

3-YEAR AIRPORT GROWTH STRATEGY

MAKE A PLAY | TEAM #18 HARD KNOCKS







March 2025

OUR TEAM





Sunny Liu

Planning Phase Owner





Arya Jue

Monitoring Phase Owner





Christian Weddington

Execution Phase Owner



Ava Sorrento

Closure Phase Owner

AGENDA





MULTI-YEAR BUDGET

KPI FRAMEWORK

MONITORING PHASE

ILLUSTRATIONS

CLOSING STATEMENT

EXECUTIVE SUMMARY

PROBLEM STATEMENT:

MAP's partner company—and leading consulting firm—Oliver Wyman, is at the forefront of the airport transformation movement and recently conducted a benchmark study on the strategic evolution of leading airports. We are tasked with **developing a plan to transform airports into** more personalized, seamless, and operationally efficient ecosystems in the next 30 years.

OVERVIEW:

- The aviation industry is evolving rapidly, passengers demanding more seamless, efficient, and personalized travel experiences
- U.S. airports struggle to meet these expectations
- As student athletes who often have to travel, we offer a unique perspective

This report focuses on the **Passenger Experience Revolution**, applying the DMAIC framework to enhance airport operations. By leveraging biometric authentication, AI-driven virtual assistants, and smart queue management, our strategy aims to create a future where air travel is smooth, stress-free, and technologically advanced.





DMAIC

WHY THIS FRAMEWORK?

Structured Problem-Solving



Measurable Results



Sustainable Impact

WE PROPOSE USING THE DMAIC FRAMEWORK TO OPTIMIZE OPERATIONS, ENHANCE PASSENGER EXPERIENCES, AND ENSURE SUSTAINABLE LONG-TERM PERFORMANCE THROUGH DATA-DRIVEN IMPROVEMENTS.

DEFINE	MEASURE	ANALYZE	IMPROVE	CONTROL
Objective Identify evolving demands of all stakeholders.	Objective Establish performance baselines for current operations.	Objective Identify inefficiencies and areas of waste.	Objective Develop and test innovative solutions.	Objective Ensure long-term sustainability of improvements.
Stakeholders Passengers, airlines, shoppers, suppliers, and staff.	Metrics Passenger flow, queue times, retail revenue, operational efficiency.	Approach Data analysis to uncover bottlenecks and resource gaps.	Techniques Simulation models, prototyping, stakeholder feedback loops.	Methods Continuous monitoring, real- time data tracking, adaptive management.
Outcome Clear understanding of challenges and goals.	Outcome Data-driven benchmarks for transformation.	Outcome Actionable insights for targeted improvements.	Outcome Enhanced passenger experience and operational efficiency.	Outcome Embedding best practices into daily airport operations.

KE A PLAY FOUNDATION'S

D-LEAGUE

ISTATION & FEASIBILITY SUMMARY

- 1 Biometric & Contactless Travel
- **2** AI-Powered Virtual Assistants
- **3** Smart Queue Management

FEASIBILITY, COST, PASSENGER IMPACT, OPERATIONAL EFFICIENCY, AND SCALABILITY

FINAL RECOMMENDATION:

Biometric authentication and **AI-powered virtual assistants** offer scalable, immediate benefits, while **smart queue management** enhances long-term efficiency—ensuring a seamless airport experience for future travelers.





TARGET AUDIENCE

DEMOGRAPHIC

Universal solutions for all genders, focusing on Gen Z (18-26) and Millennials (27-40) in the global travel market.

EDUCATION

High school grads, vocational workers, college students, and industry professionals (MBAs, engineers, policymakers, executives).







TRAVEL BEHAVIOR

Multi-purpose travelers seeking personalized, seamless experiences, willing to share data for convenience and perks.



MARKETING STRATEGY

DRIVING AI-POWERED TRAVEL ENGAGEMENT



Hook Method

By leveraging triggers, rewards, and personalization, it will drive retention and referrals.

rigger

- External: Smart flight disruption alerts, personalized notifications, QR codes at pain points
- Internal: Target frustration with airport inefficiencies and desire for seamless tech experiences
- Messaging Focus: "Skip the lines. Travel smarter. One tap away."



- Friction Reduction: One-tap AI concierge, biometric enrollment, instant perks for first-time users
- Value Proposition: "3 seconds to enroll, hours of time saved"
- CTA Strategy: Simple, immediate value-driven actions with instant gratification



- fresh

Investment

- returning for



• Surprise & Delight: Unexpected upgrades, lounge passes, gamified status tiers • AI-Powered Personalization: Tailored rewards based on travel patterns • Dynamic Loyalty: Rewards that evolve with user behavior, keeping engagement

• User Commitment: Customizable AI profiles, preference settings, streak-based rewards • Network Effects: Referral programs with dual-sided incentives • Data Strategy: User feedback loop improves AI, creates personalized experiences worth

MULTIYEAR BUDGET

YEAR 1 PROJECTED EXPENSES:

DIRECT

- Biometric Security Implementation
- Al Baggage Handling & Tracking Systems
- Smart Terminals & Self-Service Kiosks

Indirect:

- Workforce Training & Digital Skill Development
- Marketing & Passenger Education on New Tech

YEAR 2 ROJECTED EXPENSES:

DIRECT

- Customer Experience Enhancements
- Sustainability Initiatives

Indirect:

- Employee Retraining for AI & Automation
- Public Awareness & Marketing for New Systems



YEAR 3 PROJECTED EXPENSES:

DIRECT:

- Intermodal
 Connectivity
- Autonomous Airport Ground Transport

Indirect:

- Regulatory Compliance & Policy Development
- Passenger Education & Adoption Campaigns

KPI FRAMEWORK







ILLUSTRATING THE CHANGE MANAGEMENT STRATEGY



airline staff and employees

• Minimal system glitches

D-LEAGUE

- Staying engaged with product during multiple
- Promoting more airlines and airports to adopt
- Airports/Airlines adopting feedback and advice



Supplier

ILLUSTRATING THE PROCESS OF IMPLEMENTING BIO-SECURITY, ITS CURRENT STATE AND FUTURE STATE, AND LONG-TERM PRODUCT CONTROL

Current product family:

Facial recognition technology, facial identification for comparison (TSA), finger print scanning

Current State:

Customers arrive to airport, check-in with baggage and TSA, multiple in-person security checkpoints





Customer

Future State:

Customer's arrive at airport, proceed to bio-security check-in kiosk, can use app or kiosk for contactless checkin, proceed to gate