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An age of facial recognition

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Biometric services present customer service, efficiency and cost-saving potential for the airline of the future

The global airline industry is one of the most competitive sectors in the world. Recently, the financial outlook for the sector has darkened in the midst of rising fuel costs, increased competition and the threat of a global trade war. In order to stay ahead, looking to new technologies is increasingly important for airlines, to help preserve margins and ultimately deliver a better customer experience.

Vice President of Global Safety for NEC's Safer City Solutions Division, Dr. Atsushi Iwata, explains that biometric services play a key role in enabling airlines to both ease cost pressures and create a better end-user experience for passengers. With significant experience using biometric technology in the retail and hospitality industries, NEC is currently helping airlines undertake this digital transformation.

Recently, for example, a major U.S carrier became one of the first airlines to embrace biometric technology by deploying an NEC system in Atlanta's Hartsfield-Jackson International Airport, at international Terminal F.

"The system offers passengers travelling through the international terminal the opportunity to opt-in to a hassle-free airport experience," says Dr. Iwata. "If a customer wishes to use face recognition technology, they are able to check-in, drop off luggage, identify themselves at security and board the flight using their face as their form of identification."

For efficient processing at each "touch point", the system leverages the U.S Customs and Border Protection database to identify passengers, explains Dr. Iwata.

Hartsfield-Jackson International Airport is the busiest airport in the world, servicing more than 100 million air passengers each year—so a digital transformation using biometric technology was a logical step.

A recent study by finder.com found that due to the immense volume of passengers that use the airport, it leads the nation in carrier-caused flight delays at 8.8% of all flights. It also takes second place behind Los Angeles International Airport for major departure delays at 7.8%.

NEC's face recognition helps airlines resolve delay issues by reducing the typical boarding time of an international flight by nine minutes, as passengers no longer need to undergo multiple identification checks of their boarding pass and passport.

That's good news for border control—a 2018 IATA Global Passenger Survey, with 10,400 respondents from 153 countries, found that border control had the second lowest satisfaction rating of 11 elements of the customer journey.

It's even better news for the bank accounts of airlines—the US Federal Aviation Administration estimates that flight delays in the country cost airlines US$28bn per year. It comes as no surprise that reducing flight delays is a top priority for airlines.

Due to the initial success of leveraging biometric technology, more organisations are embracing face recognition services, says Dr. Iwata.

NEC has recently partnered with Star Alliance to allow more airlines to easily integrate face recognition technologies into passenger processing services. Star Alliance is the oldest and largest airline partnership programme, consisting of 28 member airlines who offer more than 19,000 daily flights to 1,300 airports in 194 countries.

NEC and Star Alliance will soon launch an interoperable platform, enabling Star Alliance member airlines to implement biometric services for their frequent flyers.

The system is set to launch with its first Star Alliance members in early 2020, and once implemented, will allow passengers to easily drop off luggage, enter airport lounges and pass through boarding gates.

In some cases, passengers may also be able to clear security using the system. On-boarding passengers to the system is also designed with convenience in mind—a passenger can enroll using their mobile device and will only need to register once for any participating airline. "The service is opt-in and data is stored securely and in accordance with local privacy regulations," points out Dr. Iwata.

Opt-in for the service is likely to be popular, too. IATA's Global Passenger Survey found

that millennials want to spend less than 30 seconds dropping their bags off, and 65% of passengers would be willing to share additional personal information to speed up processing at the airport.

According to IATA's Economic Performance Report, consumers are already benefiting from lower travel costs and more routes, and will spend 1% of world GDP on air transport in 2019. This means people are travelling more, so the easier an airline can make it, the better.

Dr. Iwata says the face recognition experience being deployed by major airlines is just the beginning of a broader digital transformation. Airlines will be able to leverage

face recognition technology to improve the efficiency of their operations, including using biometric services to identify staff members and allow access to sensitive locations.

It will be useful to enhance customer service in-flight, too, enabling flight attendants to identify VIP passengers or passengers with specific needs.

"The biometric services currently being used will expand to other services within the airport and eventually even to services outside the airport," Dr. Iwata adds. "Airlines are in constant need of new products and services to increase revenue and to stay competitive."

As an example, airlines could further expand the use of face recognition technology to allow customers to pay for duty-free purchases, both within the airport and in-flight. Eventually, airlines could also partner with businesses outside the airport building altogether, such as hotels, retail outlets and attractions—offering seamless check-in and payment options. The ultimate goal is to make the entire experience of travelling just as efficient and convenient as the current biometric-enhanced airport experience.

As biometric technology continues to mature and scale, airlines will have an increasingly broad and powerful portfolio of products and services to enhance the customer experience and to control costs.

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