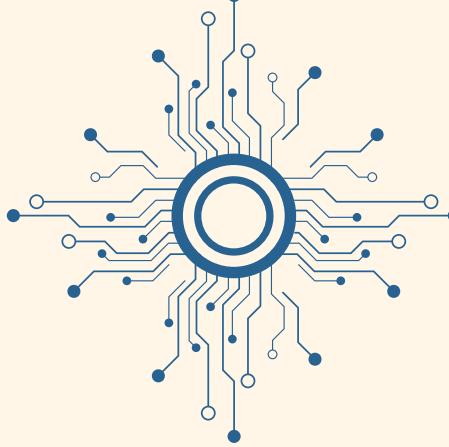
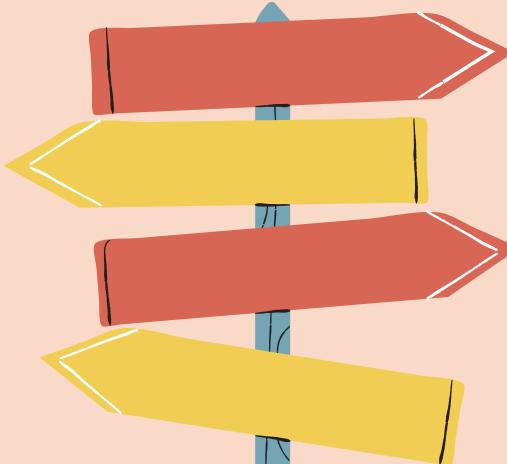
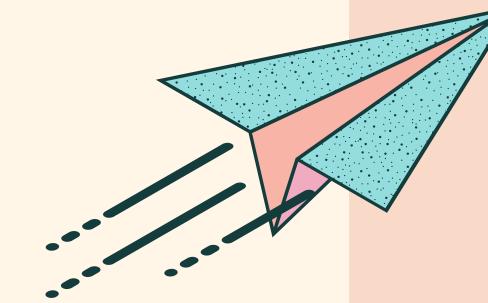


Making Tourism Less 'Ctrl+Alt+Delete' and More
'Click+Escape'



MEET THE TEAM “ArchFlow”



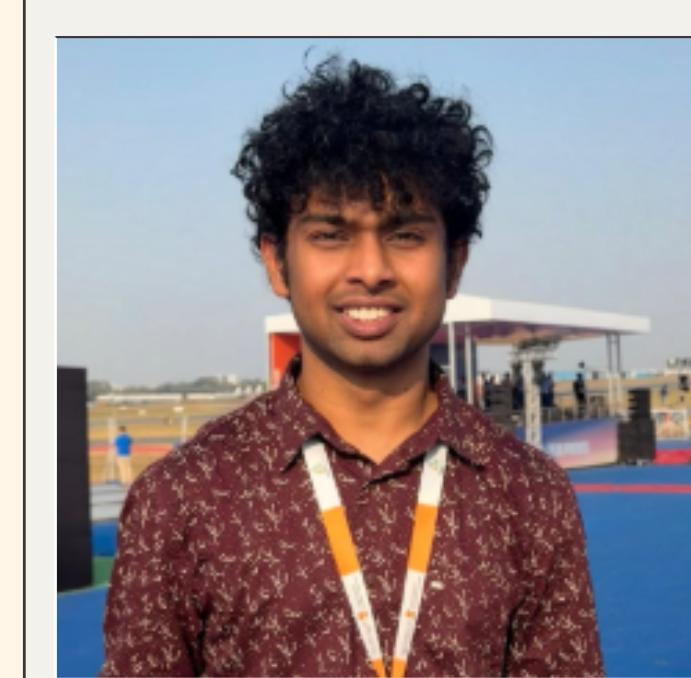
Dhanyashree
Krishnamurthy



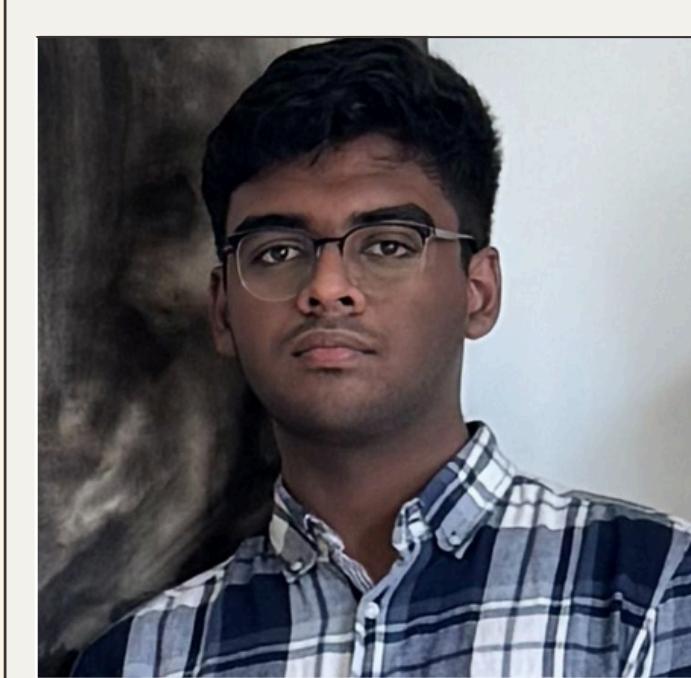
T Keerthi
Amudaa



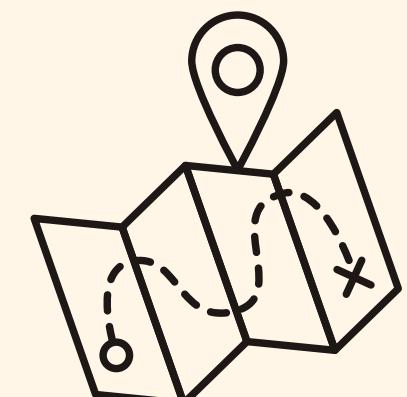
Medha
Mummigatti



Dhruva B A



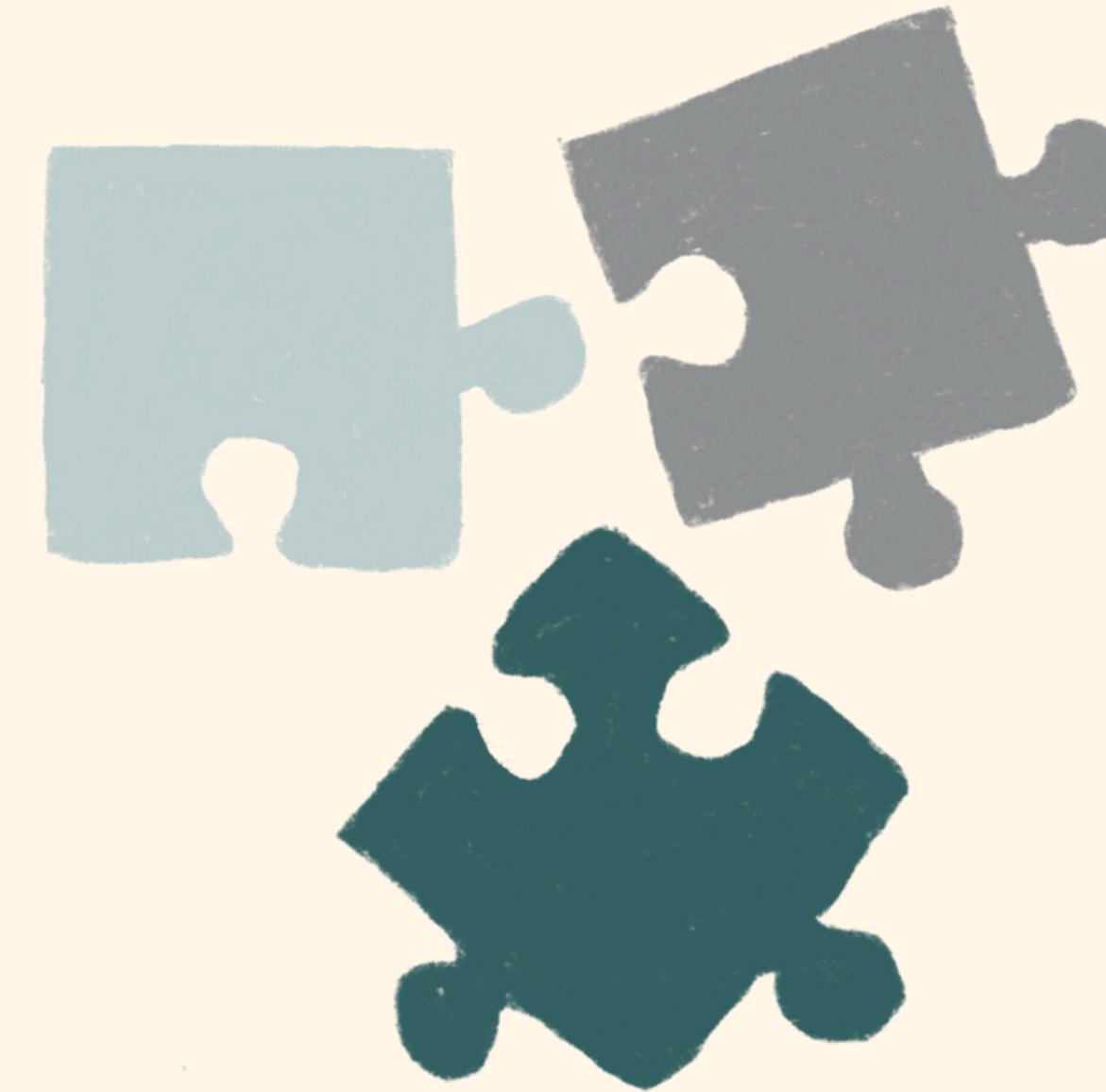
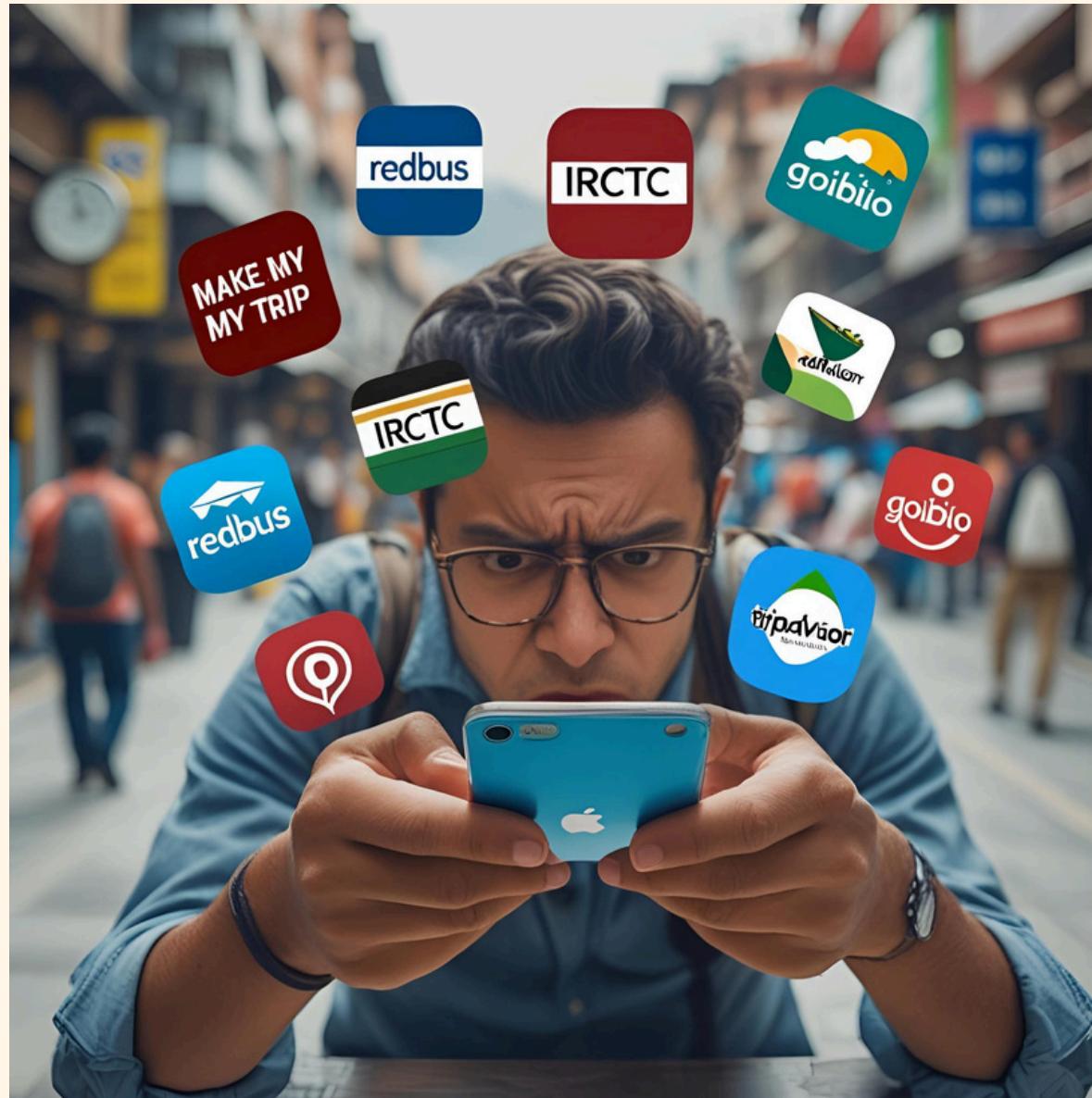
Aditya S Nair



Students of
RV College Of Engineering



THE CHAOS OF TODAY

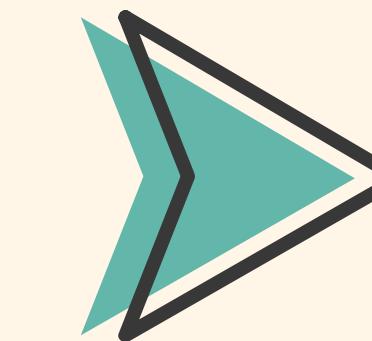
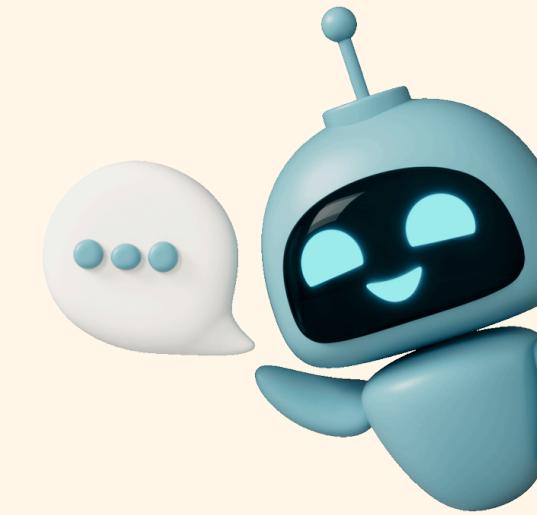
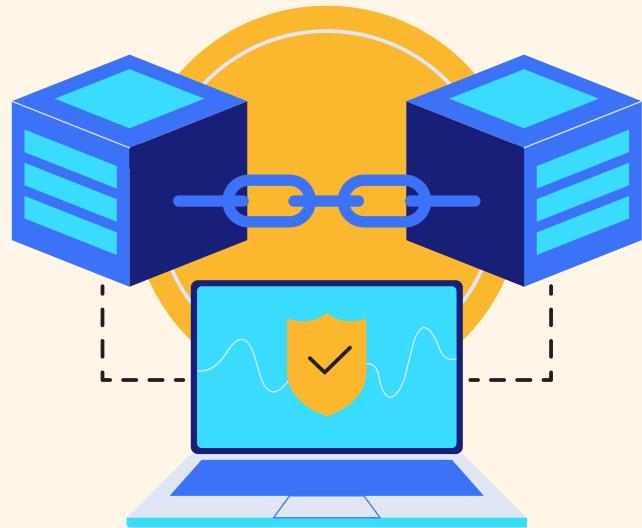


“India’s tourism is rich in culture—poor in cohesion.”

INTRODUCING: <Smart E-scape>



"Ctrl+Alt+Delete travel stress. Just Click + Escape."





TRAVEL IN 2025: UNIFIED. SMART. SUSTAINABLE. INCLUSIVE.



No more juggling apps or searching in silos.
Unites bookings, guidance, support, and
experiences into a seamless digital flow.



From carbon tracking to eco-reward gamification, we embed sustainability into decisions—nudging greener behaviors and supporting low-impact tourism.



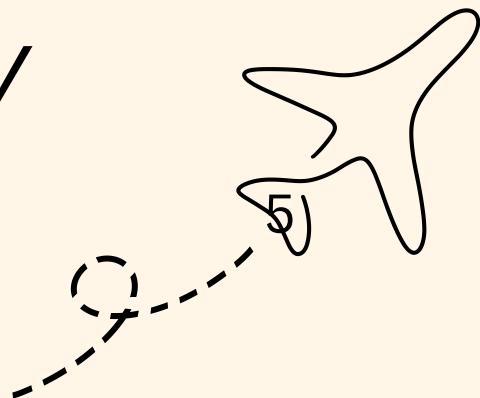
AI-powered agents curate personalized itineraries, adjust plans in real time, speak your language, and anticipate your needs.
It's more than intelligent—it's intuitively human.



With rural vendor onboarding, multilingual support, accessible design, and equitable visibility, we're building a platform that reflects the diversity of India—and ensures everyone can belong to the journey.



*"We're stitching together the threads of India's travel story
—into one seamless, smart, and inclusive journey."*



ECOSYSTEM FIRST



Travelers



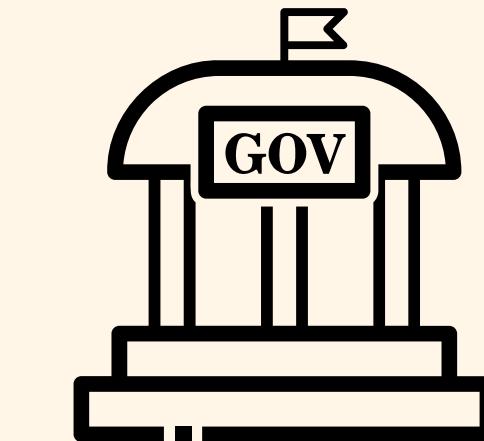
Rural Providers



Tech Partners



The Planet

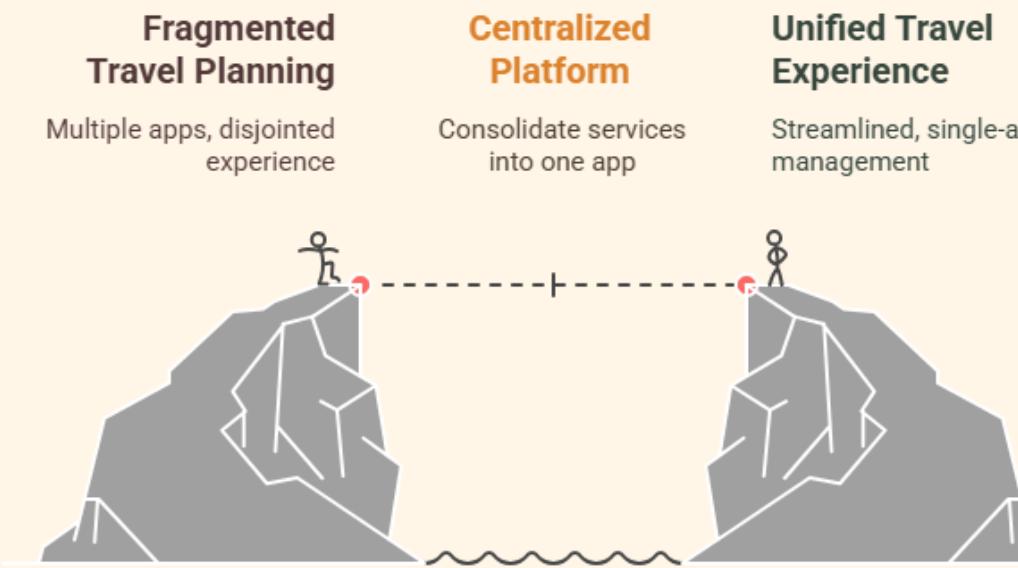
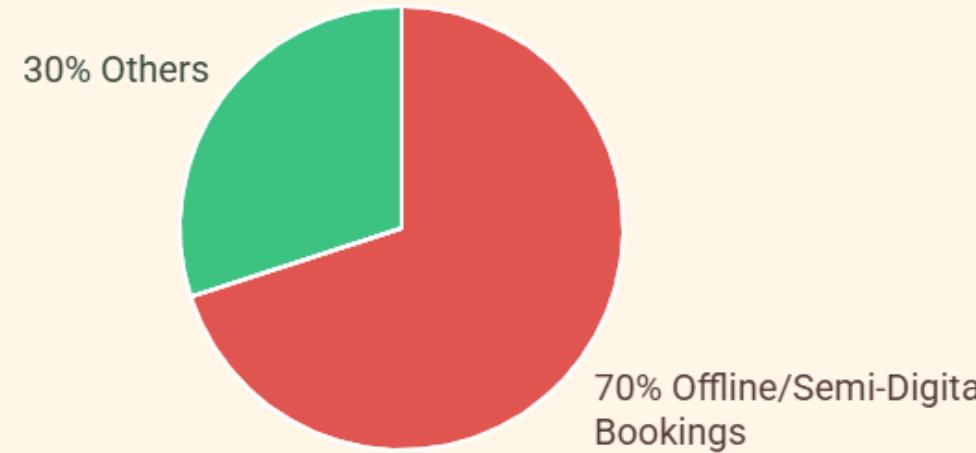


Government

THE PROBLEM: THE FRACTURED FABRIC OF TRAVEL

“Incredible India” shouldn't feel incredibly exhausting.

Booking Preferences Among Users



How to promote responsible tourism?



Traditional Tourism

Lacks eco-tracking and incentives

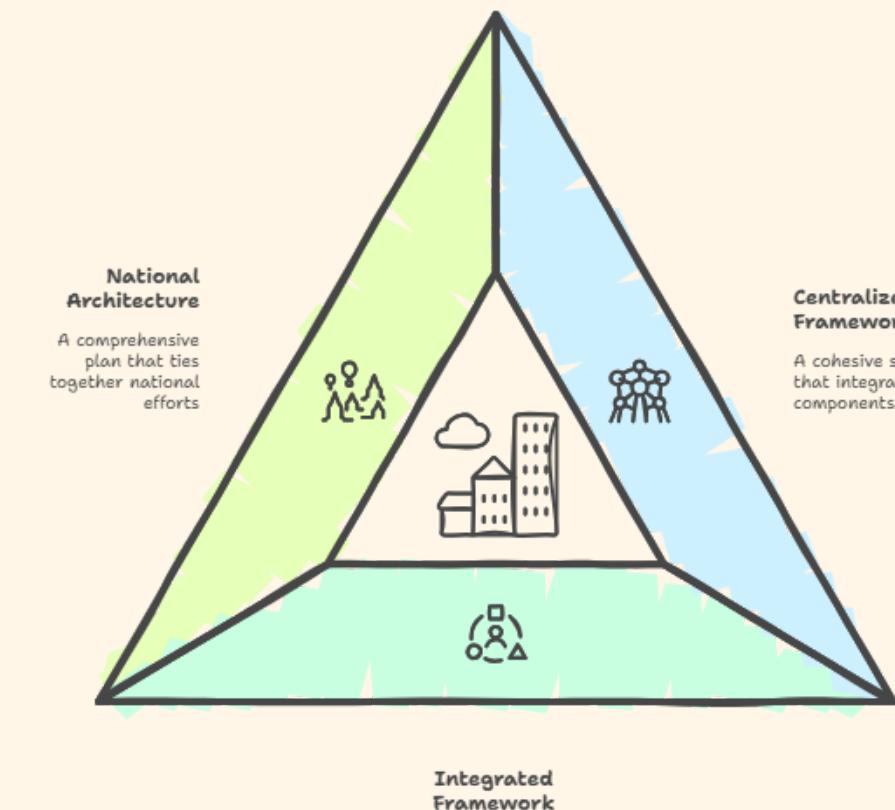
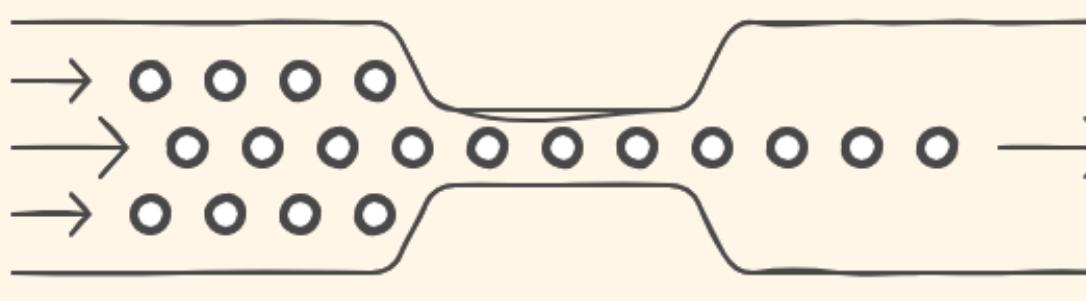


Sustainable Tourism

Guides responsible travel

“India’s tourism ecosystem is **fragmented** and **lacks a unified digital architecture**, resulting in poor user experience and limited inclusivity.”

Rural operators lack digitalization due to limited tech access, language barriers and no onboarding tools



Current Platforms

Offer generic suggestions

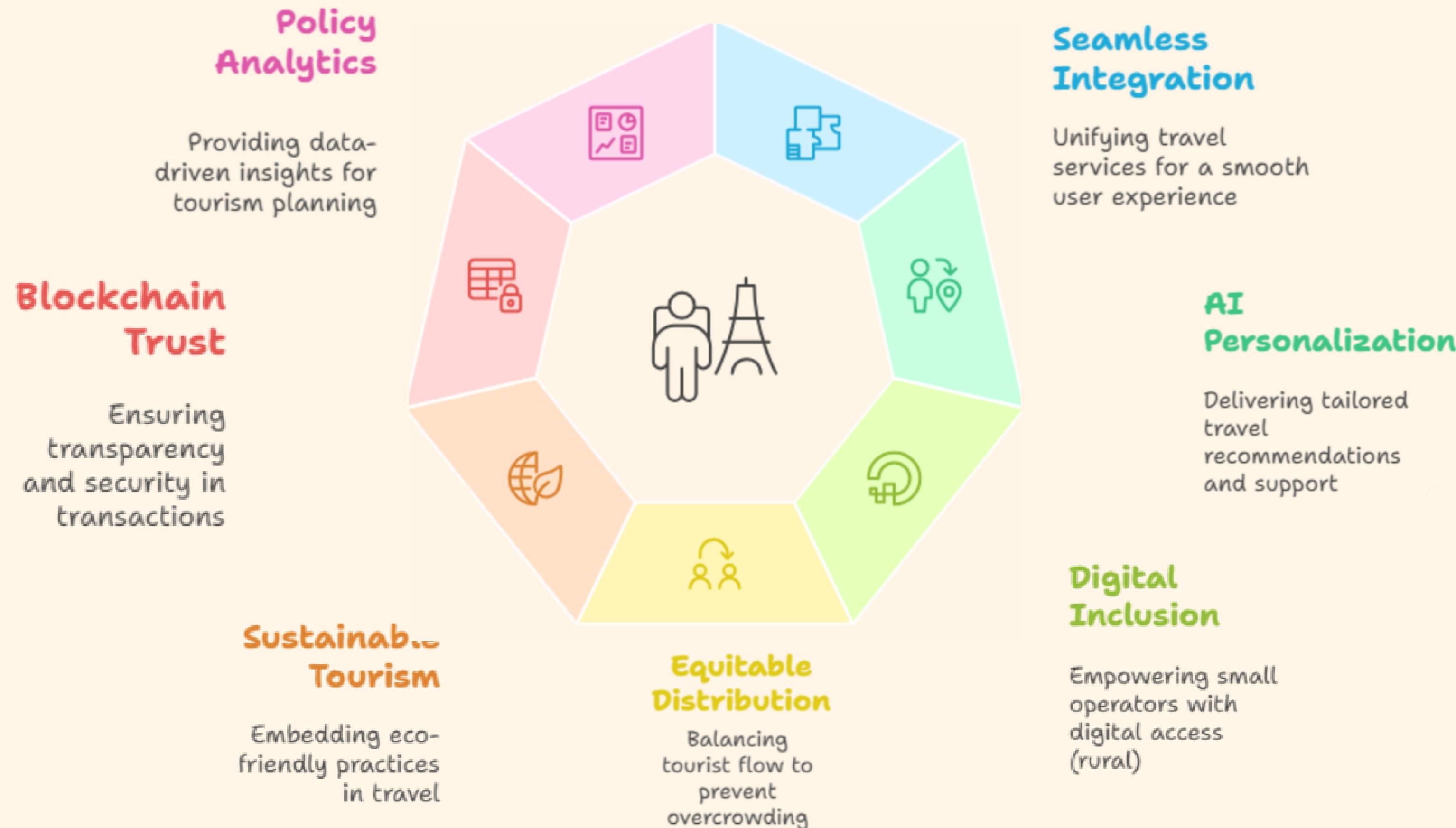


Personalized Support

Provide real-time, multilingual assistance

OBJECTIVES

"Because good architecture starts with great intentions."



THE STAKEHOLDERS WHO MAKE THE WHEELS TURN

Traveler:

- Personalization
- Accessibility

Local Communities:

- Economic Uplift
- Cultural Preservation

Technology Providers:

- Innovation
- Infrastructure



Service Providers:

- Visibility
- Integration

Govt. & Tourism Authorities:

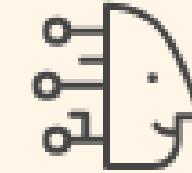
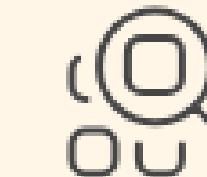
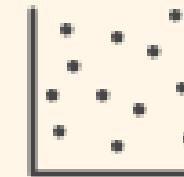
- Smart Governance
- Data-Driven Planning

Environmental Orgs:

- Sustainability
- Eco-Monitoring

THE TRAVEL MAZE: WHAT'S BROKEN TODAY?

"So many silos, you'd think it was grain storage."



Characteristic

Silos

Business

Data

Application

Technology

Integration

Processes

Resource Distribution

Siloed service providers

Decentralized repositories

Isolated apps

Traditional client-server

Limited stakeholder integration

Lack of standardization

Low interoperability

Limited emerging tech use

Manual & disjointed processes

Minimal real-time data usage

No personalization engine

Partial cloud adoption

Inefficient distribution

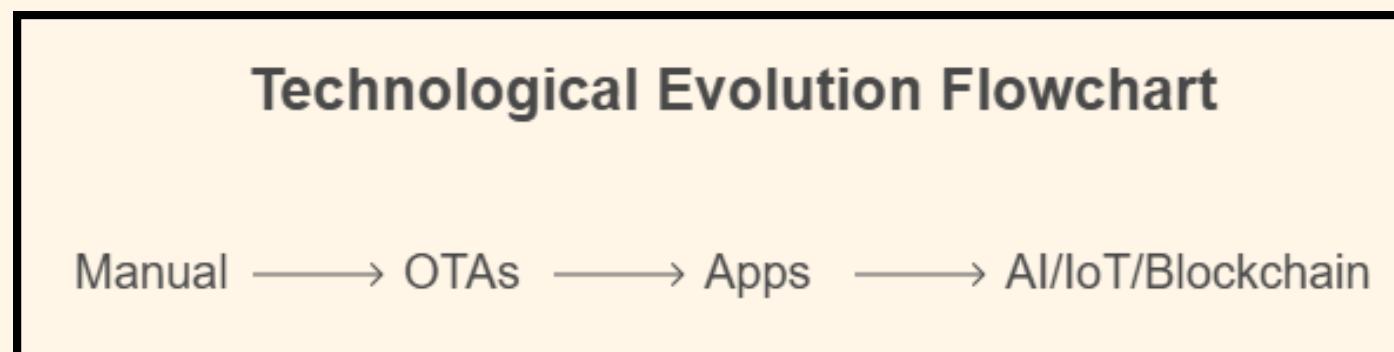
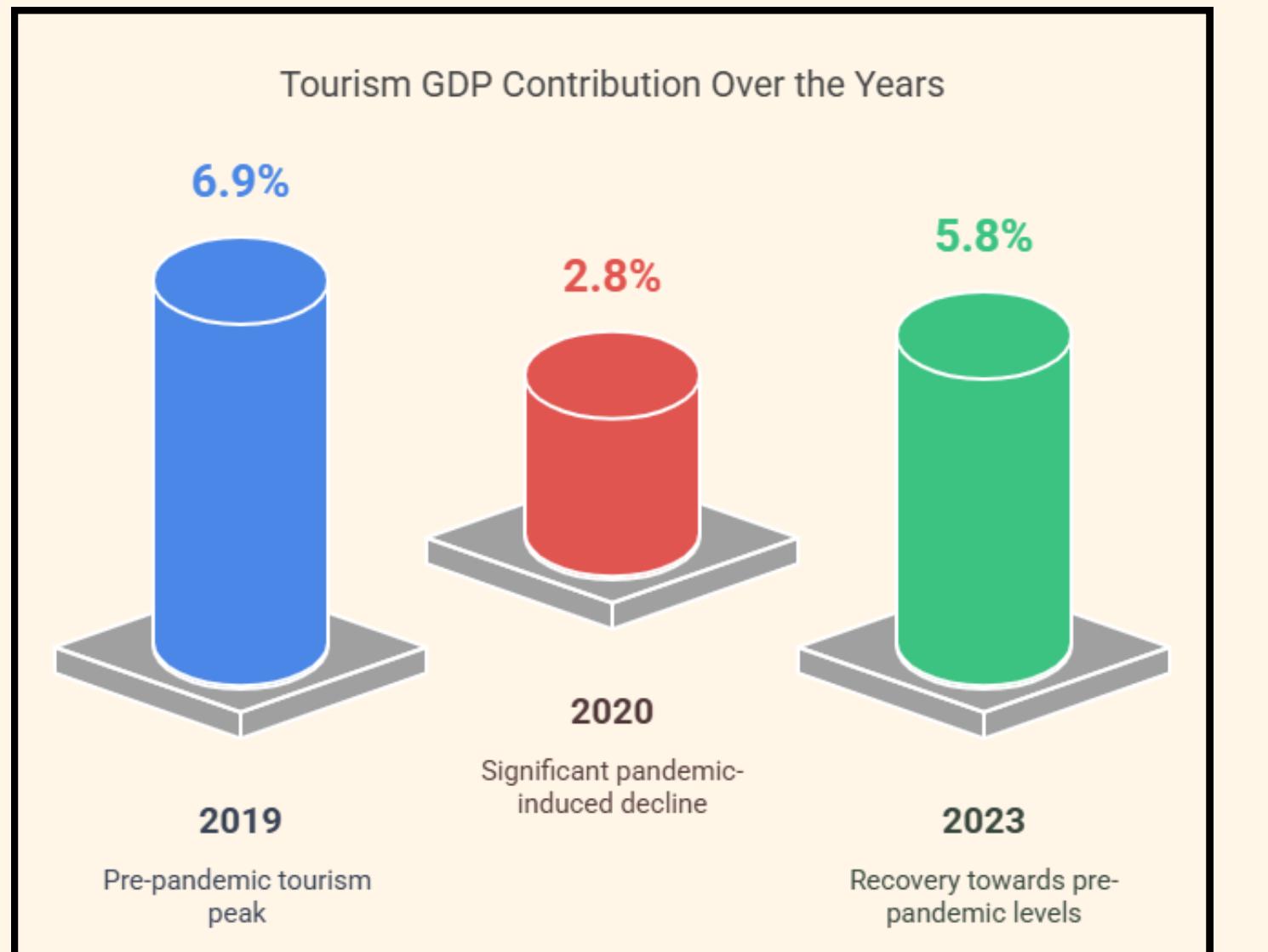
Limited analytics

No gamification or eco-tracking

No shared infrastructure

OUR DISCOVERY ENGINE: WHAT THE DATA TOLD US

"To fix the system, we studied the seams."



Why This Matters

Benefits of tourism



Economic Benefits

Tourism can boost GDP, increase rural income, and create local jobs.



Social Benefits

Tourism provides inclusive access for all demographics within a society.



Technological Benefits

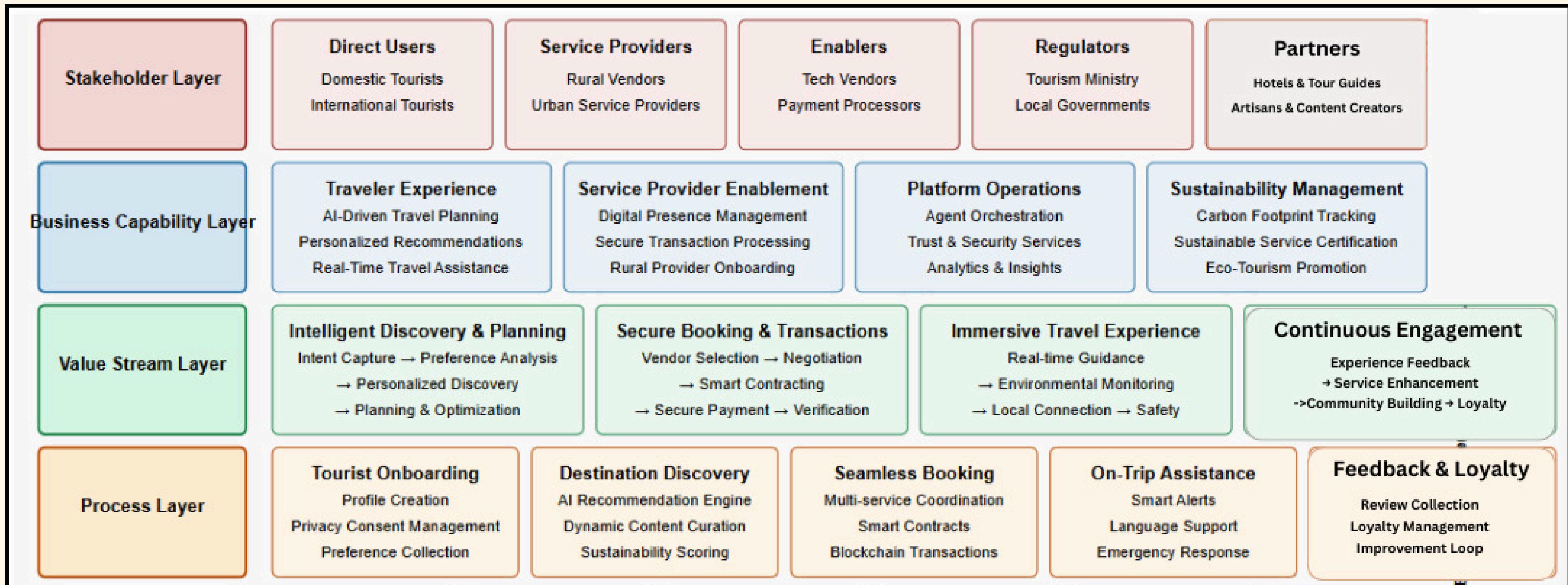
Tourism builds a national EA-based smart ecosystem for technological advancement.



Environmental Benefits

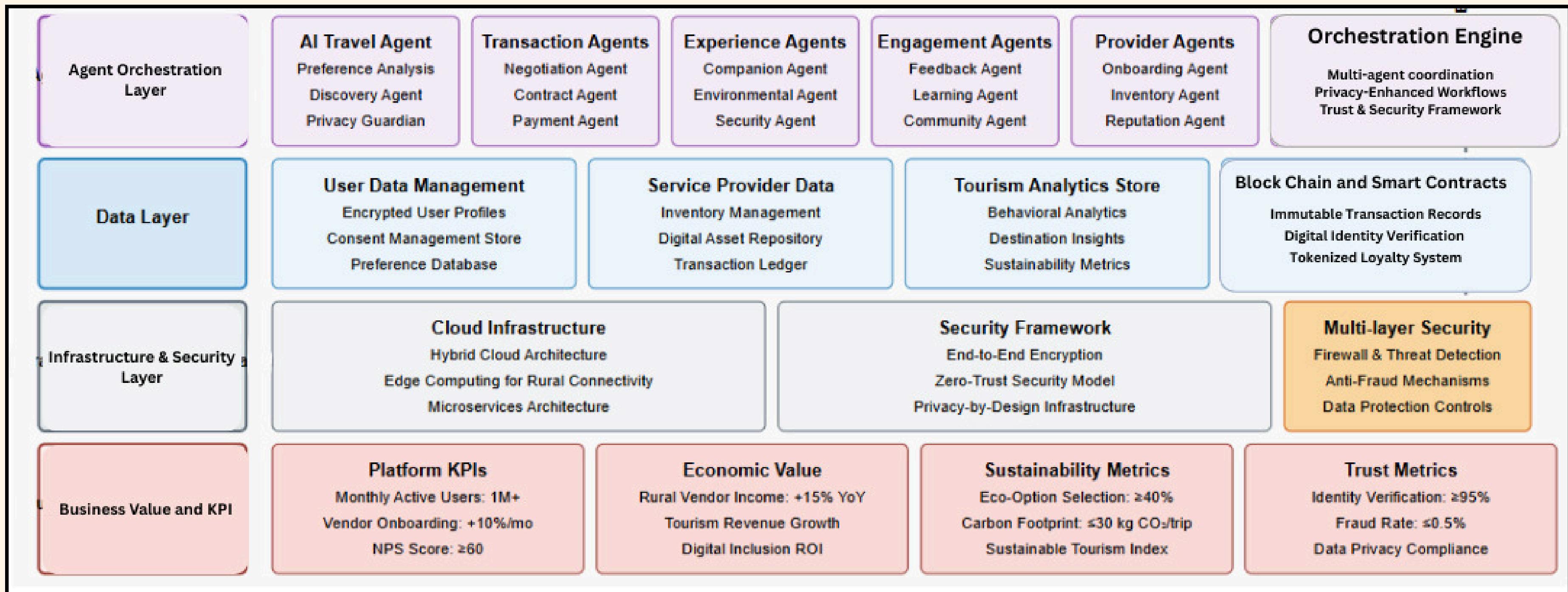
Tourism encourages sustainable practices to protect the environment.

OUR TOGAF-DRIVEN APPROACH - STITCHING THE TAPESTRY



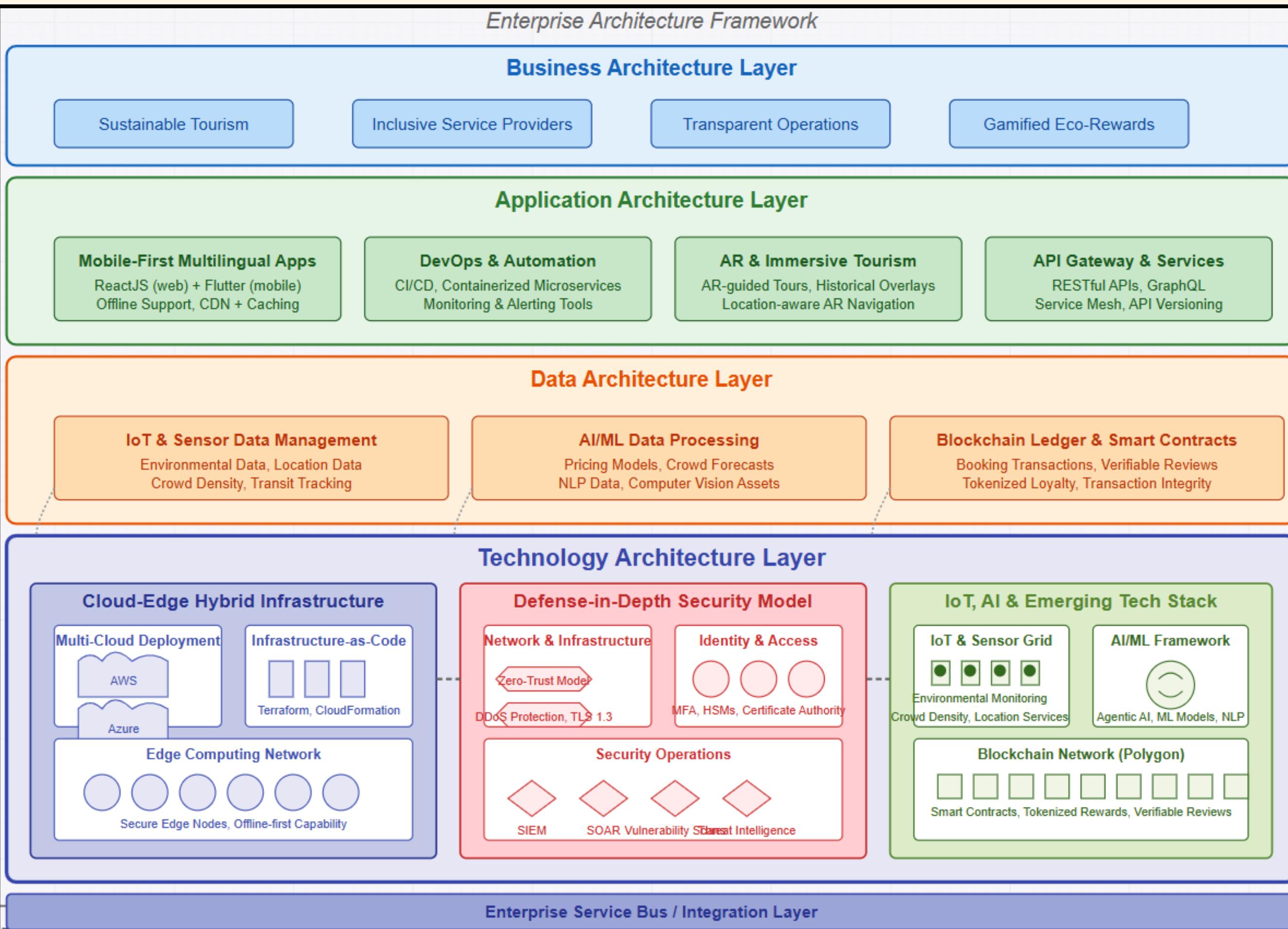
- Unified Platform
- AI-powered personalization
- Eco-sustainability tracking
- Blockchain-based trust
- Scalable and modular
- Privacy-by-design
- Real-time Crowd Monitoring
- Rural Discovery Boost
- Interactive Safety Map
- Multilingual Emergency Chatbot

OUR TOGAF-DRIVEN APPROACH - STITCHING THE TAPESTRY



- Unified Platform
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EA FRAMEWORK OVERVIEW



CORE FRAMEWORK COMPONENTS

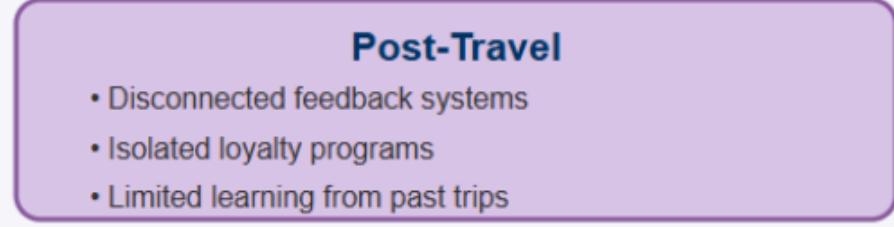
- TOGAF 9.2 ADM IMPLEMENTATION
- AI AGENT ORCHESTRATION
- BLOCKCHAIN TRUST PROTOCOL
- IOT ENVIRONMENTAL NETWORK
- ZERO-TRUST SECURITY ARCHITECTURE
- PRIVACY-BY-DESIGN PRINCIPLES

FUTURE STATE ARCHITECTURE

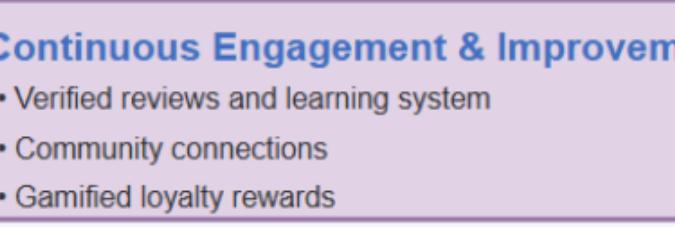
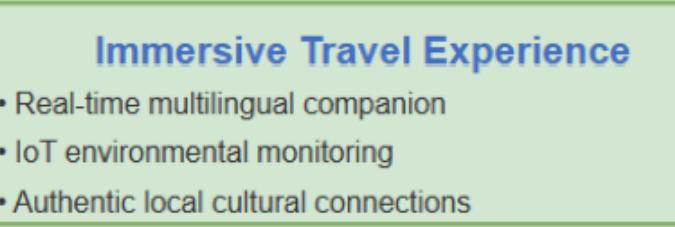
"Where every trip feels tailored, trusted, and timeless."

Tourism Ecosystem Transformation: AS-IS vs TO-BE

CURRENT STATE (AS-IS)



FUTURE STATE (TO-BE)



BUSINESS ARCHITECTURE

CAPABILITY CLUSTERS

Capability Cluster	Key Capabilities
Traveler Experience	AI-Driven Travel Planning, Personalized Recommendations, Multi-Modal Transportation Integration, Real-Time Travel Assistance
Service Provider Enablement	Secure Transaction Processing, Inventory & Availability Control, Rural Provider Onboarding, Reputation Management
Platform Operations	Agent Orchestration, Trust & Security Services, Analytics & Insights, Ecosystem Governance
Sustainability Management	Carbon Footprint Tracking, Ecological Impact Assessment, Sustainable Service Certification

KEY PERFORMANCE INDICATORS

1. Platform Adoption
2. Personalization & UX
3. Local Impact
4. Sustainability
5. Trust and Safety

DATA ARCHITECTURE

DATA COMPONENTS

1. Operational Data Stores
2. Analytical Platforms
3. Blockchain Data Layer
4. Knowledge Graph Layer

DATA INTEROPERABILITY FRAMEWORK

1. Standards and Ontologies
 - a. OTA api
 - b. Geospatial, cultural ontologies
2. Integration Methods
 - a. API Gateway- secure partner access
 - b. Event Mesh - real time processing
 - c. ETL pipelines
 - d. Stream processing - IoT

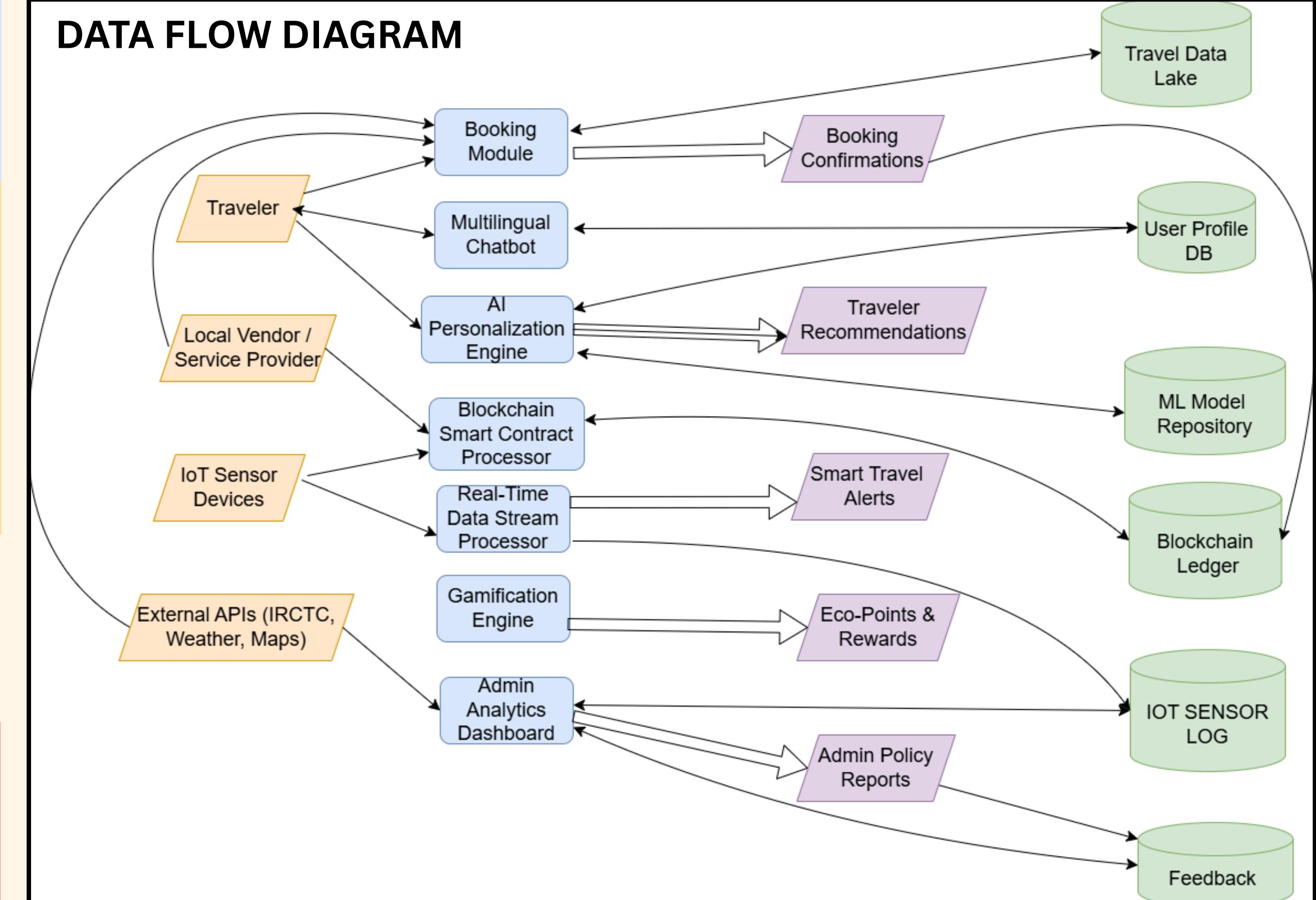
DATA PROTECTION MECHANISMS

1. Differential Privacy
2. Homomorphic Encryption
3. Secure Multi-party Computation
4. Tokenization & Masking

DATA LIFECYCLE MANAGEMENT

1. Data Collection
2. Data Processing
3. Data Storage
4. Data Archival& Deletion

DATA FLOW DIAGRAM



APPLICATION ARCHITECTURE

AS-IS

User-Facing Applications



Core Platform Services



Administrative Applications



Integration & Commercional

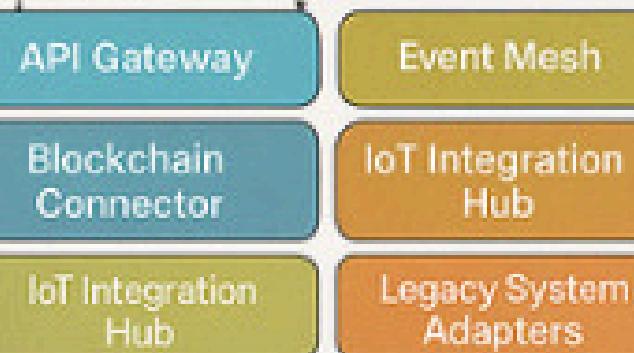


TO-BE

User-Facing Applications



Agentic AI Framework



USER FACING APPLICATIONS

- Smart Travel Companion
- Immersive Discovery Portal
- Voice-Enabled Travel Assistant
- Augmented Reality Guide

ADMINISTRATIVE APPLICATIONS

- Governance Dashboard
- Security Operations Center (SOC)
- Privacy Management Console
- Sustainability Analytics

INTEGRATION & COMMUNICATION

- API Gateway
- Event Mesh
- Blockchain Connector
- IoT Integration Hub
- Legacy System Adapters

PROVIDER FACING APPLICATIONS

- Business Dashboard
- Rural Onboarding App
- Marketplace Analytics
- Reputation Management

AI AGENTIC

- Agent Orchestration Engine
- NLU Module
- Knowledge Graph Interface
- Learning & Adaptation System

CORE PLATFORM SERVICES

- Smart Itinerary Engine
- Dynamic Pricing Engine
- Crowding Management
- Multilingual Support
- Unified Booking Service

TECHNOLOGY ARCHITECTURE

- Agent-Centric : AI agents orchestrate planning, personalization, and real-time support.
- Data-Smart : A consent-driven Smart Data Backbone powers insights without compromising privacy.
- Edge-Ready : Cloud-Edge hybrid infrastructure ensures performance everywhere—from metro hubs to remote villages.

AI Agent Framework



These agents personalize every part of the user journey – from Itinerary planning to on-trip assistance and post travel enga-

IoT and Blockchain Integration



We combine IoT edge nodes for real-time data collection — like crowd flow and environmental conditions — with blockchain to secure bookings, loyalty tokens, and verifiable reviews

Security and Privacy by Design

Inspired by the DPDP Act, our architecture uses zero-trust models, encrypted data layers, and granular user consent mechanisms.

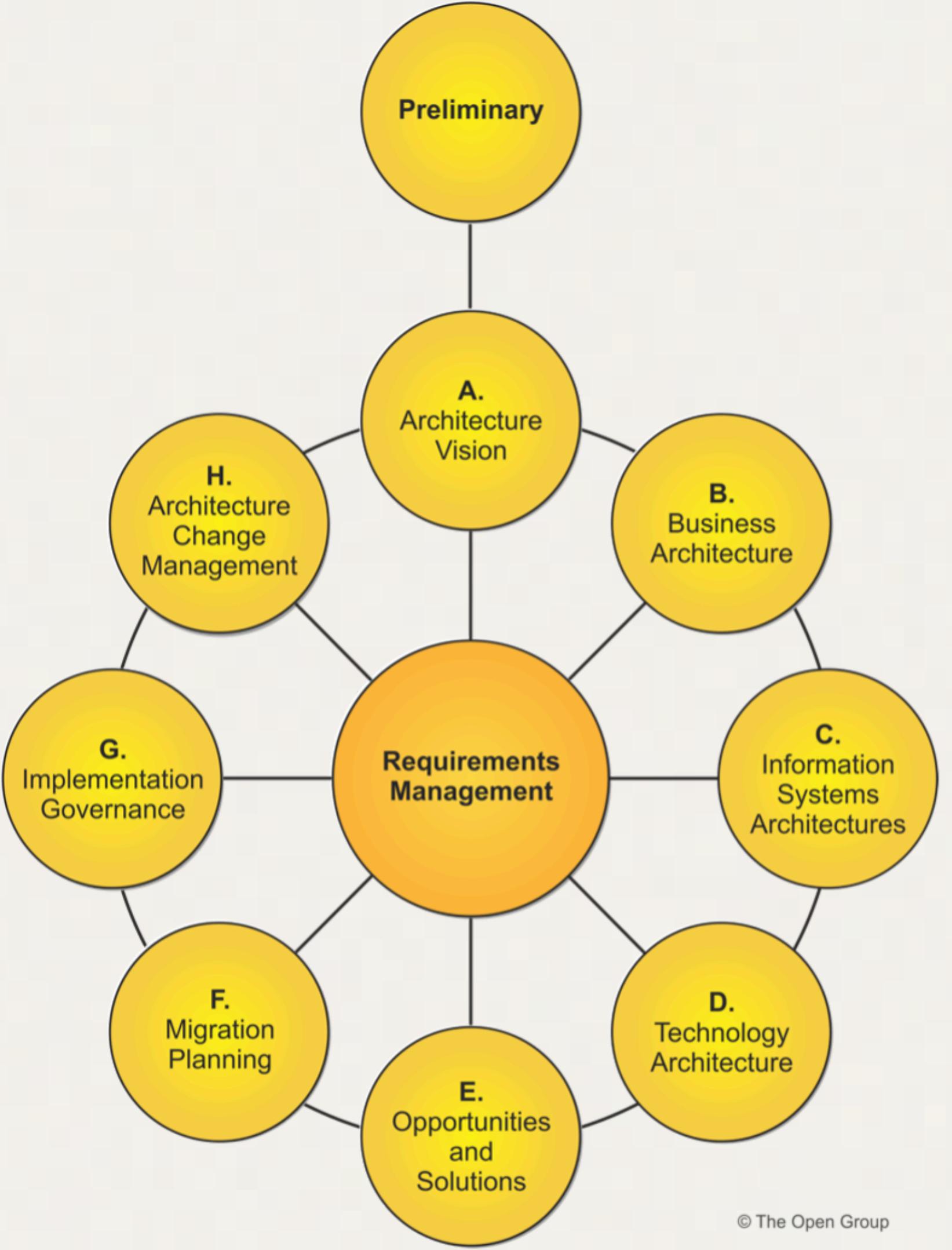
Smart Data Backbone



This layer orchestrates our Unified Travel Data Lake, real-time analytics, knowledge graphs, and privacy-first data access

Application Stack

On top of this, we've already prototyped a multilingual, mobile-first MVP-app



TOGAF ADM FRAMEWORK

RISKS & MITIGATION

“What Could Go Wrong? (And why It Won’t)”

Risks and Mitigation Strategies



Stakeholder
Resistance



Low Digital
Literacy



Data Privacy
Challenges



IoT Hardware
Failures



API
Fragmentation



Eco-Reward
Abuse

Early engagement, MoUs	Digitalized India	DPDP Act compliance
Rugged devices	Standardized APIs	Blockchain-based controls



HOW WE GET THERE: TIMELINE & TOOLBOX

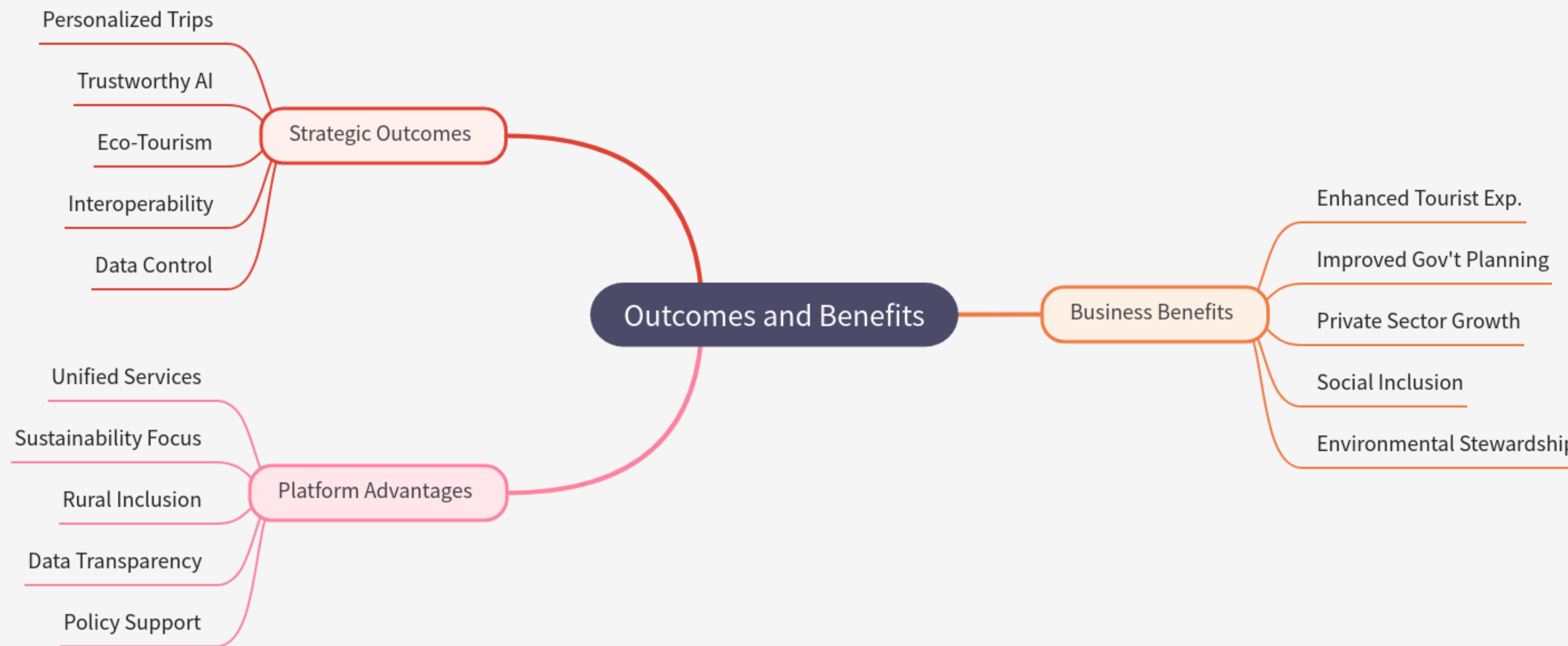
Smart E-scape Project Timeline

Strategic Implementation Roadmap 2025-2026



OUTCOMES THAT MATTER. BENEFITS THAT SCALE.

"We're not building features. We're building futures."



FINAL BOARDING CALL: KEY TAKEAWAYS

"This isn't the end of a project—it's the beginning of a movement."

India's Tourism Ecosystem Is Enigmatically Fragmented

- The sector grapples with disjointed services, a dearth of personalization, and scant digital visibility for rural stakeholders. A unified platform is essential, beckoning our attention.

Smart E-Scape Unveils a Scalable, Modular Solution

- Crafted upon the TOGAF framework, this innovative platform weaves together AI, IoT, and blockchain, conjuring personalized, real-time, and secure travel experiences.

Rural Inclusion and Sustainability Stand as Core Pillars

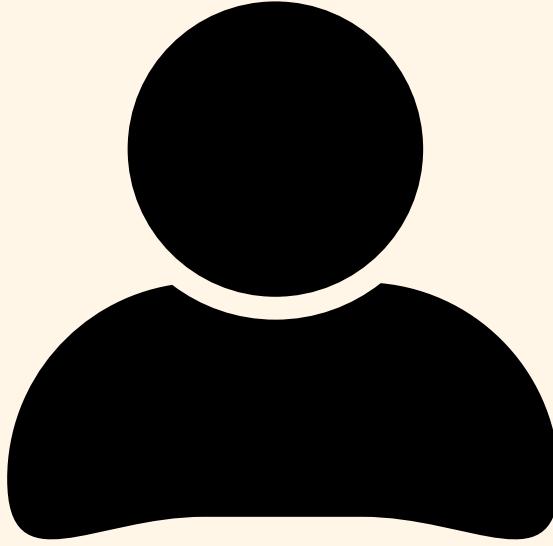
- The design champions the onboarding of rural operators, fostering eco-friendly travel through gamified rewards, while ensuring access even in low-bandwidth realms.

Data-Driven Governance Illuminates Policy and Planning

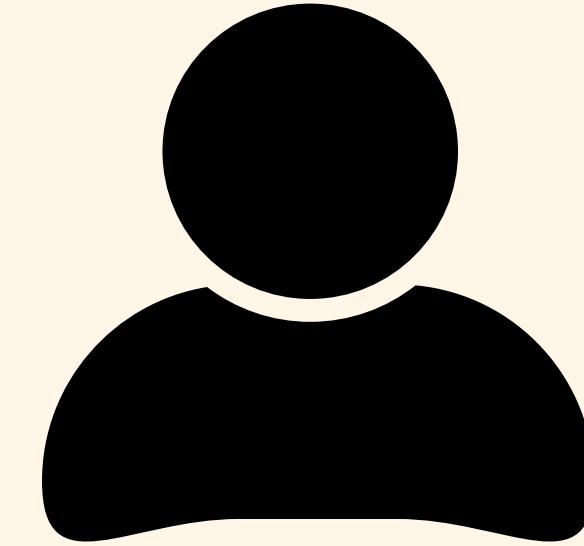
- Government entities are empowered with real-time insights through interactive dashboards—facilitating wiser choices regarding crowd management, infrastructure, and sustainability.

MENTORS

NILADRI BIHARI NAYAK



BRIAN TWESIGYE



“A huge thank you for their unwavering support and guidance throughout our journey.”



THANK YOU

Making travel so smooth, even your nani could plan
a backpacking trip to Hampi.

