The security experience

Game-changing biometrics

Arguably, when considering how in-airport security has been improved over recent years, the advancement in biometrics sophistication and subsequent deployment has been the ultimate catalyst. It's fundamentally transforming journeys for travelers, making the airport experience frictionless and more enjoyable without compromising the integrity of security processes.

It's removed the need for multiple verification checks throughout the terminal journey which has made passage smoother, faster, and fundamentally more secure – eliminating the need to carry around physical identity properties (tickets, passports) so they're less likely to be lost, misplaced, or stolen.

Amadeus. It's how travel works better.

One-time registration

The key to the success of biometrics (from operational and security perspectives alike) resides in its simplicity to establish traveler identity digitally linked to a government trusted document or an airline issued boarding pass. A single point of authentication at the outset means that the subsequent verification points are instantaneous and contactless.

This happens predominantly between check-in (at home or at the airport) and bag-drop. The passengers register their biometric data - mostly through facial recognition solutions - in combination with their travel document authentication. This is done at automated, self-service kiosks and stored on the traveler's mobile device and relevant app.
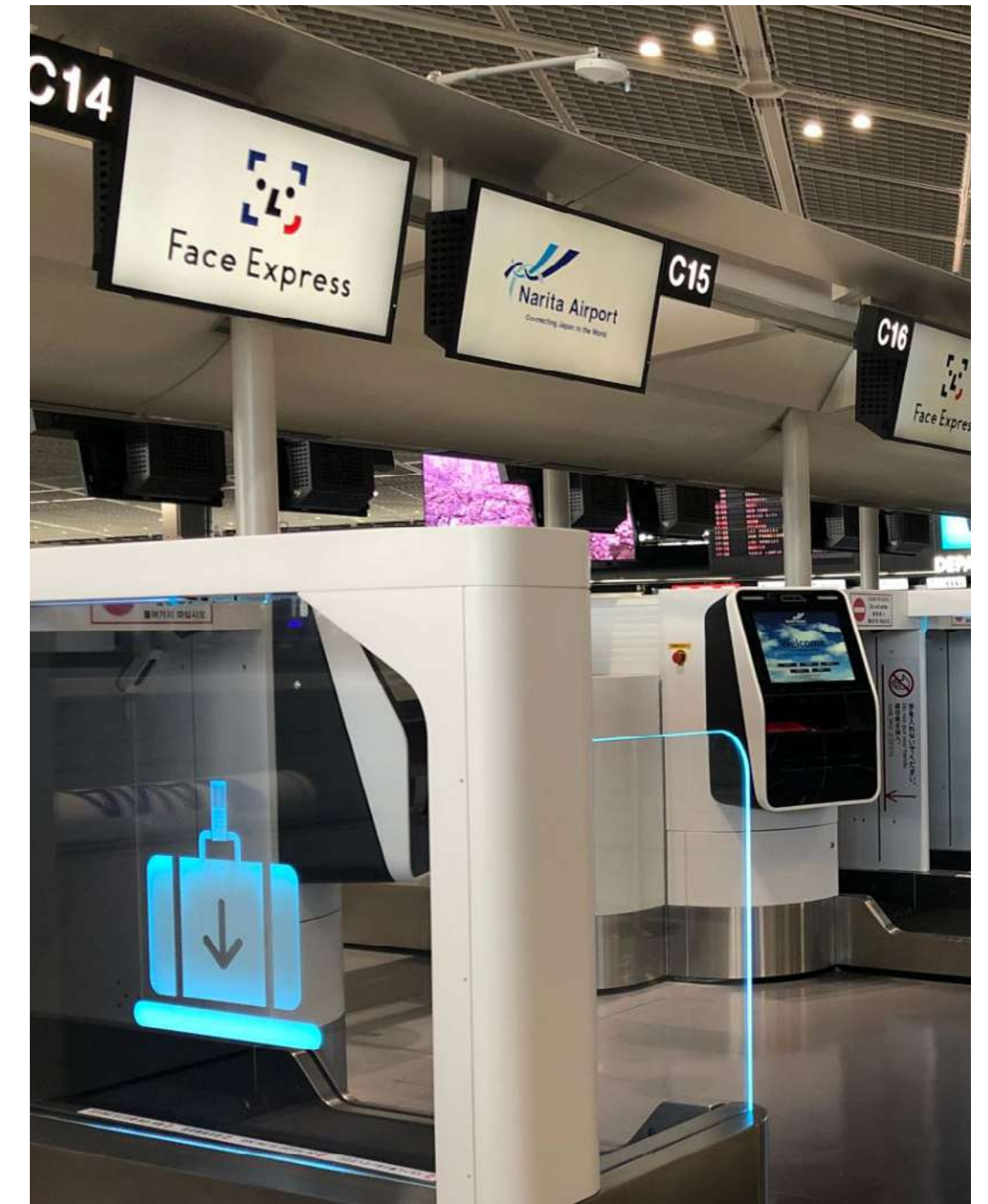
As the passenger makes their journey through the terminal, this biometric data is then shared on a need-to-know basis with the relevant security and access control actors throughout. Importantly, verification can be done without physical checks - it's all handled through facial recognition devices sustained by a scalable software called an Identity Management Platform (IMP).

'Ready to Fly'

As biometric solutions become increasingly sophisticated, the 'ready to fly' model for travel will become more normalized. These solutions involve regulatory governmental, and police checks well ahead of arriving at the airport, meaning that the traveler only needs to arrive at the terminal and walk straight through. Visa controls, e-passports, and security clearance are pre-approved ahead of time, removing any friction.

The Amadeus Seamless Corridor and free flow technology is at the cutting-edge of what can be achieved. This innovation replaces 'stop-start' and 'one-at-a-time' gates with wide corridors hosting sophisticated AI-enabled processing. It's capable of identifying multiple passengers while in motion by verifying ID with mobile apps or biometric wallets.

The corridors, currently being tested in production at several pilot airports, are demonstrating previously unimaginable levels of convenience and speed. Results demonstrate the ability to clear an individual in under ten seconds - even within groups of people walking together.

Opening up new possibilities

The nature of biometrics means that it can reach far beyond the airport terminal through the ability for hardware or software providers to integrate their own solutions into the ecosystem. When we consider the door-to-door journey, there are obvious points of adoption. For example, car rental firms could use facial technology to confirm hiring criteria or hotels can use it for contactless check-in or in-house services and facilities access.

However, the technology can also apply once the holiday or business trip is underway. Biometric authentication can revolutionize the ability to integrate entertainment services with on-the-ground suppliers, with tickets purchased in advance and validated on arrival. This could even extend into insurance industries where potentially risky activities are covered once underway and ad hoc, without the need to go through lengthy online or paper-based checks and forms.

The importance of decentralization

Fundamental to the success and security of biometric technology is its use of decentralized proof of identity. Here, all information is stored on digital wallets or in-app, with verification handled locally and temporarily, using encrypted, consent-based data sharing. This boosts privacy, control, and security, as travelers decide when and where to share their information.

Beyond Amadeus' digital ID and biometric wallet, the technology is also interwoven within IATA's 'One ID' initiative, equally interoperable with the recently enhanced Apple and Google ID wallets. This means the model can deliver truly global, interoperable identity across multiple stakeholders (airlines, airports, governments). This is key when it comes to moving beyond the terminal and into other areas within the travel journey, and even into the holiday or business trip once underway.

Payment solutions

Contactless payments have long since been the norm for payments both locally and internationally. The days of queuing at the Bureau de Change for foreign currency have almost disappeared. But carrying a physical wallet still brings risk. This is where fingerprint authentication also delivers the potential to hugely reduce fraud and theft, especially in tourist hotspots. The potential to spend an entire day sightseeing or traveling between meetings without having a physical wallet or ID reduces the potential for crime.
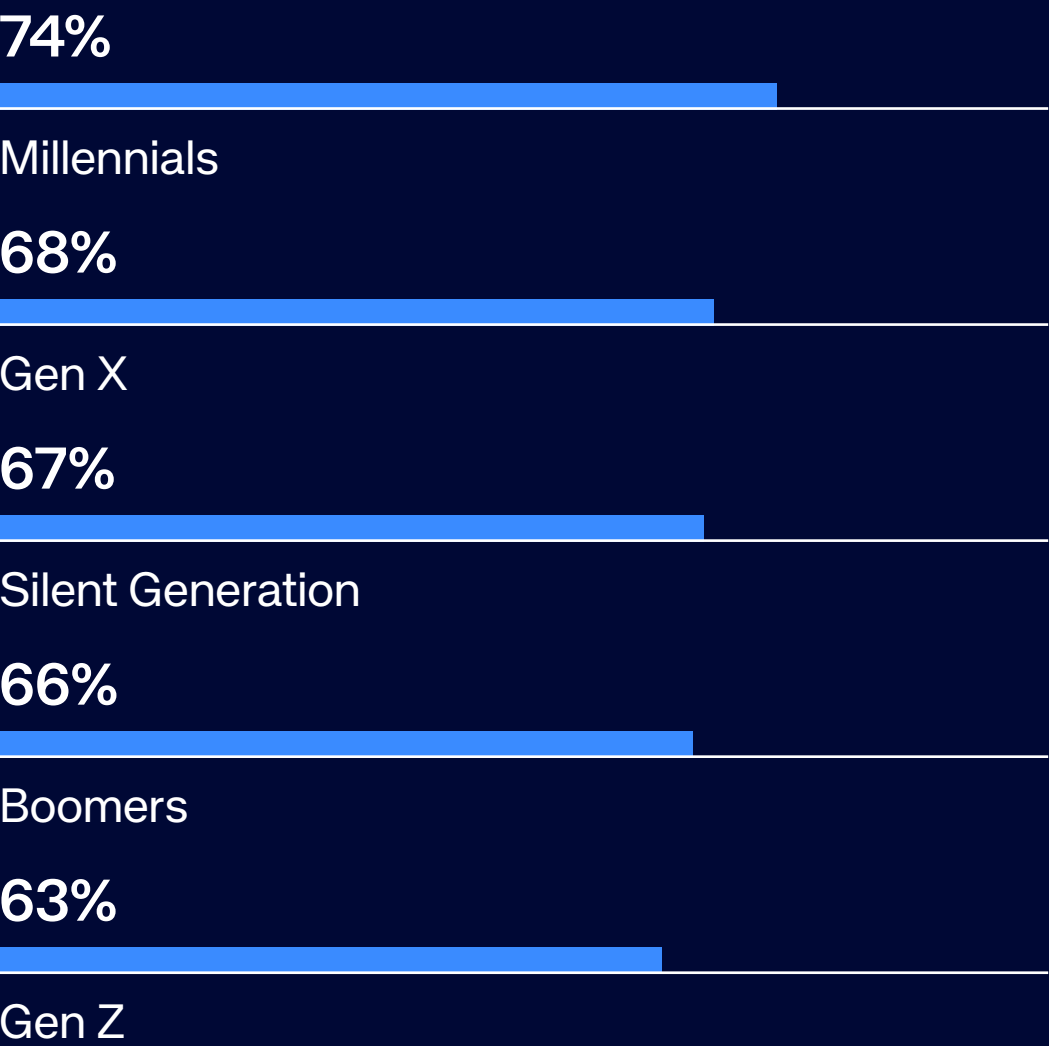
Ultimately, the use of biometric security can be applied throughout the journey and eventually undertaken well in advance. This brings the opportunity to make the truly contactless, seamless travel experience a reality. This is a move which can benefit the entire travel and hospitality industries, not least in extending ease of booking into many other areas, establishing the 'connected trip' in the process.

When asked whether they would consider **using biometric gateways so there's no need to stop and show a passport or even a mobile phone** (i.e. using face or fingerprint scanners to let you pass through airport security), an average of **69% of global travelers said they would.**

69%

Interestingly, while this differs only slightly across generations, to a factor of no more than 10%, there are clear cultural divides with 88% of Chinese travelers agreeing that they would, but as few as 54% of French passengers taking this stance.

Generational

74%

Millennials

68%

Gen X

67%

Silent Generation

66%

Boomers

63%

Gen Z

Regional

88%

China

79%

Singapore

74%

India

70%

UK

63%

Spain

61%

USA

54%

France

Amadeus. It's how travel works better.