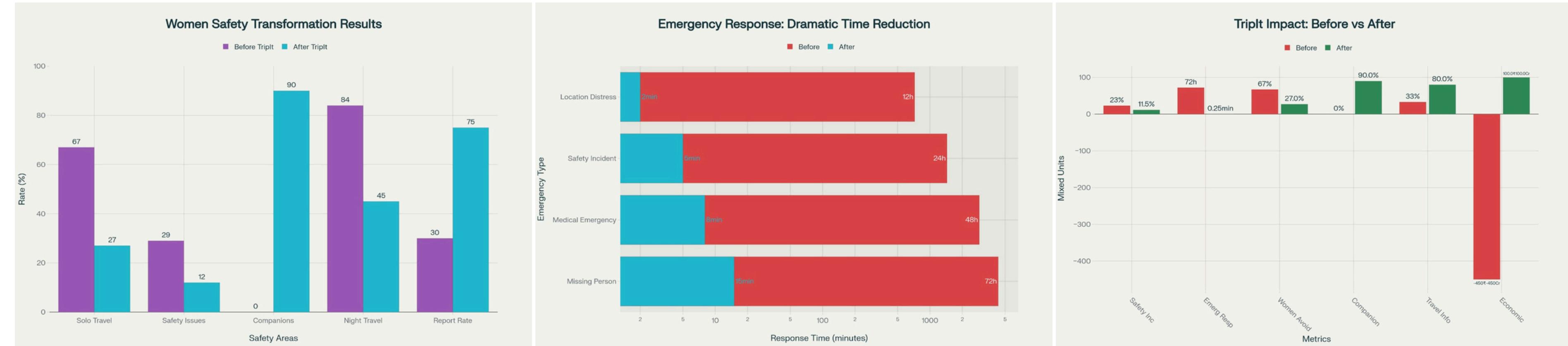
- Market Scale:** Tourism added ₹19.13T to GDP in 2023 (10% above pre-COVID), supporting 43M jobs . Domestic visits reached 2.51B in 2023, up from 1.73B in 2022 .
- Policy Backing:** NDHM promotes blockchain for tourism data sharing . Smart Cities (₹48,000 cr central + state match ) provide infrastructure for integration.
- Revenue Model:** Projected Year-3 revenue: ₹200 cr B2C, ₹100 cr B2B, ₹50 cr token economy . State tourism APIs (₹50 L/yr) and business dashboards diversify income .
- Govt Value:** Real-time alerts, analytics, and women's safety monitoring enable integration with police/tourism boards, aligning with official safety KPIs .
- Scalable Design:** Roadmap targets 100K+ users (40% women) across multiple states . Built on NIC's Vishvarya blockchain framework , ensuring national scalability.

### Challenges we might face      How we solve them



# IMPACT AND BENEFITS

## IMPACT :



## BENEFITS :

Benefit	Tourists	Government	Local Communities
Safety & Security	Travel confidently with 24/7 monitoring	Real-time tourist visibility	Earning as Guardians
1 Information Access	Access verified safety intelligence	Predictive crowd management	Sustainable tourism employment
SOS Emergency Response	One-touch SOS with 30-second response	Blockchain evidence for investigations	Cultural ambassador opportunities
Social Media Sharing makes travel content go viral	Social Media Sharing makes travel content go viral	Boom in Tourism and GDP Growth	Tokens reward safety, contributing to local economy growth



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