In preparation for International Airport Review’s Airport IT & Security conference – held in London on 25–26 September 2019 – we decided to investigate the IT and security sectors first hand. Gathering opinions from industry professionals from 80 airports worldwide we have identified the key security challenges airports are facing, and the trending IT technologies that are being invested in.

Collating the survey answers revealed some surprising statistics and supplied us with serious food for thought. They are below for your viewing and I hope you will join us in London in September to continue the discussions.
Responses came from all corners of the world:

United States of America
Mexico
Argentina

England, UK
Scotland, UK
Ireland, UK
France
Spain

Portugal
Germany
Denmark
Sweden
Czech Republic

Austria
Hungary
Turkey
Iran
Riyadh
Abu Dhabi
Bahrain

Albania
Austria
Portugal
Italy
Hungary
Denmark
Croatia
Austria

Ghana
Kenya
Ethiopia
Tanzania

Morocco
Nigeria
South Africa
Vanuatu

Hong Kong
Maldives
Malaysia
Indonesia

Northern & Southern America
Europe & Africa
Asia & Australasia (Oceania)

Main job functions of survey respondents:

- 23% Information Technology
- 22% Safety/Security
- 17% Other
- 11% Airside Operations
- 9% Terminal Operations
- 8% Sales/Marketing/BD
- 4% Consulting/Research
- 4% Infrastructure
- 1% Financial/Legal/HR
- 1% Purchasing/Procurement

Does your airport have separate budgets for new technologies in IT and security?

- 61% Separate budgets
- 39% Combined budgets
What key industry trends are you interested in?

<table>
<thead>
<tr>
<th>Trend</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyber-security</td>
<td>43%</td>
</tr>
<tr>
<td>Digitalisation</td>
<td>58%</td>
</tr>
<tr>
<td>Data processing</td>
<td>56%</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>51%</td>
</tr>
<tr>
<td>Digital identities</td>
<td>39%</td>
</tr>
<tr>
<td>Drones</td>
<td>31%</td>
</tr>
<tr>
<td>Landside security</td>
<td>43%</td>
</tr>
<tr>
<td>Incident management</td>
<td>42%</td>
</tr>
<tr>
<td>Automation</td>
<td>62%</td>
</tr>
</tbody>
</table>

Automation is driving the future.

Digitalisation, data processing and artificial intelligence are topics that currently can't be ignored within the aviation sector, especially considering their uses within the seamless travel concept. However, it is the trend of automation that has exceeded all, proving itself to be a must-talk-about trend.

What will be the main disruptors for the aviation/airport industry in the next 12 months?

**Artificial intelligence & digital identity**
In the forthcoming years, artificial intelligence and digital identities will take over the airport experience in the bid to create a seamless flow of passengers. Terminal infrastructure and operational procedures will no doubt be disrupted, but as a result, increased safety, satisfaction and sales are expected.

**Cyber-attacks**
The advent of digital technologies has provided airports with opportunities that could greatly improve operational efficiency. But reliance on technology brings its own risks, as the evolution of technology has played into the hacker’s hand too. Cyber-security itself must adapt and develop to be able to protect the airport’s digital systems from outside intruders.

**Time to process passengers**
Shortening queues and minimising the delays passengers have to face when moving through a terminal has become imperative to the reputation of an airport. Creating a seamless travel process will disrupt current operations, however, will enable airports to process more passengers in the same amount of time.

**Machine learning and prediction**
This technology is being implemented in many areas across airports, one of which is air traffic control. The use of machine learning and prediction tools will disrupt how the sky is managed, solving challenges from low visibility to stand management. The result? A genuine, digital airport, where people have access to information for decision making, improving safety, operational resilience and enhancing the passenger experience.

What are your biggest IT challenges?

- Cyber-security
- Lack of infrastructure development
- Integrating AI
- Attracting and retaining quality technical talent
- IT security
What is the estimated annual spend for new security technologies at your airport?

Security technologies

<table>
<thead>
<tr>
<th>Estimated annual spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5,000,000 and above</td>
</tr>
<tr>
<td>$2,000,000 - $5,000,000</td>
</tr>
<tr>
<td>$1,000,000 - $2,000,000</td>
</tr>
<tr>
<td>$500,000 - $1,000,000</td>
</tr>
<tr>
<td>Up to $500,000</td>
</tr>
</tbody>
</table>

Average spend: $238,095

On average this represents 16% of an airport’s total spend on new security technologies.

What are your biggest security challenges?

Smart security screening  Cyber-attack  Drone incursions  Equipment and automation

Within our survey we asked respondents to identify the biggest security challenges that were being faced in their airports today. These four above were frequently highlighted. Do you agree?

What is the estimated annual spend for new information technology at your airport?

IT technologies

<table>
<thead>
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</tr>
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</table>

Average spend: $294,118

On average this represents 14% of an airport’s total spend on new IT.
It does not come as a surprise that biometrics are at the top of the list regarding technologies airports are planning to invest in. Biometric technology continues to evolve, and airports continue to find new homes for it within their operations. How this develops further we look forward to witnessing – join our social media channels to stay up to date!

<table>
<thead>
<tr>
<th>Technology</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biometrics</td>
<td>60%</td>
</tr>
<tr>
<td>Data analytics</td>
<td>50%</td>
</tr>
<tr>
<td>Robotics &amp; automation</td>
<td>43%</td>
</tr>
<tr>
<td>AI</td>
<td>30%</td>
</tr>
<tr>
<td>Virtual/Augmented Reality</td>
<td>25%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
</tr>
<tr>
<td>Blockchain</td>
<td>3%</td>
</tr>
<tr>
<td>Cryptography</td>
<td>0%</td>
</tr>
</tbody>
</table>

Thank you to all the survey respondents for their time and for such interesting results from over 80 airports worldwide. The above analysis will help us to shape future content for International Airport Review.

This special industry survey infographic was supported by our annual Airport IT & Security Conference 2019, taking place in London on 25-26 September. Many of the insights and topics from the survey will be covered in greater depth at the conference.

Registration for the Airport IT & Security 2019 Conference is now open! Book your tickets securely on our website or call +44 (0)1959 563 311 ext. 2071
www.internationalairportreview.com/it-security