Case Study: Panama Airport

Smart WiFi Experience for Millions of Passengers

Executive Summary

Tocumen International Airport, Central America's premier travel hub, has reimagined the passenger journey with a cutting-edge digital transformation powered by Linkyfi – guest WiFi management and marketing platform, a product by AVSystem.
In collaboration with integration experts Global Wifi, the airport deployed an intelligent WiFi platform that does far more than connect passengers to the internet – it engages, delights, and… **drives $15,000 of revenue weekly!**

Highlights:

- $15 000 of revenue weekly
- 12 500 daily users
- 341 access-points
- 99.992% availability

Introduction

About the Airport

Tocumen International Airport (PTY), located in Panama City, serves as the busiest airport in Central America. With approximately 18 million passengers annually, it operates as a crucial connection point for travelers across the Americas and beyond.

Recognized as the "Best Airport" in Central America and the Caribbean by Skytrax in 2022, Tocumen is committed to delivering exceptional services and facilities to its passengers.

Project Context

Let's face it – connectivity is no longer a luxury; it's a necessity. Whether it's checking flight updates, catching up on emails, or scrolling through your favorite social feed, staying online is part of modern travel. But at Tocumen International Airport, passengers were working with just half an hour of free WiFi. Sure, it was better than nothing, but with growing demands for uninterrupted, high-speed internet, it was clear that one hour wasn't cutting it.

Tocumen wasn't just looking to extend time limits, though – they had bigger plans. They envisioned a WiFi system that did more than just connect devices. What if it could engage passengers with personalized content, support local businesses with targeted ads, and even generate revenue?

That's where Global Wifi, a trusted technology integrator with extensive experience in complex digital infrastructure projects, stepped in. Collaborating with Global Wifi and powered by Linkyfi from AVSystem, the team brought Tocumen's vision to life. This wasn't just an upgrade – it was a digital transformation that turned WiFi into a platform for smarter airport operations, passenger engagement, and business growth.

Challenges and Objectives

Key Challenges

⊘ Lack of Engagement Tools: The airport lacked mechanisms to engage passengers through targeted content or promotions.

⊘ Missed Revenue Opportunities: The existing system did not capitalize on potential monetization strategies.

Project Objectives

⊘ Generate Additional Revenue: Monetize WiFi services through advertising and premium access plans.

⊘ Enable Personalized Marketing: Leverage WiFi for targeted promotions and passenger engagement.

⊘ Enhance Passenger Experience: Deliver seamless, reliable, and high-speed internet access throughout the airport.

⊘ Improve Operational Insights: Use analytics to understand passenger behavior and optimize services.

Solution: Linkyfi Deployment

Linkyfi, a powerful WiFi management and platform developed by AVSystem, was chosen for its ability to deliver robust connectivity and advanced analytics. The solution's key features include:

Captive Portals:
Custom-branded login pages offering seamless onboarding.

Analytics:
Real-time insights into passenger behavior and usage patterns.

Monetization Tools:
Options for ad-based revenue generation and premium access plans.

Deployment Process:

1. Initial Assessment: A thorough analysis of the existing network infrastructure and passenger needs.

2. Technical Implementation: Integration of Linkyfi with the airport's IT systems, ensuring coverage across all terminals and lounges.

3. Testing and Optimization: Pilot testing to address potential issues and optimize performance.

4. Full Rollout: Deployment across the airport with continuous 24/7 monitoring and updates.

Results and Impact

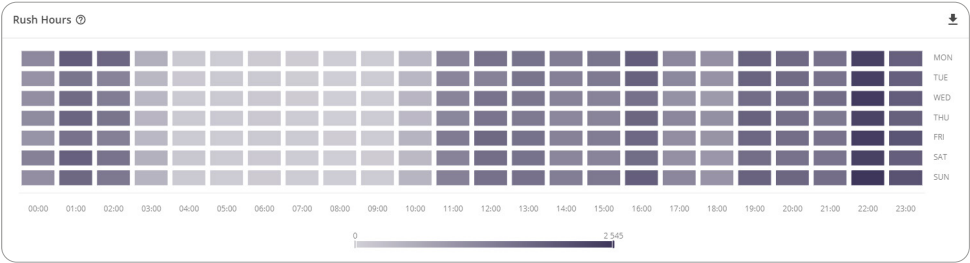The deployment of **Linkyfi** at Tocumen International Airport has delivered measurable results, transforming the passenger experience and creating new opportunities for engagement and revenue generation. Here's what the data reveals:

Daily User Engagement

☑ 12 500 users connect on average to the WiFi network daily, showcasing the platform's extensive reach and usability.

☑ A conversion rate of 3.5% for the paid premium plan highlights the value passengers place on high-speed, uninterrupted connectivity.

Rush Hours ⦾   ⬇

| | 00:00 | 01:00 | 02:00 | 03:00 | 04:00 | 05:00 | 06:00 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 |

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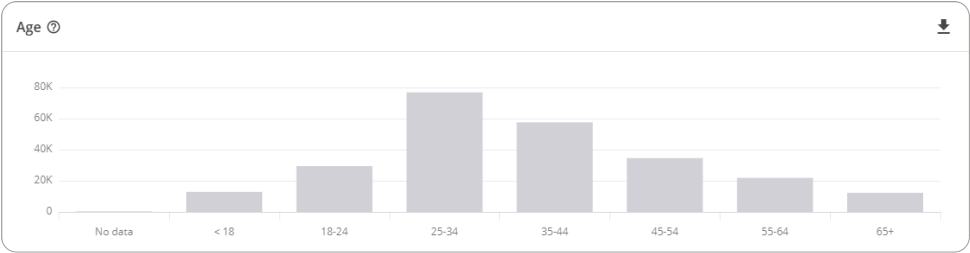
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Language and Demographics

☑ The platform is tailored to the airport's diverse passenger base:
- 56% Spanish speakers.
- 31% English speakers.
- 7% Portuguese speakers.
- 1.5% French speakers.

☑ The majority of users fall into the 25-34 age group, reflecting the needs of digitally savvy, millennial travelers.

Age ⦾   ⬇

80K
60K
40K
20K
0

No data   < 18   18-24   25-34   35-44   45-54   55-64   65+

Enhanced Passenger Satisfaction

☑ Passengers benefit from seamless onboarding, reliable coverage, and relevant content tailored to their language and preferences. Positive feedback underscores how the personalized experience meets the expectations of a global audience.
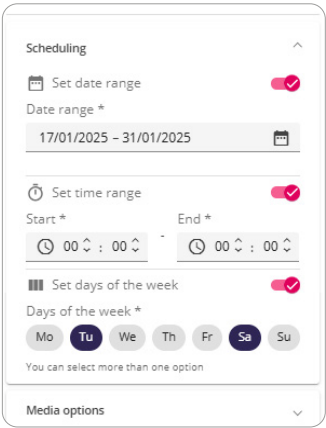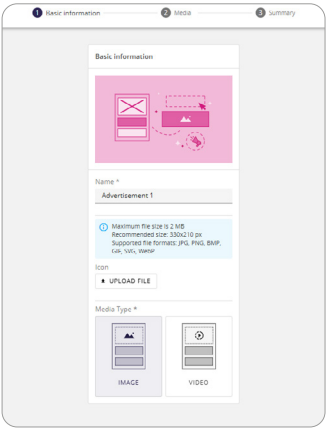
Revenue Generation

⊘ The **3.5% adoption rate** of paid plans translates into a steady stream of ancillary revenue with around **$2k daily, $60k monthly and $720k yearly.**
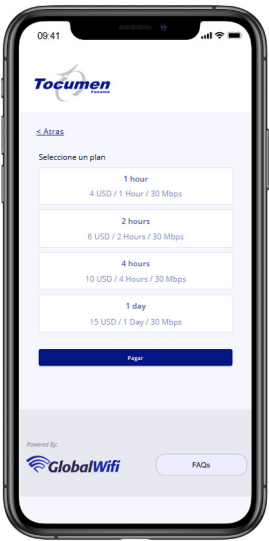
⊘ Targeted promotions and advertisements tailored to language preferences and demographic groups have driven higher engagement with airport retailers and food outlets.

Operational Insights

⊘ Real-time analytics provide actionable insights into user behavior, including peak usage times and preferred locations within the airport.

These insights help optimize resources and improve passenger flow.

Technological Innovations

The Linkyfi deployment at Tocumen International Airport showcased several cutting-edge features that set a new benchmark for airport connectivity:

Captive Portals

Fully customizable, branded portals provided a seamless onboarding experience, integrating the airport's logo, colors, and messaging. Passengers could log in using various options, making the process user-friendly and efficient.

Advanced Analytics

The platform delivered actionable insights into passenger demographics, session durations, and data usage trends. This allowed the airport to tailor its services and plan marketing strategies effectively.

Scalability

The platform's scalable architecture allowed for future expansions and upgrades as passenger demands evolved.

Reliability

99.992% of sessions reported correctly.

Lessons Learned

- **Importance of Customization** – Tailoring the guest WiFi service to the unique needs of the airport and its passengers was crucial for success. This included aligning the WiFi marketing platform and captive portals with the airport's branding and offering multi-language support for international travelers.

- **Addressing Implementation Challenges** – Initial technical challenges, such as ensuring uninterrupted coverage across large terminal areas, were resolved through fast thorough testing and phased rollout strategies thanks to experience of Global Wifi.

- **Value of Passenger Insights** – Real-time analytics not only improved WiFi performance but also provided invaluable data for other aspects of airport operations, such as retail planning and passenger flow management.

Future Outlook

With the successful implementation of Linkyfi, Tocumen International Airport is exploring further opportunities to enhance its digital ecosystem:

- **AI-Powered Enhancements** – Leveraging AI to offer predictive analytics, enabling proactive responses to passenger needs and potential issues.

- **Expansion to Other Areas** – Extending WiFi coverage to parking facilities and nearby transit hubs, ensuring a seamless experience for travelers from arrival to departure.

Conclusion

The Linkyfi deployment at Tocumen International Airport transformed the passenger experience, delivering reliable connectivity, personalized services, and new revenue opportunities. By adopting advanced guest WiFi management technology, the airport not only addressed its immediate challenges but also positioned itself as a forward-thinking leader in smart airport innovation. This case study serves as a model for other airports seeking to enhance connectivity and passenger satisfaction in today's digital age.

Linkyfi

Linkyfi is a public WiFi access management system. Built to offer captive portal functionality, secure internet access, customer insights, and targeted marketing capabilities, it's the only WiFi marketing solution you need to understand your customers.

Contact us

avsystem.com