PARKING WORLD

Technology Drives
Airport Parking

Airport Parking Technology Takes Off

BY PETE GOLDIN

Airport parking is big business. Because parking is a profit center for many airports, the customer experience is becoming a focus, and technology can be an important support.

"A car park has a high value," says Robert Weiskopf, Chief Marketing & Sales Officer, Car Access for Skidata, a parking technology vendor. "It is where the passengers have their first and last impression of the journey."

Weiskopf points out that parking can even serve as a driving force to attract customers to an airport, particularly people looking for cost savings from services such as parking space pre-booking.

Improving customer service and the customer experience is one of the main drivers behind deployment of technology at airport parking facilities. However, each airport is different and embedded in a unique traffic and transportation system, so the types of technologies they deploy differ widely depending on the requirements.

"The greatest parking challenge faced by airports is to use availability of parking space and comfort of parking as a differ-

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entiator," says Thomas Dibbern, Director, International Operations for Scheidt & Bachmann, another parking technology vendor.

New technology can be an enabler, says Dibbern. In the past, airport parking was primarily about installing robust, long-lasting field devices. Today, the focus is on highly sophisticated software solutions on virtual platforms interacting with numerous applications to provide a more customer-centric user-friendly approach.

Airport IT departments have recently taken on a larger role in the selection and management of parking systems, and this development has encouraged parking system vendors to raise the level of technological sophistication.

Europe Leads the Way

In Western Europe, there are many airports to choose from within a range of less than 200 miles, and all compete for the same travelers with more or less comparable flight destinations and schedules. Parking technology can be a competitive differentiator.

Dibbern states that in recent years, European airports have made considerable investments to implement fully integrated parking solutions that go far beyond traditional revenue control – covering such aspects as pre-booking, single-space detection and valet parking. Pre-booking platforms, for example, deployed at numerous European airports, have increased the overall competitiveness of those airports, says Dibbern.

"A lot of European airports have set a relatively high standard in parking solutions in terms of functionality and service for the end user, such as License Plate Recognition (LPR) for enhanced security, drive-in and -out by credit card, increase in online reservation portals, and VIP parking," Weiskopf notes.

UK airports exemplify the cutting edge. In the past three years, operator BAA has spent about £150m redeveloping short-term car parks and improving the valet and long-stay parking products across its seven UK airports.

One improvement is BAA's Car Finder system at Heathrow. Designed to assist customers in locating their vehicles, Car Finder tracks cars to a specific zone using LPR and CCTV. Customers can use their ticket or enter the registration number at a Car Finder kiosk to identify the location of a parked car.

Heathrow also uses Automatic Number Plate Recognition (ANPR) for swift and efficient entry/exit for pre-booked customers. In addition, ANPR is an important security feature for tracking abandoned vehicles and preventing attempted car crime.

Europe's airports also are deploying technology for back-end functionality as well. For example, Amsterdam Airport Schiphol has upgraded its technology implementation to better integrate with other back-end airport systems such as CRM. Weiskopf points out that it is important for new parking technologies to be compatible with standards to enable integration with operating systems, databases, network technology and other software applications.

"European airports highly value state-of-the-art software solutions with web-client and open source technologies like Java due to their ability to interface with other applications," Dibbern says.

European airports have clearly embraced parking technology; however, Dibbern notes a significant amount of legacy equipment in the European market that could benefit from an upgrade.

Technology Adoption Worldwide

The U.S. and Europe lead the way in terms of airport parking technology, but the tech revolution also is catching on at airports worldwide. New Zealand is just one example.

"Prior to changing our technology, our car parking system couldn't handle the through-put at peak times, and the car park was also not operational 24/7," says Geoff Eban, General Manager Operations and Infrastructure at Christchurch International Airport, which recently deployed a central pay system from Federal APD. "With a central pay system, we captured all the lost revenue, and processing times were greatly diminished," Eban says.

Meanwhile, Airports in Asia and Africa still run a large number of exit cashier lanes – in contrast to most European airports, where high labor costs have driven the adoption of full automation.

Hong Kong International Airport is one of the exceptions. To simplify payment procedure and enhance efficiency, its car parks use an automated payment system, minimizing the risk of cash handling, as well as enhancing efficiency.

Another progressive Asian airport, Tokyo Narita International, uses Mitsubishi Precision parking systems. In addition, Narita uses systems from Amano, which also are deployed at airports in Mumbai, Delhi and Bangalore, India.

Some of these airports deploy technology to solve regional challenges.

"Due to extreme humidity in some of the countries, Asian airports are keen on alternative technologies to the traditional paper ticket," Scheidt & Bachmann's Dibbern explains, pointing out that operations such as Kuala Lumpur International Airport have deployed ChipCoin technology, which alleviates the problem of tickets sticking together and jamming machines.

This is just the beginning. Expect to see even more innovations over the next couple years and greater worldwide adoption of advanced solutions. Skidata's Weiskopf envisions future airport parking technology offering a seamless air travel process that links parking with passenger booking and boarding via a single ticket.

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