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Feature TECH TALK

Tech Talk: Tips for Monetizing Airport Wireless Networks

WITH THE DAWN OF A NEW WIRELESS ERA, AIRPORTS ARE EXPLORING THE ADVANTAGES OFFERED THROUGH TODAY'S ADVANCED WIRELESS TECHNOLOGIES

By Scott Ewalt

TOUCHDOWN! THE KICK is good!

Football season may be over, but when it comes to the aviation industry, airport wireless networks show a strong resemblance to that of the biggest championship game in sports – the Super Bowl. That's because running the wireless network at an airport is like running the wireless network at the Super Bowl, every day.

Airports and the Super Bowl are environments where tens of thousands of people are in one venue sitting hip-to-hip and trying to connect online. It's a scenario where data-hungry consumers are using their mobile device as a lifeline to family and friends, work, and their social platforms.

Whether a sports fan, frequent flyer or both, consumers have a voracious appetite to stay connected. From an operations standpoint, catering to the demand for connectivity must be viewed as a way to enhance the customer experience, while creating new revenue generating opportunities. Airports should look at methods for getting passengers connected seamlessly to free Wi-Fi without barriers, while adopting new business strategies that will help monetize the network.

Follow this four-step guide to understand how to get the most out of your airport wireless network leveraging both Wi-Fi and cellular technologies.

STEP I: TURN TO PASSPOINT

To create a truly ubiquitous connectivity experience for travelers—one that removes the headaches of Wi-Fi log-ins and other frustrations—airports should plan for Passpoint adoption. Passpoint is a new set of wireless protocols that enable seamless, secure, automatic Wi-Fi access, with no user action needed. The technology has the power to fundamentally change the way consumers connect to Wi-Fi, doing away with public Wi-Fi network log-ins and browser redirects, dramatically improving the experience of connecting within an airport.

Travelers with a Passpoint profile installed on their device can enjoy an automatic connection from the moment they enter the airport or step out of the cab. The Passpoint networks

also provide a WPA2 encrypted connection automatically, ensuring enterprise-level security, with no additional software or Virtual Private Network (or VPNs) needed.

Airport IT teams should do a full survey of their current network to determine Passpoint readiness, and the steps necessary to get there. Passpoint networks require hardware supporting the Hotspot 2.0 technical specification created by the Wi-Fi Alliance, which makes the seamless hand-off between networks possible. Networks that have not been upgraded in the last three or more years might need updated access points installed. Networks that have been updated with new access points in the last 18-24 months may be able to support Hotspot 2.0 with a quick firmware upgrade.

STEP II: MONETIZE NETWORKS WITH PASSPOINT & WI-FI SPONSORSHIPS

Consumer concerns tied to the cost of domestic and international cellular roaming fees is building. Airports can be the connectivity hero by alleviating these concerns with networks that enable Wi-Fi offload. This approach also opens monetization opportunities through carrier agreements.

Carriers' top priority is to provide fast and uninterrupted connectivity that their customers come to expect, but in high-traffic venues like airports, this can be jeopardized due to high-volume usage that puts extraordinary pressure on existing cell towers and infrastructure. To address the ongoing mobile data explosion, carriers are exploring converged networks that leverage Wi-Fi offload features via Passpoint.

With Passpoint, the infrastructure is in place to deploy transfer between cellular and Wi-Fi without sacrificing the user experience. As the automatic connect feature augments connectivity, it can be paid for by a primary service provider, like a wireless carrier or cable operator, as roaming onto Wi-Fi networks can be more cost effective then moving customers onto roaming cellular towers.

To offset rising Wi-Fi costs, airports can also turn to advertising solutions that offer sponsored Wi-Fi sessions. Brands are attracted to sponsorship campaigns as they offer several screens of exclusive, high-impact interactions with appealing demographics. For example, a convention that is being hosted nearby or a local attraction may benefit from serving ads to users over your network. The media is organic to the passenger experience—vs. a forced interaction—can deliver hyper-local segmentation with mass customization and is put in front of a contextually relevant audience—people who want to connect online.

STEP III: OFFSET COSTS WITH CELLULAR DAS NETWORKS

Distributed Antenna Systems (DAS) have found a home in airports as more and more large venues turn to the technology to boost cellular coverage and complement Wi-Fi networks.

DAS solutions solve capacity and coverage issues by deploying hundreds of small antennae throughout the airport and integrating them into a cohesive cellular network. These individual antennae can be turned up or down, easily adjusting to provide additional capacity when it's needed most, whether for holiday travel or summer vacation season. A well-designed DAS setup can also limit interference, ensuring that all sectors of an airport have equal access to cellular connectivity. Further, cellular DAS networks can help offset costs by bringing in carrier participation.

STEP IV: LOOK AT THE BENEFITS OF HYBRID WI-FI NETWORKS

While major airports have embraced Wi-Fi to better serve travelers and their crave for connectivity, it's important to remember that we are now entering a new era of airport wireless that merges both free and paid models—not one over the other. The growing trend is to offer passengers more choice and control and move away from Wi-Fi networks that are a one size fits all approach. For example, the Wi-Fi requirements of an occasional leisure traveler who gets online to check email or update Facebook are vastly different from those of a business person who wants the network to function as an extension of the office. Networks should be flexible to meet each traveler's individual needs.

Today's intelligent Wi-Fi networks enable an experience that is secure, multi-platform, analytics-driven, responsive and tiered. When building, or upgrading an airport network, the following features should be present: WPA2 (Wi-Fi Protected Access) security encryption; tiered services with varying speed and bandwidth levels; actionable insights such as queue management, pathing and wayfinding; content management system (CMS) tools; and device flexibility across smartphones, tablets and laptops.

Wireless infrastructures should also take Network Functions Virtualization (NFV) into consideration. NFV is a new technology that is receiving heightened attention for its ability to eliminate the need for expensive hardware and physical infrastructure, while reducing capital expenditures (CapEx) and operating expenses (OpEx).

The dawn of a new wireless era has arrived and there's never been a better time for airports to explore the many advantages offered through today's advanced wireless technologies. Remember, when your network scores, your airport wins. <

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