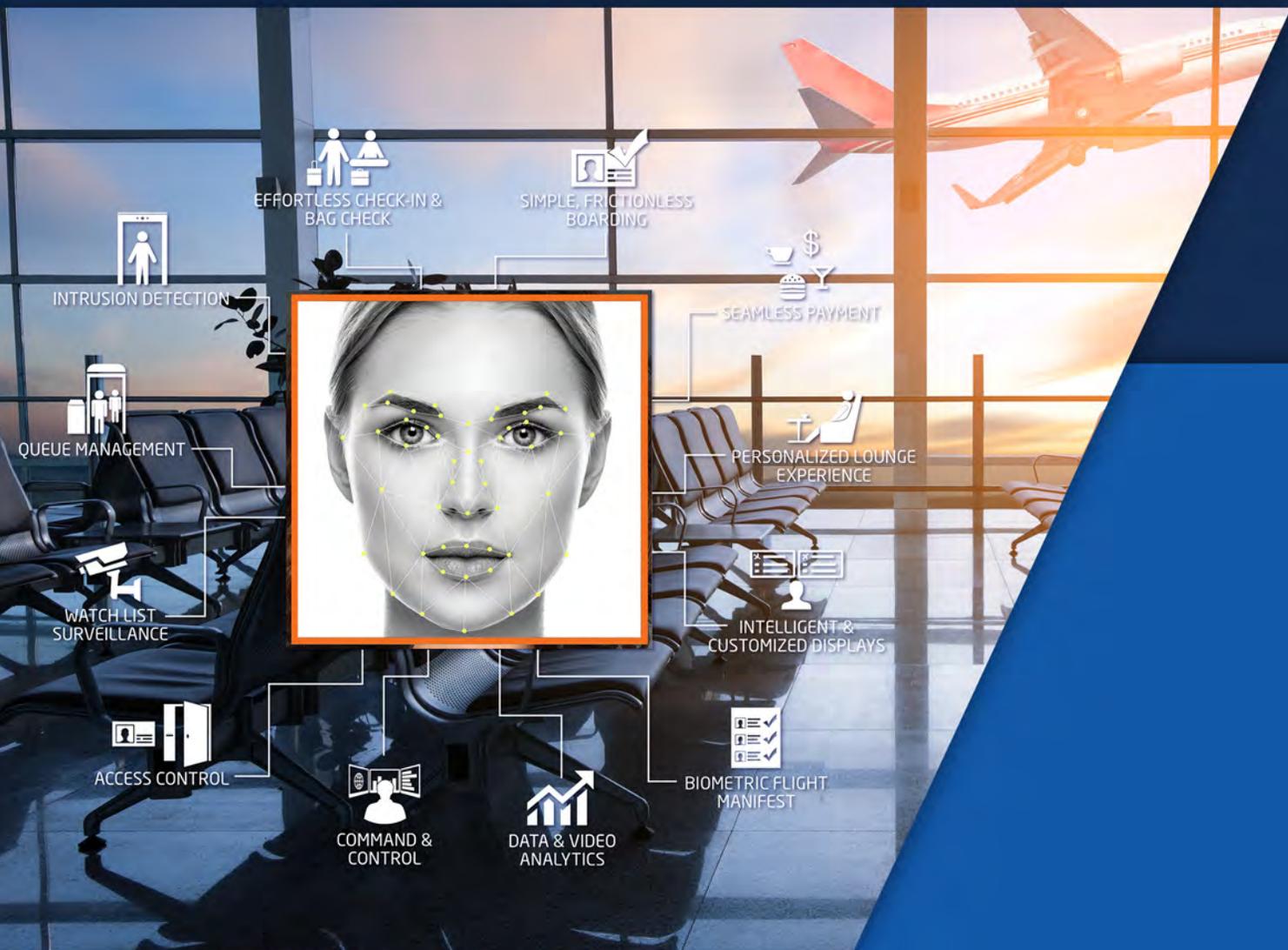


# 7 Ways Face Recognition Can Unlock A Secure, Frictionless and Personalized Travel Experience

COURTESY OF A SINGLE, UNIFIED BIOMETRIC KEY





## INTRODUCTION

Boarding a plane used to be the exciting start to any journey, even a business trip. But today's airports are busier, more congested and stressful than ever. According to the International Air Transport Association over **4 billion passengers** boarded airline flights worldwide in 2017. With demand for air travel expected to **double over 20 years**,<sup>1</sup> that makes for some very crowded airports.

What used to be a pleasant experience is now marred by long queues, time-consuming security checks, and constant stress. From the check-in counter and the self-service kiosk to the security screening and boarding queues at the gate, travelers wait in one queue after another.

But what if each passenger had their own unique biometric key, allowing them to overcome these obstacles?

With the right technology—like advanced biometric and face recognition solutions—airports can make an air traveler's journey a more pleasant one once again.

**Here are seven ways advanced recognition technologies can provide a secure, frictionless and personalized passenger experience.**

1: <https://www.iata.org/pressroom/pr/Pages/2017-10-24-01.aspx>

2: <https://www.sita.aero/globalassets/docs/surveys--reports/passenger-it-trends-survey-2017.pdf>

# #1 CHECK-IN COUNTER

## START OFF WITH FAST, ACCURATE SELF-SERVICE TICKETING.

Why not streamline the check-in process right from the start? Airports around the world look to the savings in costs and personnel enjoyed through smooth and efficient self-check in.

In 2017, 15 percent of air travelers queued up to self-service kiosks to check-in for their flights. But a full 34 percent who checked in via an agent expect to use self-service on their next trip. <sup>2</sup>

While that indicates an accelerated shift from agents to self-service kiosks, these kiosks typically scan a passengers' IDs, not the passenger themselves.

However, advanced face recognition solutions from NEC can quickly and accurately verify a traveler's identity at self-service kiosks. A simple scan of the face creates a unique and unified biometric key that allows travelers fast, frictionless check-in for their flights. It can also match them against security watchlists and flight manifests to keep reduce wait times and keep everyone safer.



### Traveler benefit:

**Shorter, faster-moving queues mean a simple, frictionless check-in in a fraction of the time.**

## Busiest Airports in the World 2017

1	Atlanta, Ga
2	Beijing, CN
3	Dubai, UAE
4	Tokyo, JP
5	Los Angeles, Ca
6	Chicago, Il (ORD)
7	London, GB (LHR)
8	Hong Kong, HK
9	Shanghai, CN
10	Paris, FR (CDG)

Source: Airports Council International



## #2 BAG DROP

### MAKE BAG DROPS FAST, EASY AND SECURE.

After check-in comes the bag drop. Even passengers using a check-in kiosk face this queue. How do handlers know the person dropping the bag is the actual traveler, unless there's another ID check?

Face recognition technology—like NEC NeoFace's dual-capture face recognition—can **ensure the identity of the travelers** dropping off luggage by matching passengers with their tickets and luggage for faster processing. That means baggage handlers can potentially **screen more luggage** and **check fewer IDs**.



#### Traveler benefit:

Face recognition eliminates bag drop delays for the traveler, while visually and digitally associating travelers with their bags.



## #3 SECURITY CHECKPOINT

### MAKE SECURITY SCREENS FASTER AND MORE ACCURATE.

Our traveler has sped through check-in and bag drop, thanks to face recognition.

Now comes the security screening. No other step in a traveler's journey is more necessary for safety—or as frustrating.

Wait times in some of the busiest airports in the world can, at times, be measured in hours. Staff shortages and threat alerts create havoc under normal conditions but are especially frustrating during high-impact travel windows, such as during the summer and the holidays.<sup>3</sup>

With face recognition, airport security gets fast, accurate identity verification, so they can screen more passengers **with fewer personnel**.

That means they can focus their attention on addressing potential and actual threats.



#### Traveler benefit:

**Use of face recognition allows travelers to move through security checkpoints more quickly and with less friction, which significantly reduces travel stress.**

<sup>3</sup> : <https://a4e.eu/european-passengers-face-huge-delays-this-summer-thousands-of-flights-cannot-depart-on-time/>.

### Do security lines get a bad rap?

Four of the top 10 traveler complaints about airports are about security issues.

- Confusing layout / what to do
- Unfriendly / overworked personnel
- Lengthy wait at screening process
- No seating to dress afterward

Face recognition simplifies the screening process, and reduces the need for these discomforts.

Source: McKinsey Research, Executive Briefing, August 2016.  
<http://www.mckinsey.com/business-functions/operations/our-insights/the-ceo-guide-to-customer-experience?cid=other-eml-alt-mkq-mck-oth-1608>



## #4 IN-AIRPORT ENTERTAINMENT

### LET TRAVELERS SAFELY ENJOY THE “WAIT BEFORE THE GATE.”

Speeding through queues allows customers to dine, shop and relax before it's time to board their flights. NEC NeoFace solutions integrate with restaurant and retailer payment systems, letting travelers make secure, fraud-free purchases with just a glance at the camera. At VIP frequent flier lounges, face recognition identifies and admits only those with appropriate memberships.

Face recognition technology can make those experiences faster, more secure and more enjoyable, even in a crowded terminal. NEC's NeoFace Watch software can easily scan the crowd for suspects on watch lists increasing security for all.



**Traveler benefit:**  
Face recognition lets passengers enjoy a meal, shopping and the lounge, with faster-moving lines and a more positive experience.



## #5 BOARDING PROCESS

### AUTOMATE GATE MANAGEMENT FOR FAST, SECURE BOARDING.

No one likes standing in a queue to board or waiting as airline employees scan each paper boarding pass—even after a relaxing time in the lounge.

With face recognition and identification technology, airlines can ensure tickets and ticket holder match without adding another manual ID check. Face recognition software can automate the boarding process, reduce the need for extra gate personnel, and even eliminate the need for printed boarding passes. Boarding lines move more quickly, while airlines get a more accurate passenger manifest—meaning airlines can ensure more on-time departures and safer flights.



**Traveler benefit:**  
Imagine, no more paper boarding passes. With face recognition, slow and uncomfortable boarding queues are a thing of the past. Passengers get to their seats faster and with less anxiety.

### DID YOU KNOW?

The U.S. Congress passed a **mandate for biometric Air Entry / Exit program by 2018**. And, this program is going global. According to SITA, 63 percent of airports and 43 percent of airlines plan to add biometric ID systems by 2020. Now, NEC's **NeoFace face recognition solution** allows airports and airlines to fulfill **Air Exit** at the gate.

## #6 CUSTOMS & IMMIGRATION

### FORGET LONG, CLOGGED IMMIGRATION QUEUES.

Our passenger has landed and is headed for the immigration and customs queue. Accurate identification of all persons entering another country is critical for public safety worldwide, but the process is often slow and stressful. The queues are often painfully long which can try the patience of both security workers and weary passengers.

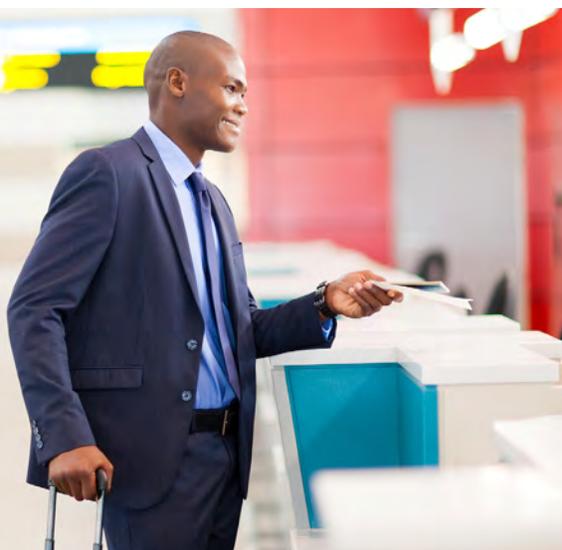
Once again, face recognition technology provides a quicker, more accurate—and even more pleasant—experience for everyone.

With rapid positive identification of arrivals, NEC's NeoFace Express platform makes the immigration process faster, safer and more secure. And coupled with Air Exit data collected at ports of exit, it makes the Air Entry process more efficient, meaning fewer agents are needed to handle high passenger volumes.



#### Traveler benefit:

**Speeding through the immigration and customs queues, travelers can move on to collect their bags and make a connecting flight—or just head home.**



## #7 BAGGAGE CLAIMS

### SECURE THE BAGGAGE CLAIM FROM THEFT AND PILFERING.

So far, innovative face recognition technology has made this trip a safe and pleasurable one. Our passengers head to the baggage claim—weary but happy—hoping to find their checked bags intact.

But, worldwide there were over 22.7 million mishandled bags in 2017, a 4-percent increase over 2016.<sup>4</sup> And sadly, **22 percent** of those were **damaged by pilferers or stolen outright.**

NEC's NeoFace Watch software can monitor baggage claim areas, deter thefts and identify perpetrators using live and recorded video streams. The baggage claim remains safe and secure, reducing the number of security personnel needed to monitor the claim area.



#### Traveler benefit:

**Fewer stolen bags also means lower stress for travelers, higher customer satisfaction rates and fewer customer support claims.**

4: SITA Air Transport Industry Insights - Baggage Report 2017,2018  
<https://www.sita.aero/resources/type/surveys-reports/baggage-report-2017>

### A not-so-perfect end to a trip?

There were over 22.7million mishandled bags in 2017, and 22 percent of those were pilfered or stolen.

**Face recognition solutions can monitor baggage claim and detect and deter baggage thefts.**

Source: SITA Air Transport Industry Insights - Baggage Report 2017,2018

## CONCLUSION

### **NEC HELPS TO STREAMLINE AIR TRAVEL SAFETY AND SECURITY – ENHANCING THE PASSENGER EXPERIENCE.**

For today's air travelers, a once pleasant experience has evolved into a time-consuming and stressful one, marred by long queues and time-consuming security checks. Instead of enjoying themselves, the traveler's experience is now about waiting in one queue after another, from the moment they arrive at the airport until they exit at their final destination. But it doesn't have to be that way.

NEC NeoFace solutions provide fast, accurate identity verification to allow airports to focus their energies on their core responsibilities—efficiently serving their customers and keeping them safer and more secure.

With NEC's face recognition and identification solutions, passenger security and comfort can coexist once again.



## About NEC Corporation

NEC Corporation is a leader in the integration of IT and network technologies that benefit businesses and people around the world. By providing a combination of products and solutions that cross utilize the company's experience and global resources, NEC's advanced technologies meet the complex and ever-changing needs of its customers. NEC brings more than 100 years of expertise in technological innovation to empower people, businesses and society.

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