

# WHACKIEST'25

## IDEATHON-2025

Theme : PS1-Endless Trail

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# PROBLEM STATEMENT

## THE FUTURE OF TRAVEL NEEDS REINVENTION

### 1. Planning is a Decision Maze

**35+**

tabs switched before finalizing a trip

FEELS UNCERTAIN ABOUT CHOICES.



### 2. Group Coordination is Lost in Noise

**90%**

of messages are irrelevant memes

IMPOSSIBLE TO TRACK ESSENTIALS.



### 3. Itineraries Ignore Human Reality

Fail to adapt to human conditions like crowds, fatigue, sun exposure, delays, & emotions.



### 4. Safety Tools are Reactive, Not Proactive

No modern AI detects **EARLY DANGER SIGNALS**.  
PROLONGED SILENCE, UNUSUAL DETOURS, REMOTE ISOLATION.



### 5. Discovery is Biased and Inauthentic

Funnels travelers to the **SAME 50 TOURIST SPOTS**,  
LOCAL SECRETS & MICRO-CULTURES OVERLOOKED.



### 6. Memories are Captured, Not Understood

Photos, chats, and emotions remain as **FRAGMENTED DATA**,  
NO TOOL WEAVES THEM INTO A MEANINGFUL, NARRATED STORY.

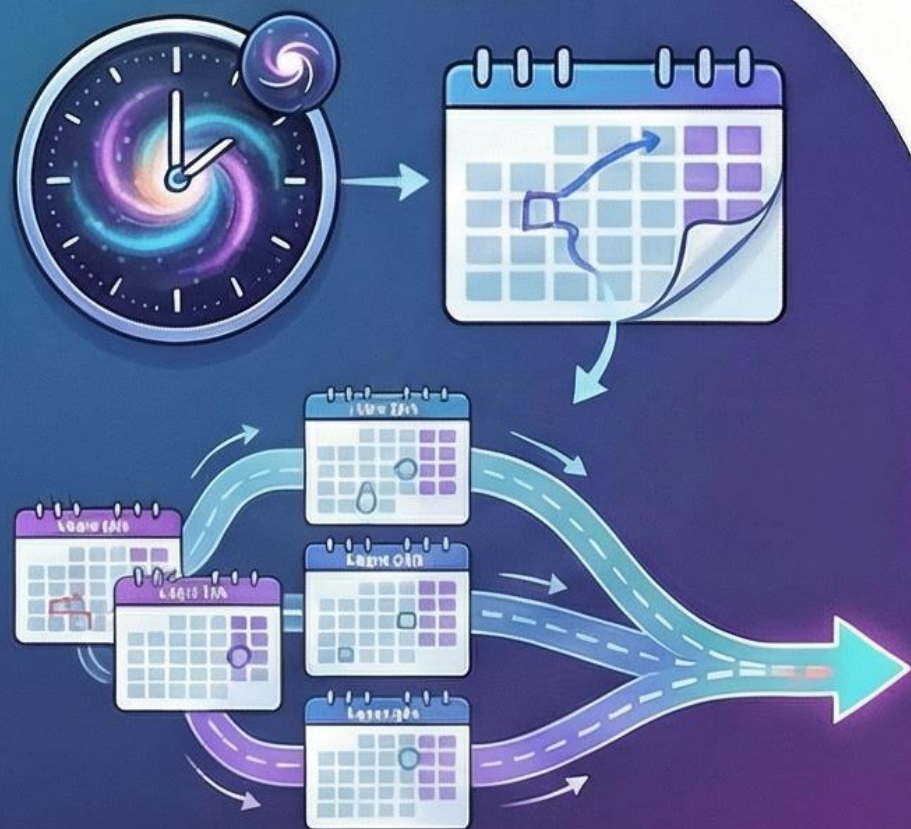




# PROPOSED IDEA



## Phase 1: Pre-Trip Intelligence



### Holiday Spacetime Optimizer (H-SO Engine)

AI simulates "alternate universes" for your seaport finding optimal travel windows by modeling how taking different numbers of leave days impacts trip length, cost, and opportunities.



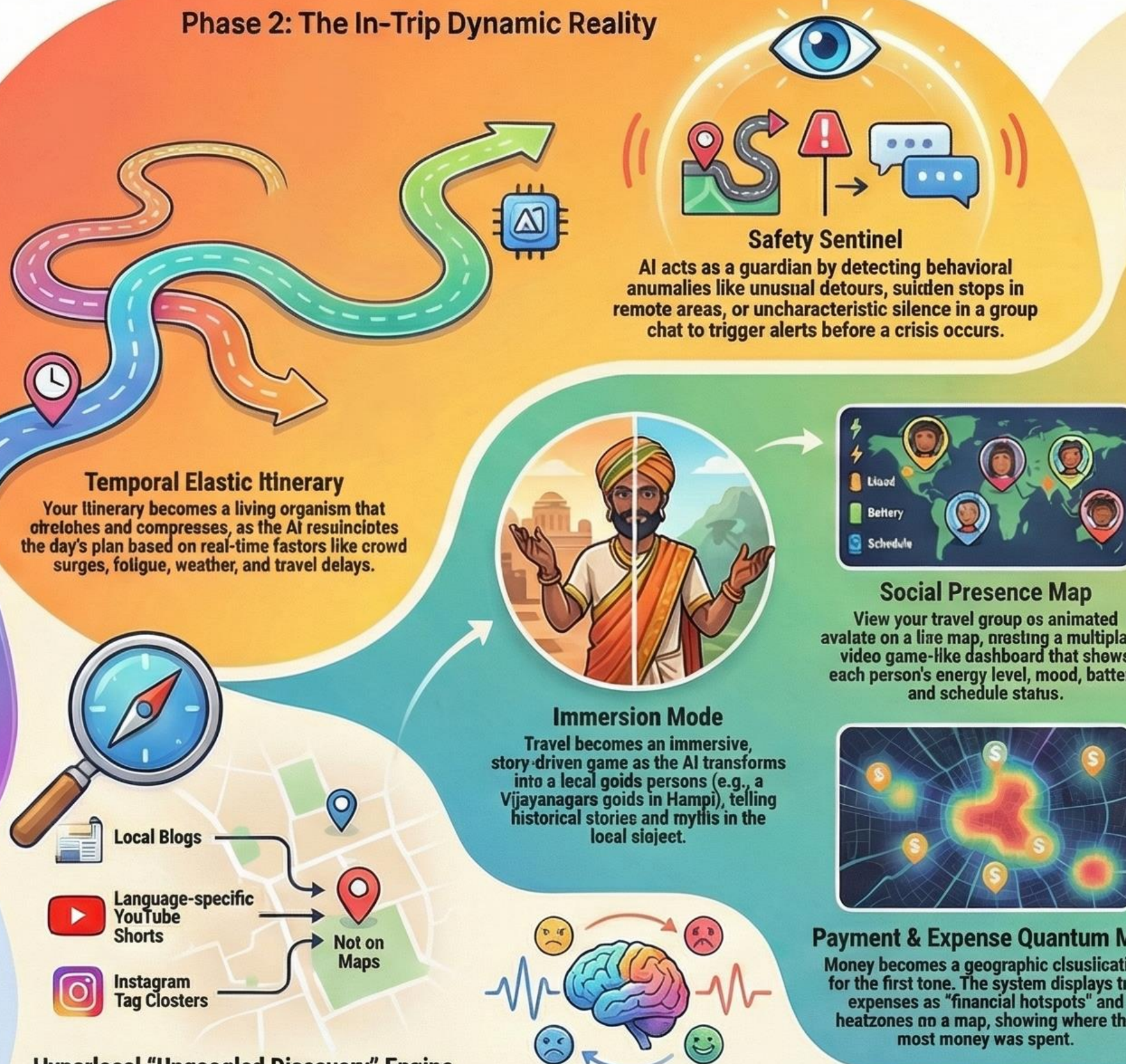
### Group "Signal-Cleanse" Engine

AI simulates "alternate universes" for your vacation, finding optimal travel windows by modeling how taking different numbers of leave days impacts trip length, cost, and opportunities.

### Group "Signal-Cleanse" Engine

Instead of manual filtering, the AI reads all group chat messages, connects key decisions, commitments, and bookings, and prevents them in a clean, real-time Decision Summary Timeline.

## Phase 2: The In-Trip Dynamic Reality



### Temporal Elastic Itinerary

Your Itinerary becomes a living organism that stretches and compresses, as the AI reschedules the day's plan based on real-time factors like crowd surges, fatigue, weather, and travel delays.

### Safety Sentinel

AI acts as a guardian by detecting behavioral anomalies like unusual detours, sudden stops in remote areas, or uncharacteristic silence in a group chat to trigger alerts before a crisis occurs.

### Immersion Mode

Travel becomes an immersive, story-driven game as the AI transforms into a local guide (e.g., a Vijayanagar guide in Hampi), telling historical stories and myths in the local dialect.

### Social Presence Map

View your travel group as animated avatars on a live map, creating a multiplayer video game-like dashboard that shows each person's energy level, mood, battery, and schedule status.

### Payment & Expense Quantum Map

Money becomes a geographic classification for the first time. The system displays trip expenses as "financial hotspots" and heatzones on a map, showing where the most money was spent.

### Emotion-Driven Recommendations

The system adapts to your group's emotional reality by detecting signals of fatigue, stress, or excitement, then suggesting personalized alternative routes and activities.

### Hyperlocal "Ungoogled Discovery" Engine

The system mines hyperlocal sources like local Blogs, language-specific YouTube vlogs, and Instagram tag clusters to find "Not on Maps" places and secret spots that Google doesn't know exist.

## Phase 3: Post-Trip Cinematic Storytelling



### Cinematic Memories Engine

Your memories are automatically transformed into a Hollywood-style documentary. The AI acts as a film director, using photos, timestamps, detected emotions, and chat highlights to create a narrated, cinematic timeline of your trip.

Photos

Timestamp

12:50

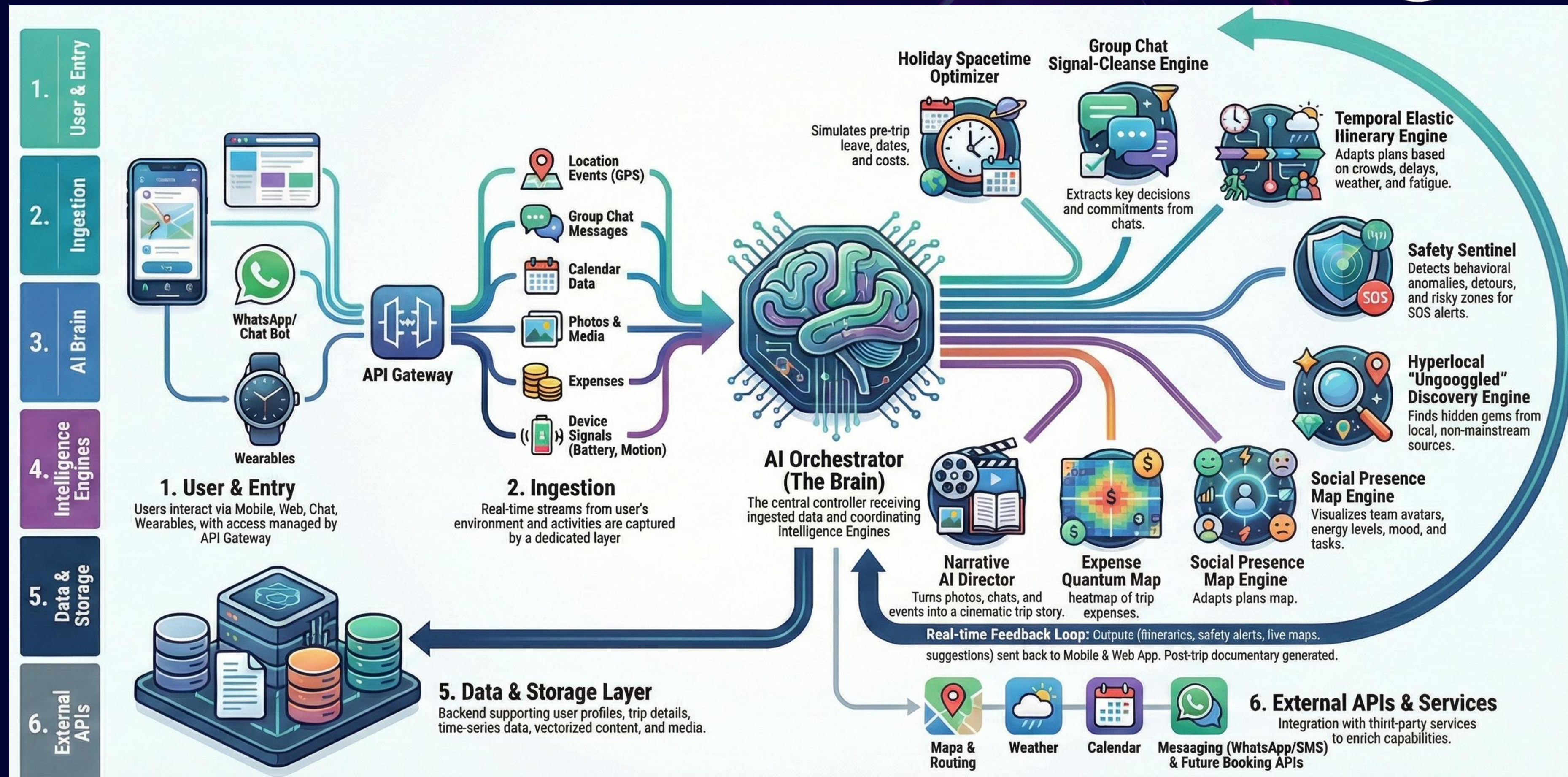
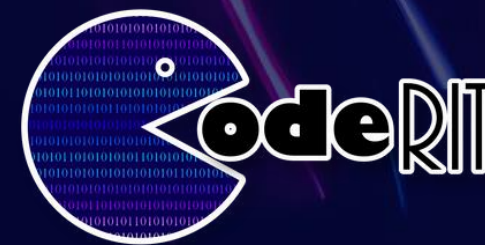
15:55

13:00

17:00



# PROCESS FLOW





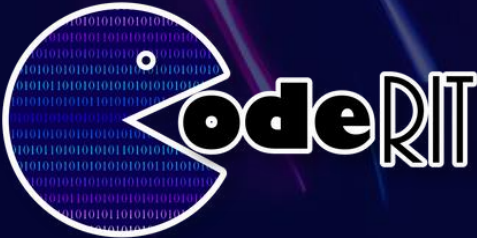
HOW THIS IS ACHIEVABLE?

- **Built on Mature AI & Existing Tech:**LLMs, multimodal models, and smartphone-native signals (GPS, battery, photos) already enable itinerary intelligence, safety, and storytelling.
- **Cloud-Ready & Real-Time:**Event-driven cloud architecture supports live updates on crowds, safety, fatigue, and delays with no special hardware.
- **APIs & Integrations Already Available:**Maps, weather, WhatsApp, Instagram, and tourism datasets make the system immediately implementable.
- **Phased Rollout is Straightforward:**Start with Signal-Cleanse → Safety Sentinel → Elastic Itinerary, then expand to full AI Travel OS.

THE POSITIVE CHANGE WE CREATE

- **Transforms Travel From Stressful to Effortless:**No more chaotic planning, group confusion, or information overload — AI handles the complexity.
- **Creates Safer Travel for Everyone:**Proactive safety through behavioral anomaly detection helps prevent issues before they escalate.
- **Revives Local Communities & Micro-Tourism:**Ungoogled discovery pushes travellers toward small businesses, local guides, lesser-known food spots, and authentic cultural places.
- **Promotes Emotionally Conscious & Inclusive Travel:**Trips adapt to fatigue, mood, stress, energy, and accessibility needs — making travel easier for elderly, anxious, or first-time travellers.
- **Sets a New Standard for Hospitality:**From booking → exploring → storytelling, travel becomes an intelligent, living experience.

MARKET OPPORTUNITY & TARGET USERS



Total Addressable Market

- Global travel & tourism industry: **\$9-10 trillion annually**
- Over **1.3 billion international travellers** every year
- Demand for AI-enabled travel, safety & planning rising rapidly
- Crisis-management, safety tech, navigation & experience apps = booming



Serviceable Available Market

- Indian domestic tourism: **~2 billion annual trips**
- Smartphone-first travellers using navigation, discovery & itinerary apps
- Group travellers, solo travellers, students, backpackers
- Hospitality partners, city tourism boards, travel communities



Serviceable Obtainable Market

- Metro travellers, weekend travellers, campus travel groups
- Hill-stations, historical circuits, cultural tourism hubs
- Hostel chains, local guides, homestays, backpacker hostels
- State tourism partnerships (Hampi, Mysuru, Goa, Kerala etc.)



THE VALUE TO THE USER

- **Effortless Planning:**The AI eliminates 80–90% of decision fatigue by summarizing chats, choosing dates, optimizing routes, and auto-fixing plans.
- **A Trip That Adapts to You:**Your itinerary flexes with real-time reality — crowds, delays, fatigue, hunger, weather, mood, or energy levels.
- **Peace of Mind Everywhere You Go:**A silent guardian that watches for unusual detours, risky zones, silence, low battery, or separation — triggering early alerts.
- **Authentic Travel, Not Tourist Traps:**Hyperlocal hidden gems, culture-rich spots, local stories, and micro-lore the internet usually hides.
- **Living Memories That Tell Your Story:**A cinematic, AI-narrated recap of your trip: photos + emotions + timestamps + moments blended into a documentary.



# BUSINESS MODEL



### Freemium – Premium Consumer Model

#### Free Tier

Offers essential features like basic itinerary planning, limited group chat, safety alerts, and hyperlocal recommendations to drive mass adoption.

#### Premium Tier

Provides advanced features for a monthly subscription, including an elastic itinerary engine, advanced safety, cinematic memories, and offline AI capabilities.



### B2B Partnerships

#### Partner Subscriptions for AI-Powered Guest Experience & Safety

Hotels, hostels, tourism boards, and large travel companies subscribe to use TripGuardOS technology to enhance visitor experiences and safety.



### Affiliate Revenue

#### Commissions from Bookings, Tours, and Experiences

Earns a commission (typically 6–20%) from affiliate links for booking hotels, tours, local experiences, and rentals.



### Local Marketplace

#### 10–15% Commission on Micro-Experiences & Cultural Tours

A platform for local guides, artisans, and food vendors to list their offerings, with TripGuardOS taking a commission on each transaction.

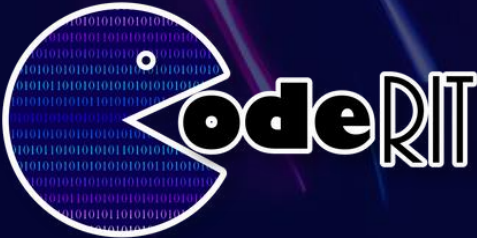










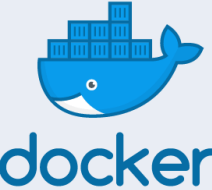






### API Licensing

#### White-Label APIs for Itinerary, Safety, and Discovery

Licenses its core technologies, such as the Itinerary Engine, Safety Sentinel, and Discovery Engine, to other travel apps and hospitality systems.

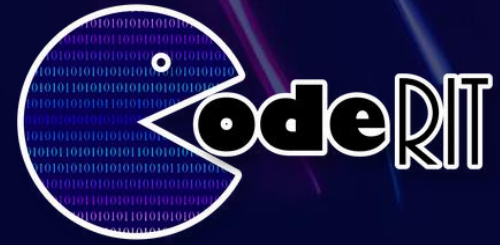
# TECHSTACK



CATEGORY	TECHSTACK
USER LAYER	 
BACKEND & APIS	  
MULTI-AGENTS	  
DEPLOYMENT	  
STORAGE	 
MODELS	 



# RESEARCH AND REFERENCES



## RESEARCH & REFERENCES

### [UNWTO - Global Tourism Statistics & Market Insights](#)

Provides authentic data on international travellers, market size, safety trends, and tourism growth – used in your TAM/SAM/SOM.

### [WTTC - Travel & Tourism Economic Impact Report](#)

Offers data on tourism GDP contribution, travel spending, and technology adoption trends in travel.

### [Google Maps Platform Documentation](#)

Official reference for routing, ETA, geospatial APIs, and traffic models used in itinerary shaping and real-time adjustments.

### [OpenAI Research - GPT-4/GPT-5 Technical Reports](#)

Covers multimodal reasoning, summarisation, and narrative generation techniques used in Signal Cleanse, Immersion Mode, and Cinematic Memories.

### [IEEE Xplore - Mobility & Anomaly Detection Research](#)

Peer-reviewed research on detecting unusual movement patterns, silence, detours, and safety anomalies using smartphone sensors.

### [Ministry of Tourism, Government of India - Tourism Statistics](#)

Authentic datasets on Indian domestic tourism (2B+ annual trips), cultural circuits, and heritage sites.