



The Seamless Passenger Journey in Smart Airports 2021 Edition





Introduction

Valour Consultancy and P.A.ID Strategies have combined their expertise on aviation, digital identity and biometrics to deliver the first edition of this smart airports report. It focusses on the passenger experience and interactions of travellers as they pass through touchpoints, including check-in, bag drop, pre-security, lounge access, immigration, boarding gate, customs and border control.

The report provides a timely insight into the current market status and future direction. It reviews the impact of COVID-19 on investment decisions in each region and outlines how the adoption of smart airport touchpoints can aid recovery and improve operational efficiency. This is based upon detailed market data and analysis of trends and factors for each touchpoint by region and airport size. Long-term forecasts are provided for market penetration, installed base, annual installations and market value.

Coverage

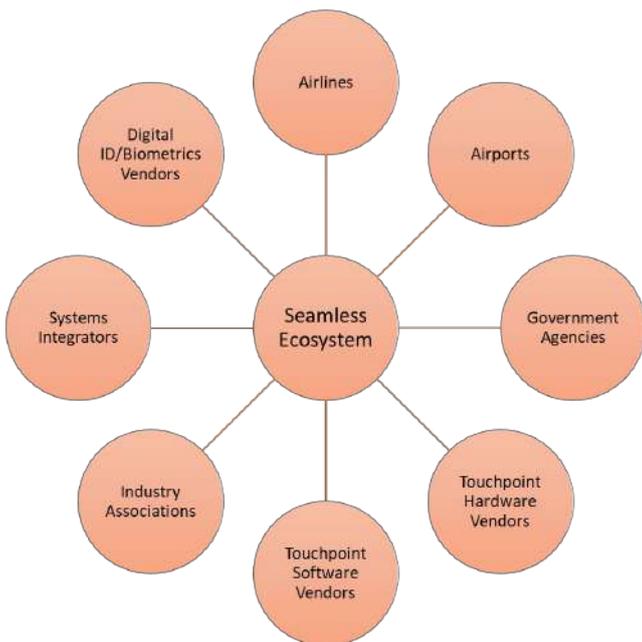
Key questions and objectives were defined at the project outset and then refined with input from prominent industry participants. These include:

- What are airports' and airlines' priorities in response to recovering from the COVID-19 disruption?
- How will new self-service and automation technologies be introduced to improve the passenger journey?
- Which smart airport applications/touchpoints will see new technologies introduced and when?
- Which application(s) will evolve and/or be replaced in the next 2, 5 and 10 years?
- What is the current installed base of self-service check-in and immigration kiosks, self-bag drop units and eGates?
- How are these located across different passenger touchpoints? How will this grow in future?
- How will annual installations and associated revenues of these products grow over the course of the next ten years?
- How does the installed base, annual installations and revenues break down by geographic region and airport tier?
- What is the current level of biometric integration into these devices and how will this grow in future?
- What will be the balance of technology versus the human touch and how will it impact the passenger experience?
- What is the current market status and future direction regarding the digitisation of identity management?
- Which companies are leading the delivery of smart airport solutions? What is the understanding of airport operators?
- How will companies need to adjust to survive and thrive in the evolving airport ecosystem?

Report Overview

Biometrics, Digital Identity and Smart Solutions for Self-Service, Automation and Traveller Processing to Improve the Passenger Experience, Increase Efficiency and Build Revenue Streams for Airports and Airlines.

In recent years, adoption of self-service and automation technology has been driven by a range of different factors, primarily the need to squeeze an ever-increasing number of passengers through physically constrained infrastructure. Moves in this direction first began about twenty years ago, first with self-service check-in kiosks to process passengers more quickly and reduce the space taken up by manual check-in counters in order to create more room for revenue-generating retail outlets. ABC eGates came next, driven by wider adoption of biometric passports in the mid-2000s, while automated eGates at pre-security and for self-boarding are relatively new smart applications in airports. Self-bag drop is also relatively new and interest in this segment has rocketed in recent years.

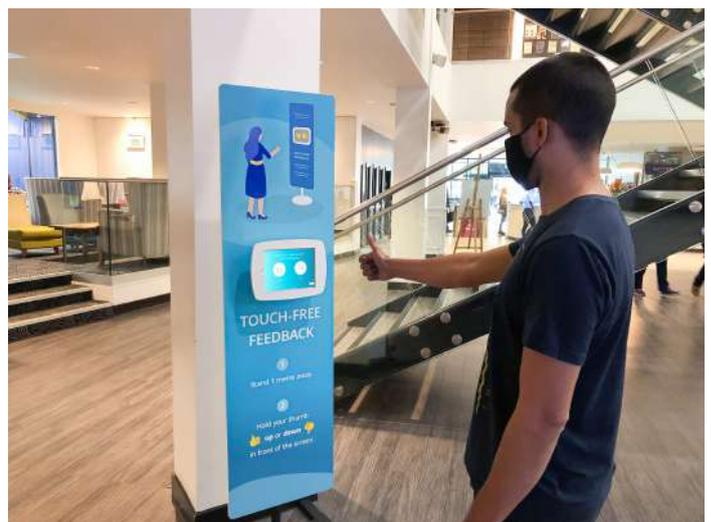


The last few years have seen continued investment in smart technologies by airports and airlines with an aim to remain competitive, improve the passenger experience and enhance both safety and security. COVID-19 will drive adoption of these technologies as airports seek to aid recovery, provide confidence to the public and find new efficiencies. At the same time, passengers have heightened expectations due to the rapid development of digital capabilities in wider society, including ecommerce, mobile apps, retail, financial services, health and the smart home.

Self-service and automation bring the promise to reduce queue times and improve the passenger experience. Greater operational efficiency is another factor as stakeholders have looked to achieve improved returns on investment and/or optimise revenue streams through better performance or creating new commercial opportunities. The ability to reduce human interactions and offer touchless processing is now also a major factor in airports' and airlines' post-COVID recovery strategy.

With a specific focus on the passenger facing journey (departures, arrivals and connecting journeys), this report provides insight, guidance and trends exploring if, how, where and when these technologies will be introduced. This is coupled with a look at the driving forces, barriers and external factors associated with their deployment.

The report also explores both on and off airport activity and looks at specific touchpoints and industry trends associated with identity digitisation and the adoption of biometrics, including how they will enhance passenger processing. The issue of health screening and how it will be incorporated into the seamless passenger journey in the post-COVID-19 environment is additionally explored.





Report Scope

The diagram below offers a visual summary of the quantitative analysis included within this report. A double base year (2019 and 2020) is included to demonstrate the short-term effect of COVID -19, with a long-term forecast out to 2030.

This is based upon market dynamics, technological developments, regulations, economic recovery and input from an extensive and rigorous primary research with stakeholders from across the value chain.

The Seamless Passenger Journey

Guidance on Future Market Value (US\$)

A wide array of passenger touchpoints are considered, including:



Key quantitative data points are offered to establish market sizing and potential



Data is then segmented by region, airport type, size and smart technology type



Report Structure

Chapter 1 – Introduction, Scope and Methodology

Contains the report scope and explanations as to what is included and excluded from the research. All definitions used are presented in a clear and concise manner, alongside the exchange rates used in our analysis and the base year and forecast methodologies employed.

Chapter 2 – Market Conditions and Development

This section features an overview of market development including the economic impact of COVID-19 and outlines the roadmap and business case for implementing a smart airport strategy. It also explores various business models, barriers and limitations, while assessing the current regulatory situation and geographic variations between regions.

Chapter 3 – Technology Review

Concentrates on the technical aspects of the market. This section provides a comprehensive exploration of the different types of touchpoint solutions which impact the end-to-end passenger experience. This includes domains such as biometrics, mobile apps, pandemic-response options, queue management, wayfinding and baggage.



Chapter 4 – Market Statistics and Trends

This section quantifies the smart airports marketplace. It examines the drivers and inhibitors of new technology deployment while presenting in-depth discussion and detailed analysis of market trends and developments. Using 2019 and 2020 as a double base year, forecast projections are plotted out to 2030.

Chapter 5 – Industry Landscape and Competitive Environment

Examines the competitive environment of those vendors operating in the smart airport technologies market. Detailed profiles are provided for the key players with notable mergers and acquisitions discussed alongside new product developments, key partnerships, business models and strategies. Also included within this section is a focus on potentially significant new entrants to the market, and disrupting factors which may inhibit the development of passenger touchpoints.



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Purchase Benefits

Price = £5,000 + VAT

By purchasing this report, you will receive:

- The **PDF report** with 172 pages of qualitative and quantitative analysis
- An **Excel workbook** containing market estimates and forecasts
- Comprehensive market data totalling **198 tables and 26 charts**
- **Dedicated analyst time** with the report's authors to answer specific questions
- An invitation to an **exclusive summary webinar** with live Q&A
- A **subscription discount** on our upcoming smart airport touchpoint market tracker, providing regular updates on new installations
- An **unlimited seat license** permitting the report to be shared with users across the purchasing company or division. The only restriction is that it cannot be shared or used by anyone outside the operating entity.

Unparalleled depth

Based on extensive primary research with the leading providers of smart airport technologies and various others in the value chain, this report provides an unparalleled insight into the current and future development of the market. Valour Consultancy and P.A.ID Strategies conducted more than 40 one-to-one interviews with companies including:

- Access control vendors
- Airlines
- Airport IT suppliers
- Airport operators
- Biometrics and digital identity companies
- OEMs, vendors and system integrators
- Regulatory bodies
- Software developers
- Technology developers

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About Valour Consultancy

Valour Consultancy is a UK-based provider of market intelligence services. Founded in 2012, the company has grown rapidly and is renowned for its comprehensive and high-quality research and consultancy services.

Having firmly established itself in the aviation space, where many companies rely on its expert insight and analysis, Valour Consultancy has successfully expanded into a number of other markets including, maritime, industrial, drones, police and enterprise body-worn cameras, consumer electronics and more.

Why Choose Us?

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About P.A.ID Strategies

P.A.ID Strategies provides market intelligence and custom research to companies and organisations looking to better understand their environments and find a way to move forward in the face of disruptive technologies and competition.

Our research focus is on Payments, Authentication, Identity (P.A.ID) and the Security and Connectivity of people, devices, objects and transactions in an increasingly digitised and connected world. Experience includes analyst, consulting and marketing experience with leading vendors across digital identity, biometrics, smart cards, government ID credentials / eID, mobile, M2M and IoT, embedded security, platforms, services.