

# Airlines and Airports Digital Services 2019- 2020 RadarView™ – Report Excerpt

Pulling the digital lever in  
turbulent times

November 2019

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# Executive Summary

# Key recommendations for the Airline and Airport industry

Chart an aggressive investment plan to revitalize growth inorganically

- Invest in key growth markets, primarily the Asia-Pacific as well as ultra-low-cost and low-cost Airline segments.
- Global Airlines should explore consolidation opportunities with regional Airlines in form of stake investments, outright acquisitions, and mergers.

Proactively address brand risks through sustainability and customer data protection

- Evaluate re-fleeting and biofuels to achieve sustainability goals and enhance fuel efficiency.
- Develop and implement a comprehensive cybersecurity strategy to ensure customer data protection and compliance of regulations.

Aggressively harness the potential of digital and alternative operating models

- Aggressively embrace disruptive technologies such as Blockchain, Intelligent Automation, Artificial Intelligence, and IoT in established and emerging use cases across the value chain.
- Deepen outcome-based strategic partnerships with service providers to implement next-generation technologies to realize digital maturity and drive business transformation.

Reimagine customer experience by tapping into underutilized data

- Aim to become the airline of choice by using data and analytics disruptively to develop industry-leading customer experience across the twin pillars of convenience and personalization.
- Mine data assets and leverage predictive analytics/AI to unlock new growth opportunities centered on customer convenience and value-added services.

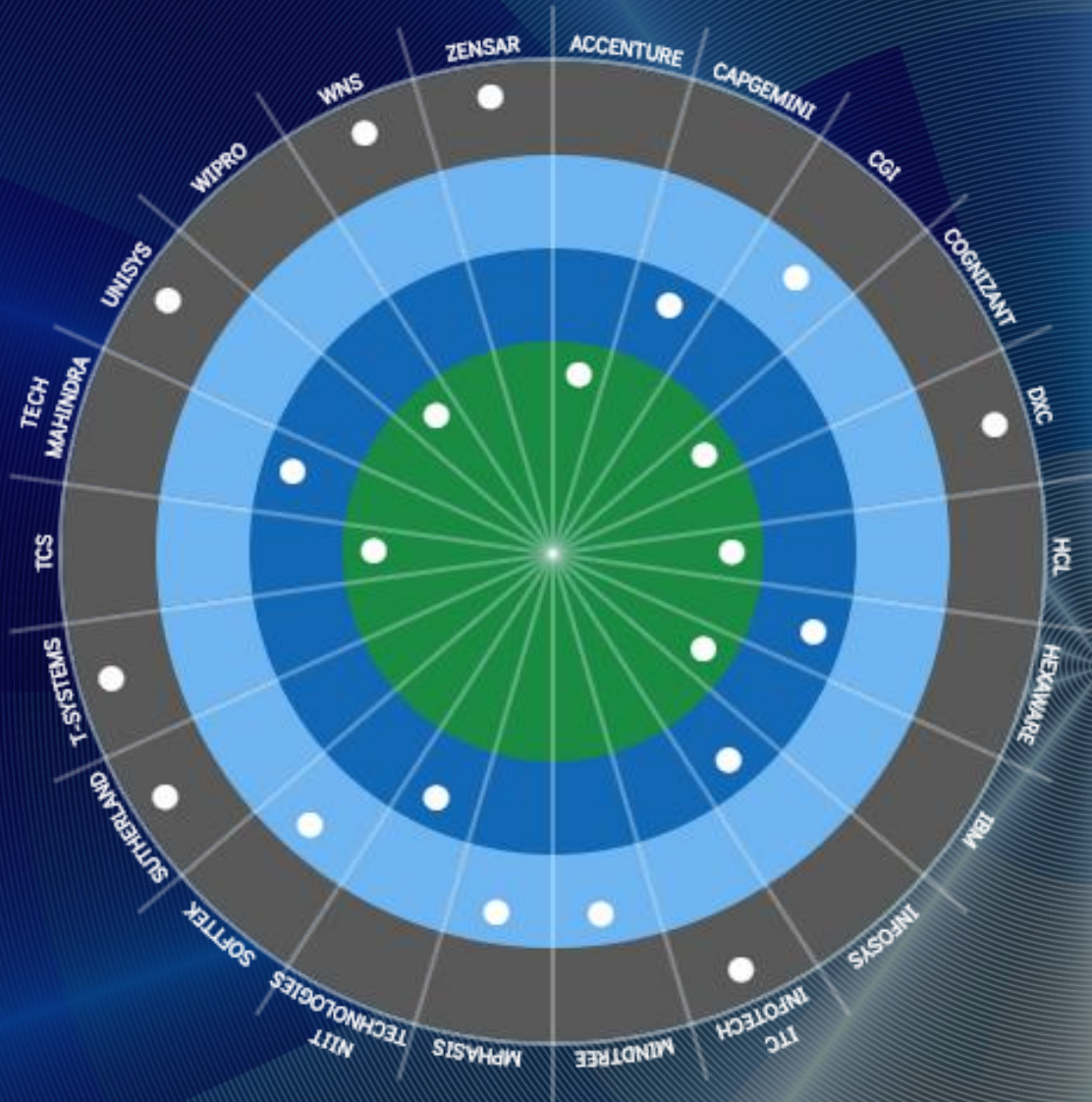
Embrace an ecosystem approach to realize innovative solutions

- Develop talent-centric alliances with other airlines to address the shortage of pilots and technicians.
- Augment partnerships to integrate and manage data assets and maximize cross-leverage opportunities from data owned by Airlines, Airports, intermediaries, and governments.

Innovate emerging tech-driven ancillary services to build new growth avenues

- Introduce emerging tech-led ancillary services rapidly to build supplemental revenue streams.
- Embrace New Distribution Capability (NDC) and develop partnerships with intermediaries to transform the way air products are retailed and increase profitability.

# Avasant has recognized 22 top-tier providers supporting Airlines and Airports in digital transformation



## LEADERS

Accenture	Cognizant
HCL	IBM
TCS	Wipro

## INNOVATORS

Capgemini	Hexaware
Infosys	NIIT Technologies
Tech Mahindra	

## DISRUPTORS

CGI	Mindtree
Mphasis	Softek

## CHALLENGERS

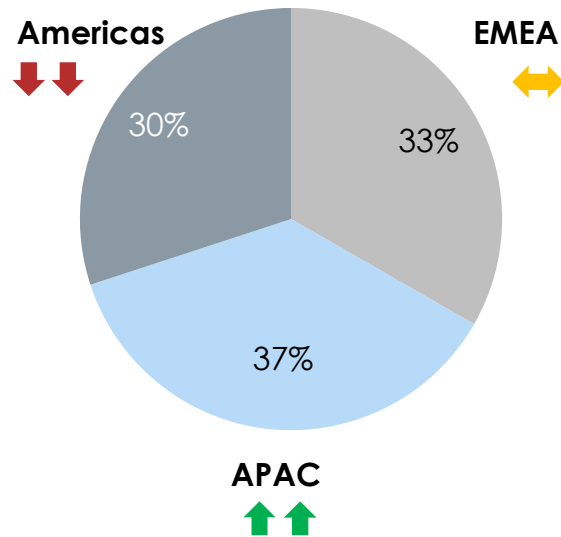
DXC	ITC Infotech
Sutherland	T-Systems
Unisys	WNS
Zensar	



# Sample Report Pages

# Asia-Pacific domestic market and Low-Cost Carrier segments experiencing the highest growth

APAC already has the highest share of airline traffic



Growth segments are APAC Domestic and Low-Cost Carriers (LCC)

Illustrative investments by global Airlines into the APAC domestic opportunity	
<p><b>~2X</b></p> <p>APAC domestic market grew 10.4% vs North America domestic market at 5.4% in 2018</p>	<p><b>DELTA</b></p> <ul style="list-style-type: none"> <li>Has a joint venture with Hanjin-KAL, the largest stakeholder of Korean Air</li> <li>Increased its stake in the JV to 9.21% in September 2019 and plans to increase it to 10%</li> </ul>
<p><b>American Airlines</b></p>	<ul style="list-style-type: none"> <li>Invested USD 200M for a 2.76% stake in China Southern Airlines in 2017</li> <li>Launched a combined frequent flier partnership in March 2019</li> </ul>
<p><b>QATAR AIRWAYS</b></p>	<ul style="list-style-type: none"> <li>Acquired a 5% stake in China Southern Airlines in January 2019, in addition to its existing 10% stake in Cathay Pacific</li> <li>Both of them are prominent players in the Greater China region</li> </ul>
Illustrative investments by global Airlines into the Low-Cost travel segment	
<p><b>31%</b></p> <p>of the world's total scheduled passengers traveled by LCCs in 2018</p>	<p><b>LEVEL</b></p> <ul style="list-style-type: none"> <li>International Airlines Group (IAG) launched Level, their LCC in March 2017 with operations commencing in June 2017</li> <li>Started short-haul routes in 2018; doubled its traffic by 2019</li> </ul>
<p><b>ANA</b></p>	<ul style="list-style-type: none"> <li>All-Nippon Airlines increased its stake in Peach Aviation in 2017, from ~39% to 67%, to gain a foothold in the LCC market</li> <li>Began a merger of its LCC brands (Vanilla Air and Peach) in 2018</li> </ul>
<p><b>JAL</b></p>	<ul style="list-style-type: none"> <li>Announced the launch of its LCC airline ZIPAIR and will start of operations in 2020</li> <li>Expected to invest JPY 10-20B on this new LCC business</li> </ul>

Multi-million dollar investments by American and Middle Eastern Airlines in APAC-centric LCC Airlines to happen in the next three years, owing to the projected YoY market growth of over 10%.

# Cybersecurity investments continue to rise as it remains one of the biggest concerns for Airlines and Airports



**59%**  
YoY rise in cybersecurity spend by Airlines reaching USD 2.8B in 2018

**40%**  
YoY rise in cybersecurity spend by Airports reaching USD 1.2B in 2018

## A spate of data breaches have occurred in recent years

	<ul style="list-style-type: none"> <li>In August-September 2018, the airline suffered a 15-day cyber attack compromising data of 380K customers, which included transaction and bank card details and had to pay USD 229M in fines.</li> </ul>
	<ul style="list-style-type: none"> <li>In October 2018, it suffered a major data leak compromising up to 9.4M passengers' personal information: passport numbers, identity card numbers, email addresses, and credit card details.</li> </ul>
	<ul style="list-style-type: none"> <li>In March 2018, a ransomware attack led to precautionary shutdown of the airport Wi-Fi until April 2, causing cancellation of flights and passenger delays.</li> </ul>
	<ul style="list-style-type: none"> <li>In April 2019, the airport suffered a ransomware attack, disrupting the flight information and baggage display, and email systems.</li> </ul>

## Illustrative Airlines and Airports whose prime focus area is cybersecurity

	<ul style="list-style-type: none"> <li>Delta Airlines' CEO Ed Bastian revealed that cybersecurity is the most concerning aspect for the airline, and they will continue focusing on it to avoid any future breaches.</li> </ul>
	<ul style="list-style-type: none"> <li>Cathay Pacific to overhaul systems containing customers personal data, hire an independent IT security expert to ensure conformance, and to continue investing to evolve cybersecurity.</li> </ul>
	<ul style="list-style-type: none"> <li>In July 2018, Malaysia's Airport Holding Bhd (MAHB) announced it will invest up to USD 24M in 5 years to introduce Airport 4.0 which will be focusing on cyber/information security and digital transformation.</li> </ul>
	<ul style="list-style-type: none"> <li>Since the malware attack in April, the airport has spent around USD 2M on upgrading computer systems.</li> </ul>

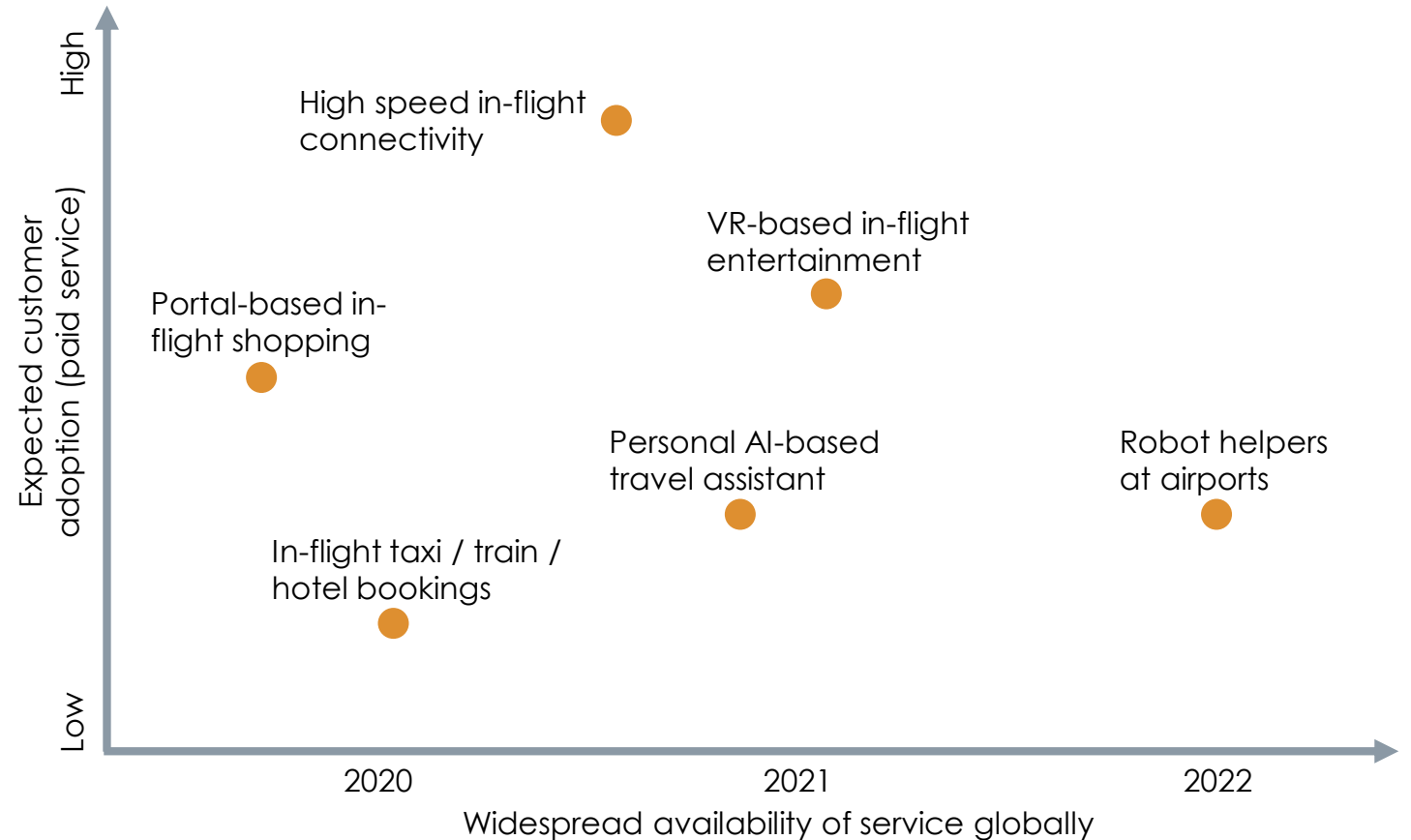
Global spend on cybersecurity to continue growing over 30% Y-o-Y owing to increased focus of Airlines and Airports for data security compliance by strengthening cybersecurity

# Introduce emerging tech-led ancillary services rapidly to build supplemental revenue streams

Travel retail has been the largest ancillary opportunity for Airlines and Airports

However, a new breed of ancillary services will leverage emerging digital technologies

**~USD 60B**  
 Airport and Airline travel retail in 2018;  
 YoY growth over 10% in the last 12 months



Emerging tech-led ancillary services, led by high speed in-flight connectivity, will grow significantly in the next 3 years and contribute over 10% to overall ancillary revenues.

Note: Travel retail revenue includes sales in duty-free airport shops, international flights, international cruises, duty-free downtown and border shops

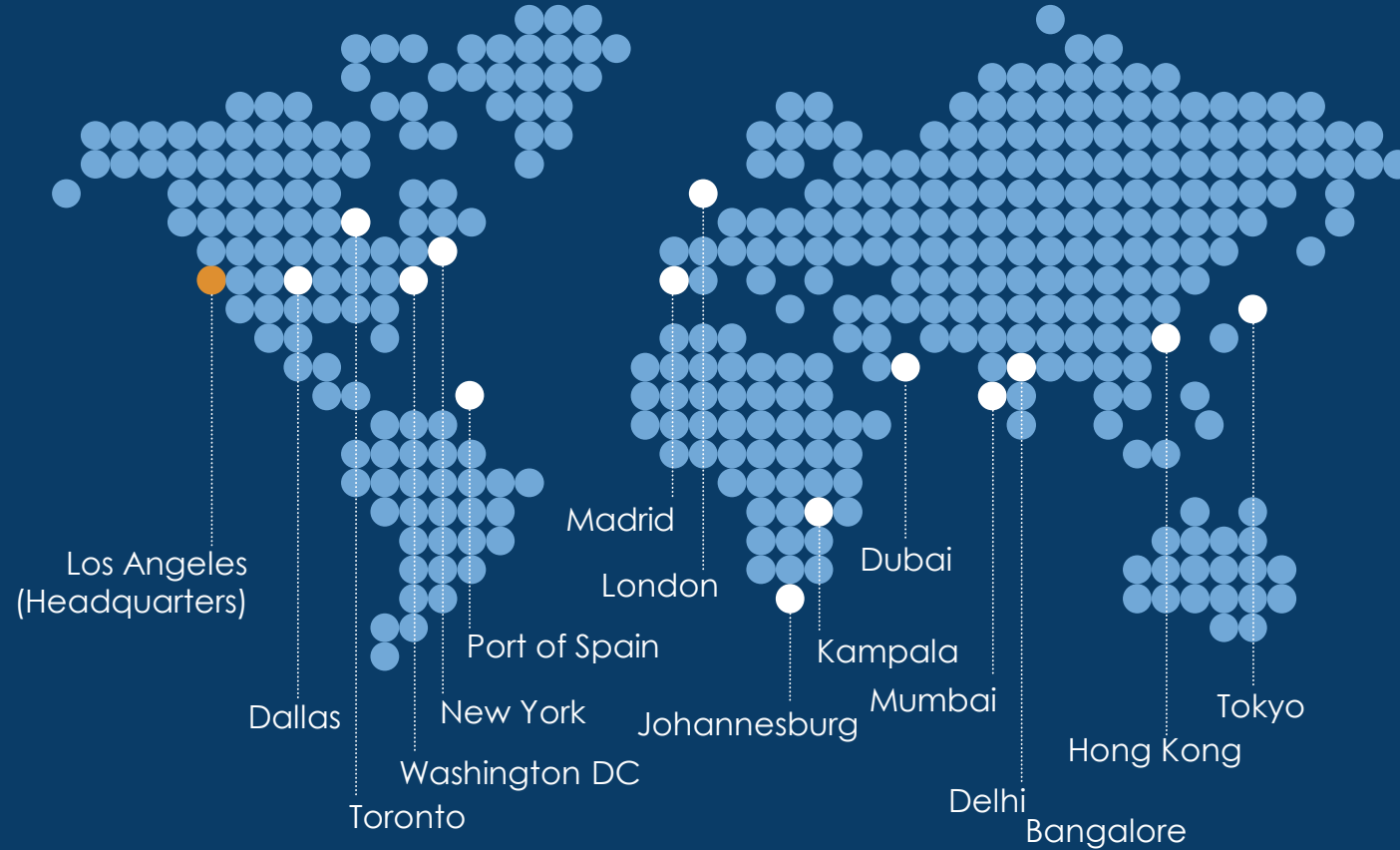
Source: Avasant Research, Duty Free World Council, Airports Council International

# Key areas where progressive Airlines and Airports have taken initiatives to gain competitive advantage

Illustrative; not exhaustive



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