Airlines and Airports Digital Services 2024 RadarView

Employing AI and intelligent automation to enhance customer experience
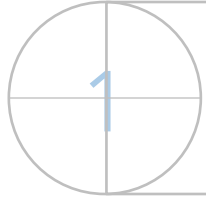
February 2024

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# About the Airlines and Airports Digital Services 2024 RadarView

1 Service providers are driving digital transformation for airline and airport (A&A) enterprises to help them improve profit margins, enhance customer experience using automation, and modernize their legacy IT infrastructure. They are also developing tailored generative AI solutions to improve their operational efficiency.
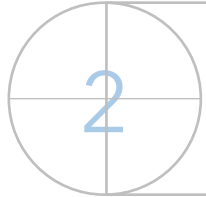
2 Avasant evaluated 39 service providers using a rigorous methodology across the key dimensions of practice maturity, investments and innovation, and partner ecosystem in the airline and airport industry. Our analysis revealed 22 providers that brought the most value to the market over the past 12 months.
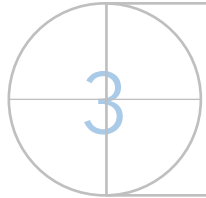
3 The *Airlines and Airports Digital Services 2024 RadarView* aims to provide an in-depth capability assessment of the leading service providers offering services to the airline and airport industry. Based on our methodology, we have categorized the service providers into four broad segments: leaders, innovators, disruptors, and challengers.
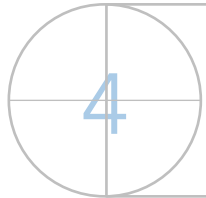
4 To enable decision-making for enterprises, Avasant has provided an overview of the major service providers in the industry. This includes details of their practice size, key IP assets/solutions, partnerships, sample clients, subindustries focus, and case studies. This is supported by an analyst's take on the providers across the three key dimensions mentioned in the second point.

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Defining airline and airport digital services scope

The report's scope focuses on digital services delivered to enterprise customers across the below-listed industry segments.

| Sub-industries	Description	Enterprise examples
Airlines	▪ The airline industry includes airlines that transport passengers both domestically and internationally. It encompasses passenger-related services across all phases of a flight. It also includes on-ground service and fleet management for day-to-day operations.	UNITED, QATAR AIRWAYS, SWISS, JAL JAPAN AIR LINES, Emirates, AIR CANADA, Lufthansa
Airports	▪ The airport industry includes businesses that operate international, national, or civil airports. ▪ It includes aeronautical and non-aeronautical operation and maintenance of airports and runways, air traffic control, aircraft refueling, taxi, parking, hanger space rental, baggage, and cargo handling services businesses.	CHANGI airport group, Heathrow, DUBAIRPORTS مطارات دبي, LAX, DELHI INDIRA GANDHI INTERNATIONAL AIRPORT, daxing PKX airport

Digital services definition: Digital services accelerate digital transformation using emerging technologies, including AI and analytics, blockchain, cloud, cybersecurity, intelligent automation, IoT, AR/VR, and omniverse/metaverse across the airlines and airports value chain. The offerings of service providers assessed in this study are advisory and consulting, proof of concept development, build and test, implementation, system integration, and development and maintenance.

We will assess the offerings of service providers across the below value chain components.

Pre-travel customer experience → Post-travel customer experience → Airline operations → Airport operations → Property operations → Marketing & sales → On-ground service operations

Avasant recognizes 22 top-tier service providers supporting the airline and airport industry in digital transformation
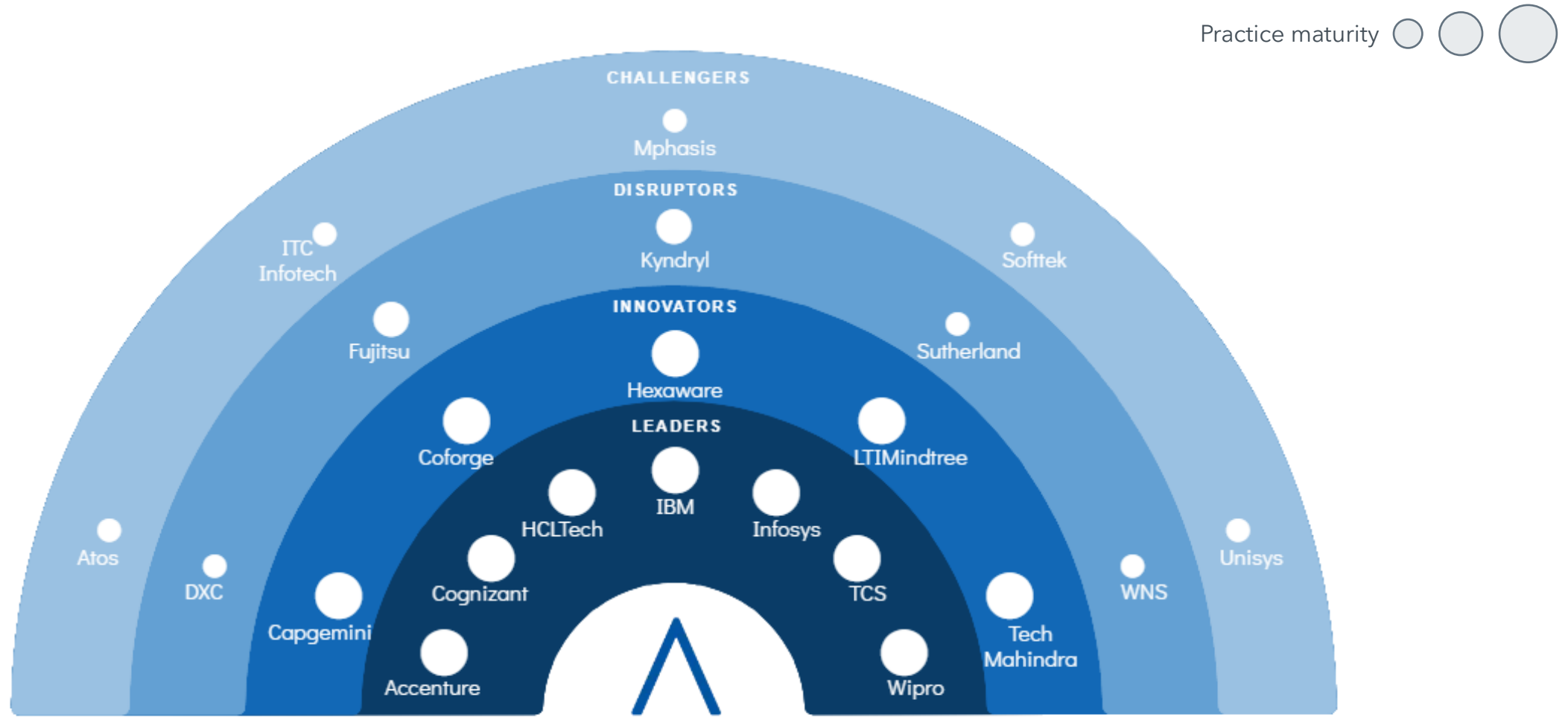
Practice maturity ○ ○ ○

Note: Please refer to Avasant's *Airlines and Airports Digital Services 2024 Market Insights* for a detailed analysis of the enterprises and demand-side trends.

Provider comparison (1/3)

Service provider	Practice maturity	Investments and innovation	Partner ecosystem	Key highlights
accenture	★★★★★	★★★★★	★★★★★	Offers end-to-end tailored solutions for airline and airport clients. Focuses on enhancing digital capabilities by leveraging its CoEs and innovation centers.
Atos	★★★	★★★	★★	Focuses on enhancing operational efficiency and customer experience by leveraging digital technologies such as cloud and automation.
Capgemini	★★★★★	★★★★	★★★★	Delivers end-to-end solutions for critical projects. Focuses on upskilling employees to develop expertise in generative AI.
Coforge	★★★★★	★★★★	★★★★	Delivers solutions leveraging AR/VR and generative AI technology to support its clients across the industry value chain.
cognizant	★★★★★	★★★★★	★★★★★	Possesses a strong digital portfolio of industry-specific solutions. Focuses on strengthening its AI-based capabilities.
DXC TECHNOLOGY	★★★	★★★	★★★	Focuses on leveraging AI and auto-bots to enhance the customer experience. Offers a wide range of solutions under its sustainability practice.
FUJITSU	★★★★	★★★	★★★	Leverages emerging technologies to enhance passenger experience and operational efficiency for clients. Focuses on sustainability services for airline and airport clients.
HCLTech	★★★★★	★★★★★	★★★★★	Focuses on delivering end-to-end, next-generation solutions for the entire value chain of the airline and airport industry. Has a strong technology collaboration ecosystem.

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Provider comparison (2/3)

Service provider	Practice maturity	Investments and innovation	Partner ecosystem	Key highlights
HEXAWARE	★★★★★	★★★★	★★★★	Focuses on legacy modernization, cost optimization, and customer experience enhancement for clients by leveraging in-house and partner solutions.
IBM	★★★★★	★★★★★	★★★★★	Delivers customer delight to its clients by adopting the IBM Garage methodology. Focuses on developing generative AI use cases for the airline and airport industry.
Infosys	★★★★★	★★★★★	★★★★	Delivers a next-generation tailored solution leveraging emerging technologies such as generative AI and the metaverse.
ITC INFOTECH Business-friendly Solutions	★★★	★★	★★	Offers bundled solutions for the digital transformation of airline and airport clients. Focuses on training the workforce on emerging technologies.
kyndryl	★★★★	★★★	★★★	Has a strong partner ecosystem of hyperscalers, with more focus on leveraging digital capabilities to develop travel solutions.
LTIMindtree	★★★★★	★★★★	★★★★	Accelerates modernization with its strong portfolio of AI-based offerings and by leveraging its industry-specific partner ecosystem.
Mphasis The Next Applied	★★★	★★	★★	Demonstrates strong expertise in AI and analytics to deliver bundled solutions for process transformation for airline and airport clients.
Softtek	★★★	★★	★★	Adopts a comprehensive delivery model to drive digital transformation for industry-specific clients. Focuses on driving digital transformation by leveraging partnerships.

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Provider comparison (3/3)

Service provider	Practice maturity	Investments and innovation	Partner ecosystem	Key highlights
SUTHERLAND	★★★	★★★	★★★	Demonstrates deep domain expertise in delivering automated finance and accounting solutions. Leverages Sentinel AI to deliver intelligent digital solutions.
tcs TATA CONSULTANCY SERVICES	★★★★★	★★★★★	★★★★★	Has expertise in developing AI solutions to deliver value for internal and external clients in the airline and airport industry.
TECH mahindra	★★★★★	★★★★	★★★★	Offers a broad product portfolio that leverages intelligent automation and AI. Focuses on driving green digital transformation for airline and airport clients.
UNISYS	★★★	★★★	★★	Possesses a strong capability in delivering workplace transformation projects. Focuses on building AI-based industry-specific offerings.
wipro	★★★★★	★★★★★	★★★★★	Offers bundled services leveraging AI and analytics. Focuses on expanding its services across new geographic regions.
WNS	★★★	★★★	★★★	Leverages industry-specific portfolio of solutions to drive digital transformation engagement for clients. Focuses on building analytics-based solutions.

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Supply-side trends

Service providers are accelerating technology adoption within the A&A industry to enhance passenger experience (1/2)

Service providers are leveraging emerging technologies to enhance the customer experience by reducing operational delays and enhancing productivity by using automation. They are also optimizing central business processes, upskilling the workforce using immersive technology, and embracing ESG to achieve sustainable goals. Notable trends and insights from the capability analysis of 22 service providers are shared below.

Enterprise focus	Service provider initiatives	Examples*
Enhancing customer experience by reducing delays due to adverse weather	• **Nearly three-fourths** of the service providers are upskilling their employees in emerging technologies, especially AI, by assisting them with broad training courses to enhance their value contribution in developing AI solutions for airline and airport clients. • **Around 36%** of service providers utilize AI and analytics to scrutinize historical data, enabling airline clients to predict weather conditions, mitigate the risk of flight delays, and enhance safety measures for airline and airport clients. • **Approximately 76%** of service providers utilize AI to develop solutions that address various operational challenges, including flight delays and capacity planning, within the airline and airport industry to streamline and optimize business processes in the sector.	tcs TATA CONSULTANCY SERVICES, IBM, wipro, Tech Mahindra, cognizant
Leveraging intelligent automation for carrying out mundane and repetitive tasks to free up staff bandwidth	• **Around 86%** of service providers are actively using intelligent automation to revamp legacy IT applications by equipping them with advanced automation capabilities and improving employee productivity. • **More than 80%** of the service providers are leveraging intelligent automation to enhance the customer experience at the airport by providing automation capabilities such as self-check-in kiosks, automated baggage handling systems, automated boarding gates, and automated passport control. • **Nearly one-fifth** of the service providers are grooming their resource pool in intelligent automation to deliver innovative solutions for airline and airport clients, freeing employees from mundane tasks for more creative work.	Infosys, accenture, LTIMindtree, HEXAWARE, HCLTech

*Logos used in this column are examples of service providers offering the initiatives. This is not an exhaustive list.

Sources: Avasant Research; percentages are based on capability discussions and public sources for 22 service providers on specific solutions/offerings/IPs in the airline and airport space.

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Service providers are accelerating technology adoption within the A&A industry to enhance passenger experience (2/2)

Service providers are leveraging emerging technologies to enhance the customer experience by reducing operational delays and enhancing productivity by using automation. They are also optimizing central business processes, upskilling the workforce using immersive technology, and embracing ESG to achieve sustainable goals. Notable trends and insights from the capability analysis of 22 service providers are shared below.

Enterprise focus	Service provider initiatives	Examples*
Optimizing central business processes by modernizing applications and leveraging cloud	• **Almost all** service providers offer cloud migration services, such as infrastructure, application, and data migration, to airline and airport clients, ensuring security enhancement and optimizing overall cost. • **Around 95%** of the service providers offer application modernization services, such as mainframe modernization, microservices API, application assessment and planning, and UI/UX modernization leveraging cloud-based applications, to airline and airport clients.	unisys Capgemini WNS ITC INFOTECH Business-friendly Solutions
Upskilling workforce by leveraging AR/VR/XR technology	• **Over half** of the service providers utilize immersive technologies to create tailored solutions for airline and airport clients. • **Around 55%** of the service providers are developing AR/VR/XR solutions to help airline and airport clients train their employees, including cabin crew, pilots, and ground handling professionals, by providing training such as virtual cabin crew training, flight deck training, flight simulations, and virtual maintenance procedures.	DXC TECHNOLOGY wipro LTIMindtree Mphasis The Next Applied
Embracing ESG to address customers' preference for eco-friendly firms and complying with regulatory requirements	• **Nearly 64%** of the service providers are developing smart carbon emission reporting solutions to integrate data silos and explore new opportunities to embed ESG practice. • **Almost half** of the service providers collaborate with airline and airport clients to develop data-driven strategies and road maps to build sustainable business models. • **Over one-third** of the service providers are offering green data center solutions to airline and airport clients to help optimize energy consumption and achieve ESG goals.	HCLTech Atos FUJITSU Softtek®

*Logos used in this column are examples of service providers offering the initiatives. This is not an exhaustive list.

Sources: Avasant Research; percentages are based on capability discussions and public sources of 22 service providers on specific solutions/offerings/IPs in the airline and airport space.

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Accenture: RadarView profile

accenture

AVASANT RADARVIEW™

LEADER

Airlines and Airports Digital Services 2024

Practice maturity ★★★★★

Investments & innovation ★★★★★

Partner ecosystem ★★★★★

Offers end-to-end tailored solutions for airline and airport clients. Focuses on enhancing digital capabilities by leveraging its CoEs and innovation centers.

Practice overview

- Practice size: NA
- Active clients: N/A
- Delivery highlights: 50+ delivery centers

~$64.1 B	8%
Organizational revenue, FY 2023	YOY growth in organizational revenue, FY 2023

Industry-specific solutions/offerings

Net New Revenue Platform	A platform solution for travel companies to engage with customers by using a marketplace
DIVA solution	A digital factory-like solution to create and launch digital products and services for airport clients
World ID	A solution that enables pre-travel health assessment of the passenger and facilitates safe travel
Intelligent Operations solution	A portfolio of solutions to transform business functions across all departments of the enterprise

Sample clients

- A Saudi Arabia-based airline
- A US-based airline
- Avianca Airlines
- Changi Airport
- Etihad Airways
- Japan Airlines
- Philippines Airlines
- Riyadh Air
- Singapore Airline
- Transavia

Partnerships/alliances

aMaDEUS	Collaborated to deliver integrated solutions for A&A clients	**AUTOMATION ANYWHERE**	Codeveloped RPA solutions to enable business process automation for clients
SITECORE	Partnered to help transform digital experience across content and commerce for airline clients	**aws**	Leveraged its cloud platforms to develop cloud-native solutions for the A&A clients
Adobe	Leveraged its commerce and analytics platforms to streamline operations for airport clients	**Hewlett Packard Enterprise**	Collaborated to deliver automation and hybrid cloud solutions for A&A clients
salesforce	Collaborated to deploy generative AI solutions for airport CRM by using the Einstein GPT platform	**ORACLE**	Partnered to deliver integrated solutions to accelerate the digital transformation of airline clients

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ○ ○ ○ ●

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Accenture: RadarView profile

Case studies

Client	Capability	Summary	Business impact
JAL JAPAN AIRLINES	• AI and analytics	• The client wanted to enhance the passenger travel experience by speeding up the check-in process and reducing the wait times at the airport • Accenture utilized AI capabilities to develop a service to answer passenger requests at the check-in counters. The service leveraged AI-enabled voice recognition to identify and interpret these queries.	• Enhanced customer experience • Improved employee productivity
Philippine Airlines	• AI and analytics	• The client needed to develop a personalized digital campaign and integrated digital experience, highlighting its Filipino values, customer-centricity, and overall hospitality. • Accenture leveraged the Sitecore content management platform to deliver an integrated system for online booking, travel promotion, and loyalty programs. It also helped the client in personalizing its digital campaign.	• Enhanced customer experience • Increased page views by 132%
A US-based airline	• AI and analytics • Cloud	• The client faced challenges with its interactive voice recognition systems that handled calls for functions such as baggage claims, crew scheduling, and employee support and wanted to replace it with an Amazon Connect solution. • Accenture helped the client migrate seven contact centers to the Amazon Connect solution. It ran on AWS, aligned with the airline's cloud-first strategy, and had access to native cloud features such as AI/ML and analytics.	• Improved operational efficiency • Decreased system downtimes
CHANGI airport group	• Metaverse	• The client wanted to enhance the airport's customer experience and offer an immersive experience by developing ChangiVerse, a metaverse of the Changi Airport. • Accenture helped the client create a digital environment, ChangiVerse, replicating the real-world airport experience. It included activities such as go-kart racing and Jurassic Mile Cycling, allowing customers to earn tokens for virtual goods and interact with non-playable characters.	• Enhanced customer experience • Increased customer visits by over 7M

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Accenture: RadarView profile

Analyst insights

Practice maturity ★★★★★

- Accenture has a strong portfolio of A&A clients, including Etihad Airlines, Changi Airport, Avianca Airlines, Japan Airlines, Transavia, and Philippine Airlines, with demonstrated expertise in emerging technologies such as cloud, AI/ML, and metaverse. For instance, it helped Avianca Airlines develop a chatbot to address customer grievances for enhanced customer experience. It also developed the Accenture Aviation Experience Accelerator (AAEA) for Transavia to reduce costs and improve on-time performance, leveraging analytics, automation, and cloud.
- It has broadened its offerings for the A&A industry by developing solutions in collaboration with Amadeus at its Dublin alliance innovation center. The new solutions focus on advanced merchandising for better conversion, optimizing revenue streams, and improving flight operation prediction.
- With sustainability being at the core of improving the ESG footprint of a business, Accenture offers a wide array of services such as developing a sustainability strategy, net-zero transitions solutions to reduce carbon emission, embedding sustainable value chains, and sustainable technology offerings. Additionally, to strengthen its ESG practice, it has invested in pulsESG to aid its capability of catering to the A&A industry.

Investments and innovation ★★★★★

- Accenture has acquired multiple cybersecurity and platform engineering companies to aid A&A clients in these areas. For example, in November 2023, it acquired Innotec Security to broaden its cyber security offerings, and in October 2023, it acquired MNEMO to deliver digital solutions. Also, in June 2023, it acquired Nextira, and in May 2023, it acquired Objectivity to enable A&A clients to leverage cloud capabilities in modernizing IT applications.
- It has invested heavily in AI to offer generative AI and prebuilt AI model solutions to help A&A clients leverage the advanced usage of AI platforms. For example, in September 2023, it invested in Writer to help enterprises leverage AI solutions across business functions such as HR, sales, and product.
- In September 2022, it established CoEs at IIT Madras for collaborative research projects and intellectual property development to enhance its AI capabilities.

Partner ecosystem ★★★★★

- Accenture has partnered with cloud companies to leverage its platform to deliver cloud data migration projects and codevelop solutions for A&A clients. For example, AWS and Google provide a platform to codevelop solutions leveraging cloud-native applications. Additionally, HPE offers automation solutions such as passenger service systems and baggage tracking.
- It has a broad portfolio of technology partnerships for A&A clients. For example, it leverages Amadeus's digital capabilities to codevelop solutions for airline retailing. It utilizes the Adobe Commerce platform for managing the content supply chain to offer customer experience on the website and the Sitecore commerce platform to deliver integrated solutions for passenger online booking, loyalty programs, and travel promotion.

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Atos: RadarView profile

Atos

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CHALLENGER

Airlines and Airports Digital Services 2024

Practice maturity ★★★

Investments & innovation ★★★

Partner ecosystem ★★

Focuses on enhancing operational efficiency and customer experience by leveraging digital technologies such as cloud and automation.

Practice overview

- Practice size: N/A
- Active clients: N/A
- Delivery highlights: Operates across 69 countries; has 10+ R&D centers across the globe

€5,548M	€212M
Revenue in H1 2023	Operating margin in H1 2023

Industry-specific solutions/offerings

Atos Computer Vision Platform	A portfolio of over 150 prebuilt AI models offering custom reporting and real-time alerts
Integrated solutions for railways and airports	An LTE and 5G-based private, secure radio network offering of field applications
Atos OneCloud	A solution providing hybrid and multicloud capabilities via on-prem, private and public cloud models
Ticketing and payments solution	A solution to enable automated fare collection and ticketing integration to enhance passenger engagement

Sample clients

- A Europe-based airline
- AENA
- Air France-KLM
- Airports of Thailand Public Company Limited (AOT)
- Hamad International Airport

Partnerships/alliances

aws	Collaborated to leverage its cloud offerings for application modernization for A&A clients	salesforce	Partnered to provide capabilities in CRM, customer service, and cloud platform solutions to A&A clients
Google Cloud	Codeveloped hybrid cloud, machine learning, and AI solutions for A&A clients	SAP	Collaborated to provide joint solutions for S/4HANA business transformation and sustainability
Microsoft	Partnered to leverage its data, AI, modern work, and security offerings for A&A clients	servicenow	Leveraged its cloud-based platform and solutions to deliver digital workflows for A&A clients
IBM	Codeveloped hybrid cloud, AI, and IoT solutions for A&A clients	Hitachi Vantara	Partnered to offer SAP HANA on-premises as a managed service to A&A clients

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ●●●●

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Atos: RadarView profile

Case studies

Client	Capability	Summary	Business impact
Hamad International Airport QATAR	• Cloud	• The client wanted to enhance the passenger experience and ensure that information related to flights, airport services, and retail outlets was easily accessible. • Atos set up Passenger Digital Assistance Kiosks to provide passengers with easy access to information. The kiosks also offer a provision to help passengers make live video calls to the customer service team. Atos' solution helped manage the passenger flow more efficiently during peak hours.	• Enhanced passenger experience
AIRFRANCE KLM GROUP	• AI and analytics	• The client wanted to leverage its huge data siloed across 12 business units in a more effective manner to obtain insights and enhance customer experience. • Atos leveraged its data-as-a-service offering to provide a single point of access to the client's entire data to enable real-time access to insights. This enabled the client to leverage the data to predict passenger behavior for several use cases, including optimization of luggage delivery and fleet management.	• Improved passenger experience • Increased operational efficiency
A Europe-based airline	• Intelligent automation	• The client had developed its customer care and loyalty application using legacy technology, which did not have the flexibility to swiftly implement changes in business processes. • Atos created a new application for the client and leveraged automation to expedite processes such as resolving customer care requests. It launched the application at 17 customer care centers, providing access to 4,000 agents.	• Reduced claim handling time by 15% • Enhanced customer experience
aena	• AI and analytics • IoT	• The client wanted to leverage biometric recognition systems for passenger boarding and providing access to restricted areas. • Atos leveraged emerging technologies, including video and AI, big data and data analytics, and IoT, to enable the development of new applications for managing airport operations more effectively.	• Increased operational efficiency

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Atos: RadarView profile

Analyst insights

Practice maturity	★★★

- Atos focuses on the European airlines and airport industry through its subsidiaries. In 2023, it launched a subsidiary, Eviden. While the subsidiary focuses on digital transformation, big data, and cybersecurity, Atos oversees the computing infrastructure business.
- Cloud is a big focus area for Atos, and it has a multitude of offerings to enable clients from various industries, including A&A, to migrate to the cloud. It leverages its OneCloud offering to provide capabilities in multicloud orchestration, private cloud, sovereign cloud, and cloud application modernization. In 2023, it codeveloped an offering, ElevateNow, to aid clients in migrating on-premises applications to the SAP S/4HANA cloud.
- Stringent regulatory requirements compel enterprises from different industries to focus more on sustainability. Atos has responded well to this enterprise demand and developed several ESG offerings. For instance, in 2023, it launched a new device life cycle management offering and provided clients with laptop replacement options that generate low carbon emissions.

Investments and innovation	★★★

- Atos has a considerable focus on innovation, as evidenced by its €235M annual R&D spend and 3,000 patents. It also runs a network of global business technology and innovation centers located in Paris, London, Madrid, Munich, Vienna, Amsterdam, and Chennai to develop solutions and POCs for enterprises from multiple industries, including the A&A industry.
- To strengthen its expertise in the cloud, Atos acquired Cloudreach in 2022. This provided Atos with capabilities in public application development and cloud migration and enhanced its OneCloud practice.

Partner ecosystem	★★

- Atos has partnered with several cloud platform providers as part of its OneCloud initiative to enable cloud migration services for clients from different industries, including the A&A industry. For instance, it collaborates with AWS, Microsoft Azure, Google Cloud, Dell, IBM, and VMware to provide capabilities such as cloud application development and modernization to its clients.
- To further enhance its partner network, Atos has developed joint solutions with SAP, focusing on sustainability. It also collaborates with ServiceNow to provide HR, customer service, and employee support capabilities to A&A enterprises.

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Capgemini: RadarView profile

Avasant RadarView INNOVATOR — Airlines and Airports Digital Services 2024

Practice maturity ★★★★★

Investments & innovation ★★★★

Partner ecosystem ★★★★

Delivers end-to-end solutions for critical projects. Focuses on upskilling employees to develop expertise in generative AI.

Practice overview

- Practice size: N/A
- Active clients: N/A
- Delivery highlights: 120+ delivery centers in more than 50 countries

7.9%	$2B
YOY revenue growth in H1, FY 2023	Planned investment in AI from FY 2023 to FY 2026

Industry-specific solutions/offerings

CapAir	An integrated SAP solution for airport financial management that ensures accountability
Testing for Airlines	A testing system to effectively manage and minimize the risk of system failure in aircraft
Business Information Management (BIM)	A portfolio of offerings that includes accounting, network, and data management solutions
Next generation MRO solution	A solution for providing end-to-end maintenance, repair, and overhaul services for aircraft

Sample clients

- A UK-based airline
- A UK-based airport
- An Italy-based airline
- Air France-KLM Group
- Cathay Pacific
- Heathrow Airports Holdings Limited
- Lufthansa
- Paris Airport
- Singapore Airlines

Partnerships/alliances

salesforce	Codeveloped solutions to address passenger travel grievances leveraging Gen AI	PEGA	Leveraged its Pega Infinity '23 product portfolio to enhance the customer experience
aws	Leveraged its cloud platform to develop solutions for A&A clients using native tools	Microsoft	Utilized the Azure platform to deliver cloud migration projects for A&A clients
MuleSoft	Delivered joint solutions for on-premises and hybrid integration platforms for airport clients	SAP	Used the SAP platform to modernize IT applications for A&A clients
IBM	Utilized its analytics platform to help A&A clients enhance business processes	ORACLE	Partnered to leverage its ERP solution to streamline business operation for airline clients

Darker color indicates higher industry concentration: ●●●●

Service line coverage

| Pre-travel customer experience |
| Post-travel customer experience |
| Airline operations |
| Airport operations |
| Property operations |
| Marketing and sales |
| On-ground services |

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Capgemini: RadarView profile

Case studies

Client	Capability	Summary	Business impact
Heathrow Making every journey better	• Cloud	• The client wanted to transform its IT capabilities to unlock the complete potential of its airport expansion plans. • Capgemini utilized Oracle's cloud-based solution portfolio to modernize finance, HR, revenue, and asset management, facilitating smooth user adoption, reducing technical migration complexity, and improving cost-benefit. The solution helped establish the Magenta Program, an integrated IT ecosystem for the client.	• Enhanced customer experience • Improved operational efficiency by automating manual tasks
CATHAY PACIFIC	• Intelligent automation	• The client sought to modernize its finance and procurement functions, aligning them with modern practices to support its long-term business growth plans. • Capgemini implemented the SAP module suite across three tracks: flight-to-settle, finance-to-manage, and budget-to-monitor. The new implementation helped the client to drive transparent information, automate transaction processing, and provide real-time information.	• Decreased operational costs • Reduced procurement complexities across the department
Lufthansa	• AI and analytics • Intelligent automation	• The client wanted to streamline service delivery across business units, reduce service costs, and enhance service quality. • Capgemini leveraged its ADMnext solutions to offer automation capabilities, decrease operational costs, and enhance service delivery. It used the Smart Analytics tools to analyze ticket and incident data to understand solutions that could be automated.	• Saved $80K on an annual service request spending of $600K • Reduced ticket turnaround time from 5.6 days to nearly two days
A UK-based airport	• AI and analytics	• The client needed to refine its e-commerce and other passenger services to enhance the passenger travel experience. • Capgemini utilized generative AI to implement four specialized AI assistants, focusing on delivering hyper-personalized experiences. These assistants included a synthetic design assistant, personalized chatbots, a content and knowledge assistant, and a product offering knowledge assistant.	• Enhanced customer experience • Improved employee productivity

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Capgemini: RadarView profile

Analyst insights

Practice maturity	★★★★★

- Capgemini has substantial domain expertise in the A&A industry, delivering diverse solutions for prominent clients such as Heathrow Airport, Lufthansa Airways, and Cathay Pacific. It helps transform finance and marketing functions and IT architecture for its clients.
- It focuses on the safety and security of aircraft by providing a testing management platform. For example, its TMap® solution facilitates software testing to mitigate the risks of the airline's customer and revenue loss. The platform encompasses the following crucial service components: project governance, involving strategy development for testing; configuration management, ensuring the integrity of work products and the software project system; test data management, including the preparation of test schedules and maintenance of test data; functional regression testing, assessing the correct operation of the program; and performance and load testing, validating the speed and usage of the program to ensure its capability in providing services.
- Aiding A&A clients to attain their net-zero sustainability objectives, Capgemini provides tailored solutions and strategies aligned with this goal. For example, it offers a flight-tracking monitoring system designed to assess and categorize the noise impact generated by aircraft and their handling.

Investments and innovation	★★★★

- In June 2023, Capgemini collaborated with Google to establish a global CoE focused on generative AI. This CoE aims to create a library comprising over 500 industry-specific use cases, serving as a guidebook for identifying, implementing, and scaling generative AI capabilities for clients in the A&A industry.
- With a significant emphasis on expanding its AI capabilities, Capgemini announced in June 2023 its commitment to invest $2 billion over three years, specifically in AI development. This investment would focus on creating generative AI solutions tailored for clients from various industries, including A&A.
- In June 2023, Capgemini acquired BTC Corporation, a digital services and cloud provider, to enhance its cloud capabilities to cater to airline clients.

Partner ecosystem	★★★★

- Capgemini has strong partnerships with key cloud providers such as AWS and Microsoft to modernize the business process of A&A clients. These cloud providers help in the modernization of IT infrastructure by migrating the database onto the cloud for A&A clients.
- In collaboration with Salesforce and Pega, the company enhances customer experiences for A&A clients. Salesforce automates content creation based on passenger travel history, while Pega's Infinity '23 portfolio improves website experiences and personalizes ancillary services.
- It has a diverse partnership with platform providers in the A&A industry. It includes MuleSoft, which provides the Anypoint platform to deliver integrated solutions; Oracle, which offers ERP solutions to automate business processes; and IBM, which provides its Cognos platform to enhance operational efficiency.

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Coforge: RadarView profile

Coforge

AVASANT RADARVIEW™ INNOVATOR

Airlines and Airports Digital Services 2024

Practice maturity ★★★★★

Investments & innovation ★★★★

Partner ecosystem ★★★★

Delivers solutions leveraging AR/VR and generative AI technology to support its clients across the industry value chain.

Practice overview

- Practice size: 3,600+ (A&A and Travel)
- Active clients: 90
- Delivery highlights: 26 delivery centers

>$100M	>60%
Revenue from the A&A segment, FY 2023	Digital revenue share from A&A, FY 2023

Industry-specific solutions/offerings

Coforge Xtreme Navigator	A digital solution that provides AR to help passengers navigate through airports
New Gen Kiosk	A self-service solution that facilitates passenger check-in, providing a seat map, rebooking, and visa scan
Monalisa	A suite of cloud-based solutions to simplify revenue accounting, audit services, and flight operations
TVera	An NLP-based solution that provides a digital assistant chatbot for A&A clients

Sample clients

- An Australia-based airline
- A Hong Kong-based airport
- A Middle East-based airline
- A Singapore-based airport
- A UAE-based airline
- A UAE-based airport
- A UK-based airport
- An India-based airport

Partnerships/alliances

Switchfly	Partnered to enhance customer experience through loyalty programs for airline e-commerce
salesforce	Leveraged its cloud platform to codevelop accelerators for the A&A industry
Microsoft	Partnered to deliver Azure-based IT infrastructure modernization for A&A clients
amadeus	Used its digital offering to deliver system integration projects for a passenger service system
Sabre	Implemented Sabre Red 360 and Sabre Travel AI™ to streamline airline operations
SITA	Adopted its digital capabilities for testing and support of an airport management system
MuleSoft	Used its AI-enabled integrated platform to codevelop accelerators for airport operations
aws	Utilized its capabilities to deliver solutions like loyalty middleware platforms for airline clients

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ● ● ● ●

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Coforge: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A UAE-based airline	• Cloud	• The client wanted to transition its Passenger Service System (PSS) service to Amadeus Altea to avoid disrupting ongoing business operations. • Coforge designed the architecture for the PSS service, aligning business processes and implementing re-engineering processes such as middleware development, testing, and data migration for integration with Amadeus Altea.	• Increased operational efficiency • Streamlined business processes
An Australia-based airline	• Cloud	• The client needed to revamp its website for improved user experience, performance, and scalability. It also wanted to address issues with legacy Salesforce integrations and a requirement for additional licensed tools. • Coforge leveraged AWS-hosted microservices to redesign the website and migrate it to the AWS cloud microservices infrastructure, providing agility, scalability, and a flexible architecture.	• Reduced costs for licensed tools • Enhanced user experience
A Hong Kong-based airport	• Cloud	• The client faced safety and compliance challenges in their ramp management system, performance issues, and elevated maintenance costs due to a dependency on outdated technologies. • Coforge adopted a green-field development approach, using microservices architecture and a web-enabled UI. The cloud engagement involved containerizing the ramp management system and utilizing Infrastructure as Code for the AWS deployment, enabling flexible releases of new capabilities.	• Reduced implementation time by 50% • Improved operational efficiency
A UAE-based airport	• AI and analytics • Cloud	• The client wanted to update its existing website with integrated, third-party services and a responsive design, prioritizing a mobile-first approach for accessibility across desktop and mobile devices. • Coforge used its Sitecore infrastructure to create a new website via a responsive web design approach, improving the user interface and enhancing customer experience. The website also incorporated analytics to monitor visitor volumes and provided multilingual support.	• Increased website traffic by 15% • Enhanced customer experience

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Coforge: RadarView profile

Analyst insights

Practice maturity	★★★★★

- With more than three decades of experience in supporting A&A clients, Coforge possesses strong domain expertise in delivering services aimed at improving airline retailing, customer retention, network planning, flight operations, baggage management and tracking, airport resource management, digital marketing, and ground handling services. For example, the company assisted a Hawaii-based airline in designing and developing a personalized e-commerce experience tailored to different customer types, leading to a 4% increase in overall passenger revenue.
- It has a strong foothold in the North American region, with the A&A segment accounting for 35% of revenue. For example, it helped a US-based airline transform its e-commerce platform through a hybrid delivery business model. It helped a US-based, low-cost airline streamline its existing sales and contact center operations by assessing processes and implementing automation for management information systems and audits.
- It focuses on driving sustainability goals for its A&A clients by conducting quarterly meetings on energy reduction, waste management, and carbon reduction. For instance, it assisted a Middle East airline in enhancing customer experience with carbon offsetting options and suggesting carbon-neutral flights.

Investments and innovation	★★★★

- To boost its digital capabilities in AI and AR/VR technologies, Coforge has a dedicated CoE to help A&A clients. For instance, it developed Coforge Xtreme Navigator to help passengers navigate their routes at airports, an intelligent document processor for advanced text analytics, and an AI-based personified chatbot with conversational AI capability for enhancing the travel experience.
- To upskill resources in emerging technologies for A&A clients, it provides domain training and multilevel A&A certification programs leveraging the Percepio platform.
- To broaden its digital offerings in AI, Coforge operates an AI-dedicated R&D lab in Delhi, enabling it to perform R&D on use cases developed for A&A clients.

Partner ecosystem	★★★★

- Coforge has a strong partner ecosystem to support the A&A industry. For instance, SITA provides system integration, testing, and support services for its airport management system; Switchfly supplies solutions for customer loyalty programs to enhance customer experience and brand loyalty; Sabre furnishes multiple platforms, including Travel AI to enhance the airline retailing experience by analyzing the consumer behavior and Red 360 helps in curating the tailored trip for the customers. Furthermore, Amadeus helps deliver system integration services for IT modernization for A&A clients.
- It has partnerships with cloud providers such as AWS, which helped codevelop a touchpoint application solution for a UK-based airline to enhance customer experience, and Salesforce, which helped codevelop accelerators for flight disruption management to streamline internal operations for clients.

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Cognizant: RadarView profile

Practice maturity ★★★★★

Investments & innovation ★★★★★

Partner ecosystem ★★★★★

Possesses a strong digital portfolio of industry-specific solutions. Focuses on strengthening its AI-based capabilities.

Practice overview

- Practice size: N/A
- Active clients: 50+ clients across the travel industry
- Delivery highlights: 100+ delivery centers

$1.2B	1.9%
Products and resources (P&R) revenue*,Q3FY23	YOY revenue increase in P&R , Q3 FY 2023

Industry-specific solutions/offerings

Crew Recovery Solutions	A solution automating platforms that provide ground handler services at the airport
Digital platforms for airports	A solution to anticipate potential delays, optimize routes, and improve the overall operation
ChatChef	A solution that helps build AI-enabled conversational chatbots for A&A clients
Cognizant Fleet Management	A solution that helps track fleets within the airport by leveraging GPS devices

Sample clients

- A European airline hub
- A midsize international airline
- A UAE-based airline
- A UK-based airline
- A UK-based airport
- A US-based airline
- Etihad Airways
- Riyadh Airports

Partnerships/alliances

Microsoft	Utilized its cloud platform to implement IT modernization for A&A clients
Google Cloud	Partnered to leverage AI and analytics tools for application modernization
CISCO	Partnered to provide A&A clients with cybersecurity and firewalls across all the systems
salesforce	Leveraged its cloud platform to deliver AI chatbots to agents to enhance customer experience
aws	Provided OrderServ® solutions to A&A clients to enhance the customer experience
vmware	Collaborated to use VMCloud to deliver data center modernization projects for A&A clients
servicenow	Partnered to advance the adoption of AI-driven automation across industries, including A&A clients
SAP	Partnered to provide ERP solutions to manage the business workflow for A&A clients

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

*Airlines and airports is a subsegment of the products and resources segment

Darker color indicates higher industry concentration: ●●●●

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Cognizant: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A UAE-based airline	• AI and analytics • Cloud	• The client wanted to enhance the member experience across all the digital touchpoints during journeys. • Cognizant leveraged analytics-based customer intelligence solutions to establish an omnichannel perspective of customer data based on insights into customer behavior. It also implemented the Adobe Marketing Cloud suite for personalized offers, promotions, and coupon targeting.	• Enhanced customer experience • Increased customer membership by 20%
A US-based airline	• IoT	• The client faced challenges in evaluating aircraft damages manually, leading to an error-prone and inefficient process. • Cognizant created agile and touch-optimized applications that leveraged IoT technology for utilizing virtual replicas of physical aircraft. This application facilitated real-time maintenance, assessment, and monitoring of damages.	• Reduced flight delays and cancellations by 25% • Improved customer experience
مطارات الرياض riyadh airports	• Intelligent automation	• The client sought to improve digital capabilities across all departments, including finance, HR, procurement, and planning, to elevate the overall customer experience. • Cognizant leveraged the Appian platform to implement an automation process spanning all departments, streamlining operations and reducing manual tasks and wait times across various systems and products.	• Enhanced customer experience with reduced wait times • Improved operational efficiency
A midsize international airline	• AI and analytics	• The client sought to minimize direct call costs for the contact center while ensuring 24/7 customer support by exploring new ways to engage with customers. • Cognizant implemented AI-powered Google Dialogflow to facilitate issue escalation through the LivePerson Chat platform. The deployment involved utilizing regression testing to map conversation flows and oversee chatbot training.	• Enhanced customer satisfaction • Improved operational efficiency

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Cognizant: RadarView profile

Analyst insights

Practice maturity	★★★★★

- Cognizant has expertise in delivering focused solutions in the A&A industry. Its solutions are strategically aligned with industry trends, addressing in-flight/en-route passenger services and passenger and baggage services to elevate the digital passenger experience; crew/workforce management, passenger flow services, disruption management, and aircraft handling to modernize both essential and non-essential operational systems; and fault management and facilities management to ensure efficient facility and transportation management within airport premises.
- It offers an extensive set of solutions and frameworks for smooth operations in the A&A industry. For example, it offers Refund as a Service, an AI framework for automated ticket refunds, and Connected Corridors, an intelligent solution ensuring the safe movement of people and goods within airport premises.
- To drive ESG initiatives for diverse industry clients, including those in the A&A sector, the company offers a range of solutions to support them in achieving net-zero sustainability goals. It offers the Cognizant Sustainability Accelerator, a tool that automates data collection and offers insightful analytics to enable clients to monitor and act upon their sustainability objectives. It also provides sustainable business practices using machine learning, digital twin technology, and IoT.

Investments and innovation	★★★★★

- Cognizant focuses on strategic acquisitions to enhance its digital transformation capabilities for a diverse clientele, including A&A clients. In January 2023, it acquired Mobica to enhance its IoT-embedded software capabilities and deliver end-to-end IoT-based digital transformation to clients. In November 2022, it acquired AustinCSI to expedite clients' end-to-end digital transformation. In April 2021, it acquired Servian to bolster its presence in Australia and New Zealand by delivering cloud migration projects and developing cloud products.
- It invests substantially in grooming its workforce to increase its impact on AI across various industries, including the A&A sector. In 2023, Cognizant announced its plans to invest $1B over three years to train 25,000 employees in generative AI and establish AI studios in Bengaluru, London, and San Francisco.

Partner ecosystem	★★★★★

- Cognizant has a robust partner ecosystem of hyperscalers to serve diverse industries, including the A&A sector. It has partnered with AWS, utilizing its cloud platform to deploy the Cognizant OrderServ solution and enhance the customer experience for A&A clients. Additionally, its partnership with Google Cloud involves leveraging the latter's cloud AI and analytics tools to modernize IT applications and improve operational efficiency for airline clients. It has partnered with Microsoft to use its cloud platform to deliver cloud migration projects in the A&A sector. Furthermore, it has partnered with Salesforce to provide AI chatbots to online travel agencies, offering services such as travel itinerary curation, ticket booking, and cancellations for end customers.
- It has partnered with key companies, including VMware, to leverage its VMCloud capabilities to deliver data center modernization projects for airline clients.

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DXC Technology: RadarView profile

Practice maturity ★★★

Investments & innovation ★★★

Partner ecosystem ★★★

Focuses on leveraging AI and auto-bots to enhance the customer experience. Offers a wide range of solutions under its sustainability practice.

Practice overview

- Practice size: 1,000+
- Active clients: 10+
- Delivery highlights: 40+ delivery centers

>$500M	30+
Revenue from the A&A segment, FY 2023	Years of experience in A&A industry

Industry-specific solutions/offerings

DXC SHARES	A solution enabling the smooth operation of the airline reservation system
DXC Fares	A solution that helps provide real-time flight information, including fares and schedule
DXC UPtime™	A platform solution that enables the centralization of workplace services for smooth business operation
DXC PlatformX™	A platform solution that is data-driven and helps clients predict IT operation risk

Sample clients

- A LATAM airline
- A US-based airline
- A US-based regional airline
- A US-headquartered airline
- American Airlines
- Edmonton International Airport
- Lufthansa
- United Airlines

Partnerships/alliances

SAP	Leveraged SAP platform to deliver automation solutions for A&A clients
aws	Partnered to deliver the cloud migration project for A&A clients
databricks	Utilized its digital capabilities in advanced analytics for modernizing the data warehouse
IBM	Codeveloped solutions and accelerate digital transformation for A&A clients
servicenow	Partnered to leverage its automation platform to codevelop solutions for airport operations
Google Cloud	Utilized its cloud platform to deliver IT modernization projects for A&A clients
ORACLE	Partnered to leverage its ERP solutions for airport clients to streamline the business function
vmware	Leveraged cloud virtualization to deliver data centre modernization project for the A&A industry

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ●●●●

AVASANT

DXC Technology: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A US-based airline	• Intelligent automation	• The legacy transaction processing facility (TPF) of the client had complex logic requiring manual analysis. It sought to modernize the crew bidding award process and enhance the crew portal UX according to the new contract rule. • DXC developed the analyzer for TPF assembler and SabreTalk to identify where contract rules were embedded in the system. The tool further enabled rapid analysis within seconds instead of months.	• Reduced turn-time by 30% • Improved operational efficiency
A US-headquartered airline	• AI and analytics • Cloud	• The client wanted to transition from traditional data warehouses, expensive analytics resources, and high-cost data platforms to adopt a modern data lake and pipeline with self-service usage. • DXC helped by consolidating the pipelines from various technologies to a Databricks platform and migrating to a cloud-based data lake. Additionally, it deployed Snowflake to facilitate analysis by end users.	• Reduced overall operation cost • Modernized IT infrastructure
A US-based regional airline	• AI and analytics	• The client wanted to predict the failure of critical components to prevent maintenance delays, reduce parts and repair costs, and minimize travel for repairs. • DXC applied AI models to the flight data recorder and maintenance data to predict the failures in a crucial component. The models focused on subsystems, identifying relevant data feeds, intricate patterns, and training models to predict the failures early.	• Improved failure prediction by 75% • Reduced maintenance cost
A LATAM airline	• Cloud	• The client wanted to modernize reservation and department control systems, aiming for reduced staff training requirements, lower operation costs, and establishing a digital platform for the airline. • DXC helped the client modernize its DXC SHARES system by transitioning it to run on Azure/Linux-based applications. This transformation also included implementing microservices, integrating with modern databases, and aligning with the existing DXC Agent Experience UX.	• Improved operational efficiency • Reduced operation cost by 50%

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DXC Technology: RadarView profile

Analyst insights

Practice maturity ★★★

- DXC has demonstrated digital capabilities in delivering end-to-end solutions for the A&A industry. For instance, it helped a US-based airline modernize the server and database layers to improve scalability. Similarly, it developed and supported IT infrastructure, applications, and middleware with DXC services for a US-headquartered airline. It also designed and built a customer-centric Android and iOS mobile application for a US-based airline.
- With a major focus on AI/ML and automation capabilities, DXC offers its Platform X automation solutions for A&A clients. The platform empowers client IT teams to swiftly detect, resolve, and predict IT downturns. It leverages AI/ML models to streamline manual processes and improve system efficiency and has a library of more than 6,000 bots for auto-resolution.
- Focusing on sustainability as a crucial factor across the A&A industry, DXC offers solutions for data center modernization, evergreen device management, and analytics and reporting. For example, it helped an airline carrier upgrade to a hyper-converged infrastructure platform to enable tons of carbon emissions reduction throughout its lifetime.

Investments and innovation ★★★

- DXC focuses on developing AI-enabled solutions for the A&A clients. It has multiple accelerators to develop solutions for various industry use cases, including A&A, such as the Conversational Query GenAI Accelerator and DXC's OpenAI integration service.
- It boosts its digital capabilities in the A&A industry by developing solutions for smart travel and next-gen reservation systems, utilizing its Industry Advantage Practice team, which includes resources from DXC acquisitions such as Luxoft and newly hired experienced air travel transformation employees.
- DXC operates an innovation center at its New Orleans campus in the US, with regional centers in various locations. These centers serve as hubs for a workshop, addressing A&A client business problems by leveraging AI-powered applications, design-thinking, ideation, prototyping, and full-scale production and rollout.

Partner ecosystem ★★★

- It has partnered with key cloud providers, including AWS, Google, and SAP, to jointly train DXC resources on their technology stacks, focusing on developing DXC capabilities for A&A clients and preparing GTM strategies across hyper-scaler solutions.
- It has a strategic partnership with key companies such as VMware, Oracle, ServiceNow, and IBM to deliver an end-to-end business solution for A&A clients. For instance, VMware provides a platform for application modernization and security enhancement; Oracle provides an ERP platform to streamline the airport business function and vendor quotations; ServiceNow provides a platform to codevelop solutions such as DXC Platform X and ESG Data Management and Reporting for A&A clients; and IBM provides applications for codeveloping IT solution and helping migrate airport IT architecture to cloud.

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Fujitsu: RadarView profile

AVASANT RADARVIEW™ DISRUPTOR — Airlines and Airports Digital Services 2024

Practice maturity ★★★★

Investments & innovation ★★★

Partner ecosystem ★★★

Leverages emerging technologies to enhance passenger experience and operational efficiency for clients. Focuses on sustainability services for airline and airport clients.

Practice overview

- Practice size: N/A
- Active clients: N/A
- Delivery highlights: Four global delivery centers and five regional delivery centers

¥3.71T	10+
Revenue, FY 2023	Fujitsu R&D labs worldwide

Industry-specific solutions/offerings

ROBOSOC™ (SOC in a box)	An on-premises security operations center solution with behavior monitoring and intrusion detection
Fujitsu Cloud Service K5	An open-source cloud platform to help A&A clients migrate existing applications to the cloud
Event Processing IoT Platform	A Microsoft Azure-based real-time monitoring engine, which can read and react to different data flows
Fujitsu Uvance	A solution to accelerate sustainable transformation for clients via hybrid IT

Sample clients

- British Airways
- Dublin Airport Authority
- Korea Airports Corporation
- Qantas Airways Limited
- South African Airways

Partnerships/alliances

aws	Provided A&A firms with a hyperscaler platform for hosting critical systems
servicenow	Provided capabilities in IT Asset Management and Service Management
SAP	Leveraged SAP solutions and services to build operational efficiency for A&A clients
UiPath™	Leveraged its automation software to reduce manual processes for A&A clients
Microsoft	Leveraged Azure services to modernize all business processes and IT landscape for A&A clients
ORACLE	Leveraged its blockchain, AI, chatbot, and automation capabilities for A&A clients
Red Hat	Partnered to provide hybrid cloud infrastructure, application services, and automation solutions
Symantec	Partnered to deliver integrated data center, cloud solution, and managed services capabilities

Service line coverage

| Pre-travel customer experience |
| Post-travel customer experience |
| Airline operations |
| Airport operations |
| Property operations |
| Marketing and sales |
| On-ground services |

Darker color indicates higher industry concentration: ○○○●

AVASANT

Fujitsu: RadarView profile

Case studies

Client	Capability	Summary	Business impact
Korea Airports Corporation	• Intelligent automation	• The client wanted to enable a palm vein authentication system for greater convenience and decreased congestion. • Fujitsu deployed its palm vein authentication system at 14 domestic airports, which enabled passengers to swiftly confirm their identities without having to show their citizen ID card.	• Increased convenience for passengers • Reduced congestion at airports
South African Airways	• Intelligent automation	• The client wanted to make its crew schedules more efficient to increase productivity and employee satisfaction. • Fujitsu leveraged the PegaSys Network Aware module, which enabled the client to perform all legacy tasks associated with the airlines, including publishing schedule changes to passengers automatically without the need for human intervention.	• Improved operational efficiency
Dublin Airport Authority	• AI and analytics	• The client wanted to establish common data standards throughout the organization to enable the flow of reliable, accurate, and timely information for decision-making. Fujitsu utilized the Oracle ERP application, creating a common data model across databases. This enabled the generation of comprehensive reports to make business decisions. Fujitsu also migrated the client data from legacy systems to Oracle applications.	• Enabled cost savings of €3.8M • Increased operational efficiency

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Fujitsu: RadarView profile

Analyst insights

Practice maturity	★★★★

- Fujitsu has over four decades of experience in the aviation industry. It helps its A&A clients overcome challenges posed by intensified security measures, increased asset management costs, and high passenger numbers, freight volumes, and flight destinations.
- It focuses on offering solutions that leverage emerging technologies to enhance passenger experience and increase operational efficiency. It developed an AI-powered scheduling system to enable A&A clients to maximize the utilization of assets and teams. It leveraged its capabilities in advanced networks and telecom to provide secure and reliable communication across airport campuses.
- It emphasizes enabling A&A clients to achieve their sustainability goals to help them comply with increasingly stringent regulatory requirements. In one of its engagements, it worked with Qantas Airways to help the airline in baseline measurement of ICT environmental footprint, development of ICT business strategy, and implementation of energy reduction projects.

Investments and innovation	★★★

- Fujitsu leverages its acquisitions to enhance its digital capabilities across different industry verticals, including A&A. In 2023, it acquired Thailand-based Innovation Consultancy Services to augment its capabilities in SAP consulting and managed services. It also acquired Enable Professional Services in 2022 to bolster its expertise in ServiceNow implementations.
- It runs the Fujitsu Accelerator program to combine its products and services with those of innovative startups to deliver value to its clients from different industries, including A&A.

Partner ecosystem	★★★

- Fujitsu leverages its ecosystem of technology providers to enable the digital transformation of clients across industries, including A&A. It has collaborated with VMWare to deliver offerings in end-user computing, data centers, and cloud to its clients. Its partnership with Oracle allows it to help clients move from traditional, fixed cloud software to cloud SaaS solutions.
- It has been a participant in the World Business Council for Sustainable Development since 2013, which enables it to support clients across industries with their sustainability goals.

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HCLTech: RadarView profile

Practice maturity ★★★★★

Investments & innovation ★★★★★

Partner ecosystem ★★★★★

Focuses on delivering end-to-end, next-gen solutions for the entire value chain of the airline and airport industry. Has a strong technology collaboration ecosystem.

Practice overview

- Practice size: 4,200+
- Active clients: 40+
- Delivery highlights: 205+ delivery centers worldwide

60+	40%–60%
R&D and innovation labs	Digital revenue share from A&A, FY 2023

Industry-specific solutions/offerings

Intelligent Unit Load Device (ULD)	A solution that provides real-time ULD management for baggage tracking and inventory control
Digital Crew	A platform that facilitates passenger management and onboard CRM and optimizes crew operations
iMRO	An SAP solution that helps in providing maintenance, repair, and overhauling of aircraft
Smart Fleet	An IoT-enabled solution that helps fleet operators monitor vehicle vehicles at the airport

Sample clients

- A France-based airline
- A Germany-based airline
- A Japan-based airline
- A Middle Eastern airport
- A Singapore-based airline
- A US-based global airline
- An Australia-based airport

Partnerships/alliances

Microsoft	Leveraged its Azure capabilities to codevelop its HCLTech Smart Fleet solution for airport operations	Honeywell	Partnered to codevelop solutions in computer vision and automation for A&A clients
SAP	Partnered to deliver a digital solution for HCL iMRO for A&A clients	aws	Leveraged its cloud capabilities to codevelop solutions for A&A clients
Collins Aerospace	Used its capabilities for flight operations, flight management systems, and flight tracking	indra	Collaborated to deliver system integration projects and develop accelerators for A&A clients
BlueYonder	Partnered to deliver an automation solution for faster product deployment for A&A clients	Google Cloud	Collaborated to accelerate digital transformation for A&A clients

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ●●●●

AVASANT

HCLTech: RadarView profile

Case studies

Client	Capability	Summary	Business impact
An Australia-based airport	• AR/VR • Cloud	• The client wanted to develop a future-fit solution to provide a next-gen customer experience and position it as an "airport as a destination." • HCLTech designed an AR/VR-enabled, next-generation mobile app using a human-centered experience design approach. The application was migrated to the cloud platform, incorporating multicloud capabilities.	• Reduced the cost of ownership • Enhanced customer experience
A Germany-based airline	• Cloud	• The client needed to reduce its IT backlog by empowering employees with a digital platform to digitize manual processes and avoid inefficiency. • HCLTech leveraged its HCL Volt MX solution to transform manual processes into digital ones. Additionally, it used its HCL iMRO service and cloud-based HCL Actian to develop more than 2,000 business applications to improve workflow processes.	• Reduced IT backlog requests • Improved operational efficiency
A US-based global airline	• AI and analytics • Cloud	• The client aimed to enhance visibility for crucial partner events to improve on-time performance and enhance customer satisfaction. • HCLTech leveraged AWS and AI-based IBM MQ solutions to build an ecosystem collaboration platform integrating partner information with the FLIFO platform based on streaming partner communication data. This subscription-based system extends across the client's ecosystem, delivering comprehensive end-to-end visibility.	• Improved on-time performance • Reduced operations costs by proactively addressing potential IRROP situation
A France-based airline	• Cloud	• The client wanted to replace its legacy system that supports the engineering and maintenance unit and integrate various business workflows. • HCLTech utilized its HCL iMRO cloud-enabled solution for process harmonization and standardization across business units. It also implemented a global aircraft maintenance template for improving business efficiency.	• Improved operational efficiency • Increased productivity across business units

AVASANT

HCLTech: RadarView profile

Analyst insights

Practice maturity ★★★★★

- HCLTech has a wide array of solutions with a strong portfolio of clients across the A&A industry. For example, it leveraged its HCL UNO-X solution to transform the passenger in-flight experience and connectivity for a Philippine-based airline; it used its HCL iMRO solution to help with aircraft maintenance, repair, and overhaul for a Singapore-based airline; and it utilized its HCL Volt MX solution to reduce IT backlog for a Germany-based airline.
- With a strong focus on developing its capabilities in AI, it developed digital maintenance assistance to be used in multiple industries, including airlines and airports. It leverages data intelligence, AI/ML, and analytics technologies to interact with documents using voice notes, voice-based feedback registration, semantic-based analysis for providing insights on feedback, workflow automation for review, and real-time work order maintenance updates.
- HCLTech has a well-defined framework to deliver green IT solutions for A&A clients. It leverages its HCLTech EcoSustain™, a thought leadership framework, to mitigate climate risk and achieve sustainability goals. It also delivers solutions such as automated ESG data ingestion, ESG reporting and insights generation, and green route planning for ground transport for clients.

Investments and innovation ★★★★★

- HCLTech has acquired new-age companies to broaden its offerings in the A&A industry. For example, in January 2022, it acquired Starschema to enhance its capabilities for supplying next-gen data intelligence solutions for airline operations, baggage movement, and airport operations. Similarly, in January 2021, it acquired Symplicit (a DWS group subsidiary) to provide human-centered design consulting for airport application design.
- To broaden its capabilities in delivering digital solutions leveraging emerging technologies, it collaborates with academic institutions, including the University of Calcutta, the National University of Singapore, and Sydney Quantum Academy, for research projects on generative AI, the metaverse, and quantum technology.
- It launched a training academy to provide domain-specific certification training for upskilling new and existing talent in the A&A domain.

Partner ecosystem ★★★★★

- HCLTech has a diverse portfolio of domain-specific partnerships. For example, Indra helps deliver system integration projects and develop accelerators for A&A clients; Honeywell helps codevelop solutions in computer vision and AI-based automation solutions for A&A clients; and Collins Aerospace delivers solutions such as flight management systems and flight communication systems to A&A clients.
- It has strong partnerships with cloud providers such as AWS, Microsoft, and Google, codeveloping solutions for the A&A industry. For example, available on Azure and AWS, it provides the HCLTech Smart Fleet solution that helps monitor fleet vehicles at airports and provides proactive maintenance.
- It partnered with SAP to leverage the EAM software to deliver HCL iMRO solutions and Blue Yonder to codevelop automation tools for A&A clients.

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Hexaware: RadarView profile

HEXAWARE

AVASANT RADARVIEW™
INNOVATOR
Airlines and Airports
Digital Services
2024

Practice maturity ★★★★★

Investments & innovation ★★★★

Partner ecosystem ★★★★

Focuses on legacy modernization, cost optimization, and customer experience enhancement for clients by leveraging in-house and partner solutions.

Practice overview

- Practice size: N/A
- Active clients: N/A
- Delivery highlights: 45 offices worldwide

20+ Years of experience in the airlines industry	30 Fortune 500 clients as of 2022

Industry-specific solutions/offerings

Home Printed Baggage Tags	Leverages a plug-and-play model to simplify baggage identification to enhance passenger experience
Proximity Marketing with Mobile Application	Leverages emerging technologies to simplify campaign management and deliver personalized notifications to passengers
MRO Remote Assistant	Connects technicians with remote experts in real time to reduce downtime

Sample clients

- Air Canada
- A European airline
- A Hong Kong-based airline
- An international airport in England
- An airline in APAC
- A North America-based airline
- A US-based airline

Partnerships/alliances

aws	Partnered to deliver data migration, modernization, and digital transformation projects
Microsoft	Partnered to provide infrastructure, data, and AI capabilities to A&A clients
snowflake	Partnered to provide integrated dashboard solutions and data platform modernization
PEGA	Partnered to deliver advanced AI and robotic automation solutions to A&A clients

(Google Cloud)	Leveraged GCP capabilities to facilitate digital transformation for airline and airport (A&A) clients
SAP	Provided data migration, process engineering, and code migration to S/4HANA to A&A enterprises
servicenow	Leveraged its automation and digitalized workflows to streamline complex IT environments
salesforce	Leveraged its expertise in Einstein AI and AppExchange solutions to enable digital transformation

Value chain coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ●●●●

AVASANT

Hexaware: RadarView profile

Case studies

Client	Capability	Summary	Business impact
An airline in APAC	• Intelligent automation	• The client was experiencing data center outages and wanted to shift to an always-on connected infrastructure. • Hexaware aided the client in migrating 176 applications from the legacy data center to a new one that leveraged automation to accelerate deployment and ensured minimal or zero downtime.	• Increased operational efficiency by 40% • Accelerated go to market
A US-based airline	• Intelligent automation	• The client wanted to modernize its existing mainframe systems and reduce passenger processing times to enhance customer experience. • Hexaware leveraged Scaled Agile Framework (SAFe), Continuous Integration and Continuous Delivery (CI/CD), and automated unit testing to increase the efficiency of the airline's systems. It also ensured that the system was capable of rapid enhancements.	• Reduced passenger processing times • Enhanced passenger experience
A North America-based airline	• Intelligent automation	• The client wanted to develop an automated test strategy for its critical applications to ensure zero release defects. • Hexaware automated the accessibility testing of several business-critical applications, including the airline's loyalty, digital, and Passenger Service System (PSS) programs and ensured compliance with regulatory requirements.	• Achieved cost savings of USD 3.24M • Accelerated time to market
An international airport in England	• Cloud	• The client wanted to deploy cloud-hosted flight information display systems (FIDS) capable of supporting up to 3,000 screens in real time. • Hexaware deployed cloud-hosted FIDS and advised the client on which critical metrics to use for tracking the performance of FIDS. It also validated the scalability of FIDS by leveraging AWS cloud's autoscaling features.	• Increased operational efficiency

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Hexaware: RadarView profile

Analyst insights

Practice maturity	★★★★★

- Hexaware has over 20 years of experience serving A&A clients globally. It differentiates itself by focusing on cost optimization, modernization of legacy systems, enhancing passenger experience, and streamlining business processes for A&A clients.
- It emphasizes enhancing passenger experience to provide a competitive advantage to its A&A clients. For instance, it helped Air Canada digitally transform its PSS by replacing its IBM TPF PSS applications with products from the Amadeus Altea suite. This enabled the client to achieve a 30% faster time to market for new features and 50% faster onboarding for new Air Canada employees.
- It leverages emerging technologies to develop new products for A&A clients and bring value to them. For example, it utilized its AR/VR, ML, and cloud capabilities to enable airline firms to provide immersive, realistic training to their cabin crew, which helped bring down cabin crew training costs.

Investments and innovation	★★★★

- In 2023, Hexaware established a ServiceNow Experience Center and Innovation Lab in Noida, India. This will enable it to showcase innovative solutions and drive proofs of concept and pilot projects for enterprises from diverse industries, including A&A.
- It emphasizes upskilling its workforce. For instance, it leverages its leadership development program, Ignite, to train its senior management in areas such as strategic thinking and customer focus. It also has a management trainee program, the Hexaware Future Leaders and Executives program, to inculcate leadership skills in business school graduates.

Partner ecosystem	★★★★

- Hexaware has partnerships with all three major cloud providers to provide capabilities such as cloud, data migration, and infrastructure modernization to A&A clients. Its collaborations with AWS, Azure, and GCP help unlock operational efficiency and enhance customer experience.
- It has also partnered with a multitude of technology vendors to bring value to A&A clients. They include Coupa for optimizing the spending process, FireEye for dynamic threat intelligence, Pega Systems for automation and AI, and Sitecore for brand content creation.

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IBM: RadarView profile

AVASANT RADARVIEW™
LEADER
Airlines and Airports
Digital Services
2024

Practice maturity	★★★★★
Investments & innovation	★★★★★
Partner ecosystem	★★★★★

Delivers customer delight to its clients by adopting the IBM Garage methodology. Focuses on developing generative AI use cases for the airline and airport industry.

Practice overview

- Practice size: N/A
- Active clients: N/A
- Delivery highlights: Operations in over 175 countries

$14.8B	8%
Organizational revenue in Q3, FY 2023	Revenue growth from software in Q3, FY 2023

Industry-specific solutions/offerings

IBM Travel Platform	A platform that bundles multiple areas of operations and leverages AI to enhance the customer experience
Baggage management solution	A solution that leverages analytics for baggage tracking and tracing using RFID
Passenger Service System	A solution that enables enterprises to streamline operations such as seating, boarding, and scheduling
Planning & Operation Platform	A platform that helps manage flight, crew, in-flight service, and airport operations

Sample clients

- A Europe-based airline
- Air Canada
- All Nippon Airways
- Amsterdam Airport
- Kempegowda International Airport
- Etihad Airways
- Finnair
- Lufthansa
- Malaysian Airline
- Riyadh Airports

Partnerships/alliances

SAP	Partnered to deliver an integrated solution that leverages IBM Watson for airport applications
SIEMENS	Collaborated to help accelerate digital transformation for A&A clients
CISCO	Delivered cyber security integrated solutions for A&A clients by reducing product complexity
skywise.	Leveraged its platform to address aircraft operational challenges using data analytics

Microsoft	Helped transform hybrid multicloud to a single cloud for A&A clients
SAMSUNG	Collaborated to leverage 5G devices at airports and codevelop security solution
salesforce	Partnered to deliver AI-powered integrated solutions that automate airport and ground operations
amaDEUS	Delivered integrated solution for digital healthcare pass to verify passenger health credential

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ● ● ● ●

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IBM: RadarView profile

Case studies

Client	Capability	Summary	Business impact
Lufthansa	• Intelligent automation	• The client wanted to enhance its operational performance by collating flight information into one system and avoiding delays in flight departure. • IBM leveraged its IBM Mobile solution to develop iOS applications offering real-time information on passenger lists, fueling, airbridge, and ground handling data. The IBM Mobile solution facilitated testing, distribution, and security services for critical enterprise operations.	• Improved operational efficiency • Reduced manual paperwork for a flight manager
ETIHAD	• AI and analytics • Cloud	• The client sought to enhance the customer experience by developing an app catering to customer preferences for in-flight service, transportation, meals, and other ancillary services. • IBM leveraged IBM Garage methodologies and deployed the IBM Cloud. This enabled the client team to utilize AI-enabled IBM NextGen Common Travel Services to develop the new web check-in application using the cloud-native and DevOps toolchain.	• Enhanced customer experience • Provided fast and easy check-ins
Kempegowda INTERNATIONAL AIRPORT BENGALURU	• AI and analytics • Cloud • Intelligent automation	• The client needed a scalable and cost-competitive IT operation to ensure agility and operational flexibility to handle the growing passenger traffic. • IBM leveraged an open hybrid cloud approach and Red Hat Ansible Automation platform to design and implement the next-generation IT architecture. The IT architecture also leveraged IBM Maximo to generate insights by AI to optimize inventory management and total cost of ownership.	• Refined the operational efficiency • Enhanced customer experience
riyadh airports	• AI and analytics • IoT	• The client wanted to transform the airport into an IoT-enabled facility by overcoming challenges such as a legacy maintenance system, communication issues with contractors, and a lack of comprehensive asset management impacting operational efficiency. • IBM leveraged IBM Maximo and Cognos Analytics while replacing the legacy maintenance system, developed a mobile application to cater to maintenance-related emails, and defined service-level agreements with all the contractors.	• Reduced maintenance paperwork by 80% • Improved operational efficiency by providing real-time insights

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IBM: RadarView profile

Analyst insights

Practice maturity	★★★★★

- With a focus on driving progress in passenger and employee experiences, IBM has delivered major projects in the A&A industry while engaging with clients such as Air Canada, Finnair, Malaysian Airlines, Airport Authority Hong Kong, and United Airlines. It leverages IBM Garage methodology, a framework based on industry best practices and experiential knowledge, to provide solutions for business problems.
- IBM leverages AI and the cloud to deliver solutions to A&A clients. IBM Watsonx, blended with generative AI capabilities, enables clients to hyper-personalize the offering, such as pricing, offers, and ancillary services for their customers. Furthermore, IBM Cloud enables A&A clients to build digital services such as automatic rebooking of tickets and develop mobile applications for frontline employees.
- It provides pick-and-chose solutions to transform the airline system and tools via the IBM Travel platform. The platform focuses on design thinking and user experience while leveraging IBM Garage-based delivery methodology. It offers solutions for areas such as airport retail operation, cognitive capabilities for personalized offerings, solutions for enterprise mobility to be deployed on mobile devices, and hybrid cloud architecture.

Investments and innovation	★★★★★

- IBM has made strategic acquisitions to strengthen its software portfolio across AI, intelligent automation, analytics, and ESG capabilities. For example, in August 2023, it acquired Apptio to help A&A clients optimize and derive maximum value from their IT spending. In July 2022, it acquired Databand.ai to enable the A&A clients to fix data inconsistencies for better decision-making. In January 2022, IBM acquired Envizi to enable A&A clients to automate the feedback generated between business environmental initiatives and daily business operations.
- IBM boosted its AI capabilities to offer digital solutions for various industries, including A&A, by launching a generative AI-focused CoE in May 2023. It also partnered with Mohamed bin Zayed University of Artificial Intelligence in May 2022, focusing on NLP and AI capabilities.

Partner ecosystem	★★★★★

- IBM has partnered with technology companies such as Amadeus, Salesforce, and SAP to deliver AI-integrated solutions. For example, Amadeus integrated its Traveler ID platform into IBM's Digital Health Pass for a safe travel experience. Similarly, Salesforce helped deliver AI-based CRM to streamline passenger processing, while SAP provided its platform integrated with IBM Watson to deliver solutions for the A&A industry.
- It has long-standing partnerships with AWS and Microsoft to deliver cloud migration services for A&A clients. For instance, Microsoft provided the Azure Cloud platform to deliver cloud migration projects leveraging IBM's Garage methodology. AWS has an on-demand cloud platform to codevelop applications with IBM.
- It partners with companies such as Siemens for PLM solutions and Cisco and Samsung to provide cybersecurity and advanced 5G networks for airports.

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Infosys: RadarView profile

Infosys

AVASANT RADARVIEW™

LEADER

Airlines and Airports Digital Services 2024

Practice maturity ★★★★★

Investments & innovation ★★★★★

Partner ecosystem ★★★★

Delivers a next-gen tailored solution leveraging emerging technologies such as generative AI and the metaverse.

Practice overview

- Practice size: 3,000
- Active clients: 65+
- Delivery highlights: 147 delivery centers

>$100M	20%–40%
Revenue from the A&A segment, FY 2023	Digital revenue share from A&A, FY 2023

Industry-specific solutions/offerings

BagRunner Dispatcher	A solution to efficiently manage baggage transfers for short flight connections
Airport Queue Times Optimization	A suite of solutions to analyze security checkpoint wait times and optimize passenger flow patterns
Integrated Fleet Planner	A solution to view ground handling activities in real time to avoid bottlenecks and enhance efficiency
Security and Lost Bag Scanner	A solution that helps scan the contents of luggage for security purposes to mitigate risks

Sample clients

- A Canada-based airline
- A Hong Kong-based airline
- A Mexico-based airline
- A Middle East airport
- A Panama-based airline
- A Singapore airport
- A UK-based airport
- A US-based airline
- A US-headquartered airline

Partnerships/alliances

atpco	Codeveloped New Distribution Capability Exchange solutions to enhance airline retailing and offers	ASAPP	Partnered to implement contact center automation solutions for its A&A clients
Palantir	Partnered to accelerate digital transformation for the A&A clients	CISCO	Provided security and automation solutions for data centers to A&A clients
aws	Leveraged its platform to enable cloud migration projects for A&A clients	Google Cloud	Helped A&A clients develop generative AI solutions using Google AI tools
IBM	Partnered to deliver solutions using tools and accelerators to reduce time to market	AIRBUS	Used its Skywise platform to monitor and analyze aircraft health and provide maintenance services

Service line coverage

| Pre-travel customer experience |
| Post-travel customer experience |
| Airline operations |
| Airport operations |
| Property operations |
| Marketing and sales |
| On-ground services |

Darker color indicates higher industry concentration: ●●●●

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Infosys: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A Middle East airport	• Cloud • Intelligent automation	• The client wanted to establish a digital framework for staffing, systems integration, and application development and maintenance. • Infosys leveraged ServiceNow to introduce a management dashboard and mobility solution and automate operational tasks. The solution provided service request management, orchestration, and catalog management. It also modernized its data center by migrating it to a modular one and implementing Splunk-based smart report features.	• Improved employee productivity • Reduced costs via automation and operation efficiency
A Canada-based airline	• AI and analytics • Cloud	• The client wanted to enhance its retailing capabilities by adopting the industry-standard International Air Transport Association (IATA) New Distribution Capability (NDC) program. • Infosys used the AWS platform to implement the NDC Exchange solution. This enabled the client to present its offerings for booking services using the IATA NDC standard and allowed external sales channels to access these services directly.	• Improved API performance and translation time • Improved operational efficiency
A US-headquartered airline	• Intelligent automation	• The client wanted to minimize flight delays and optimize operational efficiency by streamlining airport flight operations. • Infosys developed a mobile application with automation tools and a user interface to improve load planning accuracy. The app facilitated real-time updates on flight events and proactive alerts to departure managers, ensuring on-time departures and efficient baggage loading onto the aircraft.	• Reduced operational costs • Enhanced customer experience through on-time flight departures
A US-based airline	• Cloud • Intelligent automation	• The client required a reliable source of truth to provide insights into its enterprise data warehouse. • Infosys utilized ServiceNow to create a universal data cleansing utility, ensuring project data integrity. Automated dataset validation was implemented for accuracy, and a real-time health monitoring dashboard was introduced for tracking the enterprise data warehouse's status and performance.	• Improved data integrity across projects • Increased data insights for providing better passenger services

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Infosys: RadarView profile

Analyst insights

Practice maturity	★★★★★

- With over two decades of experience, Infosys has deep domain expertise in the A&A industry. It spans key value chains such as operations, marketing and commercial, passenger engagement, and IT services. For example, it developed Cortex, a customer service AI platform, to improve net promoter scores, reduce customer wait times, and provide customer care agents with contextual information during calls.
- Many A&A clients are adopting a cloud-first approach to modernize their legacy business applications and enhance operational efficiency. Infosys supports this transformation with Infosys Cobalt Airline Cloud, a cloud-based model office solution that assists various stakeholders, including passengers, station managers, ground staff, and airport authorities.
- To broaden its capabilities in its ESG practice, Infosys is engaging with A&A clients to codevelop solutions for achieving net-zero sustainability. For example, it is currently helping a Central American airline to reduce its carbon footprint. Additionally, it has proofs of concept with cloud-enabled capabilities, such as route optimization with emission circulation, ground movement emission, baseline, and subsequent integrated reporting for carbon emissions.

Investments and innovation	★★★★★

- To expand its offering portfolio and leverage emerging technologies, it launched a startup engagement program, The Infosys Innovation Network, which collaborates with select startups to bring in certified and ready-to-use ideas, technology, and offerings in different industries, including the A&A industry. Additionally, it operates the Infosys Center for Emerging Technology Solutions to identify and develop digital capabilities in optimizing airline, airport, and back-office operations using AI/ML, blockchain, AR/VR, and deep learning technologies.
- To strengthen its digital, brand-building capabilities, it acquired oddity in April 2022. The acquisition will enhance Infosys's abilities in providing in-house production services, which include AR/VR and e-commerce, and creating a metaverse-ready setup for branding experiences tailored to A&A clients.

Partner ecosystem	★★★★

- Infosys has a diverse, industry-specific partnership ecosystem to deliver digital transformation projects for A&A clients. For instance, it partnered with ATPCO to deliver an NDC exchange solution to enhance airline retailing. It has partnered with Airbus to leverage its Skywise platform to monitor and analyze aircraft health and provide the needed assistance, and it partnered with ASAPP to automate its contact center operations to address customer grievances quickly.
- It partners with key cloud providers to deliver next-gen solutions for A&A clients. For example, it partnered with Google to deliver generative AI applications leveraging Infosys Topaz offerings and Google's generative AI solutions for different industries, including A&A.
- It partners with Sabre to modernize the top Global Distribution System to Google Cloud, enabling travel agencies to access product inventory and rates.

AVASANT

ITC Infotech : RadarView profile

Practice maturity ★★★

Investments & innovation ★★

Partner ecosystem ★★

Offers bundled solutions for the digital transformation of airline and airport clients. Focuses on training the workforce on emerging technologies.

Practice overview

- Practice size: N/A
- Active clients: N/A
- Delivery highlights: 30 delivery centers

₹3,321 Cr	16.3%
Annual revenue, FY 2023	YOY revenue growth, FY 2023

Industry-specific solutions/offerings

Traveler Experience and Loyalty solution	A solution that delivers personalized omnichannel engagements to end-users of A&A clients
Commercial Intelligence solution	A solution that provides a real-time view of the airline enterprise for better decision-making
Operations Intelligence solution	A solution that predicts the maintenance of the aircraft and helps in reducing turnaround time
Intelligent Flight Operations solution	A solution that provides operational analytics to enhance the end-to-end operational metrics

Sample clients

- A Europe-based airline
- A Europe-headquartered airline
- A low-cost airline
- A Middle East-based airline
- A Norway-based airline
- A UK-based airline

Partnerships/alliances

Microsoft	Partnered to leverage Azure services to accelerate digital transformation of A&A clients	Adobe	Leveraged its digital capabilities to accelerate digital transformation of A&A clients
Google Cloud	Leveraged cloud platforms to deliver cloud migration projects to A&A clients	aws	Partnered to provide infrastructure, platform, migration, security, and compliance services to A&A clients
amaDEUS	Partnered to leverage its digital capabilities to deliver solutions to A&A clients	snowflake	Utilized cloud platforms to deliver infrastructure modernization projects to airline clients
salesforce	Leveraged its cloud platform to deliver customer engagement solutions to A&A clients	SAP	Partnered to leverage its digital capabilities to deliver cognitive solutions to A&A clients

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration:

AVASANT

ITC Infotech : RadarView profile

Case studies

Client	Capability	Summary	Business impact
A Norway-based airline	• AI and analytics	• The client wanted a loyalty management solution to maintain customer records, manage customer feedback, and execute campaigns. • ITC Infotech developed a loyalty solution that enables transactions, promotions, and tier changes and enhances campaign management. The solution offers a consolidated view of sales accounts, streamlines feedback management processes, and utilizes analytics for intelligent reporting.	• Improved customer satisfaction score • Optimized partner interface management
A UK-based airline	• AI and analytics	• The client wanted to enhance its market outreach, boost customer spending, and attract new clientele. • ITC Infotech implemented a user-friendly Loyalty platform with Analytics and Partner Data Manager (PSS), integrating with Partner systems, real-time PoS, Passenger Service Systems, and websites. It migrated seven years of historical transactional data and integrated Partner Data Manager for seamless integration across airline and nonairline partners.	• Increased new active member base by 5% • Increased ancillary sales via direct channels
A low-cost airline	• AI and analytics	• The airline wanted to enhance passenger load while ensuring effective yield management and optimizing inventory utilization. • ITC Infotech implemented an ML-enabled solution for revenue management featuring three analytical models: a descriptive alert system for low booking traction and weak alerts for flights departing within the next 89 days, a predictive model that addressed aspects such as last-minute cancellation and booking forecasting, and a fare simulation intelligence model for real-time pricing.	• Improved monthly overbooking by 5% • Increased last-minute booking by 8%

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ITC Infotech : RadarView profile

Analyst insights

Practice maturity	⭐⭐⭐

- ITC Infotech offers robust services to drive digital transformation for A&A clients. For instance, it offers services such as PSS transformation, digitalization and optimization of business processes, leveraging a data-driven platform to enable better decision-making, managing customer experience and loyalty management, and organizing and improving the application portfolio.
- It offers industry-specific solutions leveraging emerging technologies for A&A clients. It provides an analytics-based Platform of Intelligence for Aviation solution to manage customer and loyalty experiences, elevate commercial intelligence, and streamline daily operational workflows for A&A clients.
- It differentiates itself by focusing on driving digital transformation for A&A clients by leveraging and showcasing analytical prebuilt models, including a prescriptive recommendations model that helps predict future events and mitigates any risk by providing early warnings; intelligent data models that have ready-to-use dashboards for parameters such as customer experience, operations, and sustainability; and a modular plug-and-play component model that provides airline clients with easy integration techniques, enabling scalable IT infrastructure.

Investments and innovation	⭐⭐

- ITC Infotech strategically utilized its acquisitions to enhance its enterprise software capabilities for its diverse client base, including A&A clients. In June 2022, the company partially acquired PTC's product life cycle management (PLM) consulting and professional services business, forming a new business unit, DxP Services. The new unit aims to deliver a digital transformation project by adopting PTC's Windchill+ PLM SaaS platform.
- To enhance the skill set of resources in emerging technologies for improving the quality of deliverables across diverse industries, including A&A, ITC Infotech introduced the Learn from Anywhere platform in August 2022. This SaaS platform leverages AI, enabling employees to gain knowledge within their work environment through gamified events, leaderboards, and badges.

Partner ecosystem	⭐⭐

- ITC Infotech has partnered with technology providers to deliver innovative digital solutions to its various clients, including A&A. It partnered with Amadeus to leverage its digital capabilities to deliver digital solutions to A&A clients. It has an alliance with Snowflake to leverage its cloud capabilities to deliver infrastructure modernization projects to A&A clients. It joined BDB.ai and leveraged its digital capabilities to deliver cognitive solutions to A&A clients,
- It has built a strong partner ecosystem of cloud providers to offer solutions to its A&A clients. It collaborates with AWS to provide multiple services, including Disaster Recovery as a Service (DRaaS) and infrastructure, platform, and migration services to A&A clients. It partnered with Google to leverage its cloud platform to deliver cloud migration projects to A&A clients.

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Kyndryl: RadarView profile

kyndryl

AVASANT RADARVIEW™

DISRUPTOR

Airlines and Airports Digital Services 2024

Practice maturity	★★★★
Investments & innovation	★★★
Partner ecosystem	★★★

Has a strong partner ecosystem of hyperscalers, with more focus on leveraging digital capabilities to develop travel solutions.

Practice overview

- Practice size: N/A
- Active clients: N/A
- Delivery highlights: 17 delivery centers globally

$17B	30+
Annual revenue in FY 2023	Years of experience in the A&A industry

Industry-specific solutions/offerings

Kyndryl Bridge	A solution to help A&A clients optimize the operational usage of the IT systems via real-time insights
Kyndryl Advanced Logistics Management	A solution that helps track baggage and shipment at the airport to improve aircraft turnaround time
Kyndryl First Responder Safety	An AI-enabled solution that helps search and rescue teams ensure smooth operation at the airport
Autonomous Self-Service	A self-serve solution to help customers perform tasks such as web check-in and print baggage tag

Sample clients

- A Europe-based airline
- A Middle East-based airline
- A Saudi Arabia-based airline
- A US-based airline
- A US-headquartered airline
- An Asia-based airline
- An India-based airport

Partnerships/alliances

amaDEUS	Jointly delivered solutions to control growing airport traffic and enhance airport security	Google Cloud	Leveraged cloud platform to deliver digital transformation projects for A&A clients
Five9	Codeveloped cloud-based contact center solutions for personalized user experience for A&A clients	**aws**	Partnered to help A&A clients leverage cloud-native applications to modernize the IT infrastructure
Hanshow	Leveraged electronic shelf labels to provide system integration services to airport retail stores	**weavix**	Used its Internet of Workers™ platform to optimize aircraft maintenance with remote support
Lenovo	Partnered to transform IT infrastructure into multicloud environment for A&A clients	**NOKIA**	Codeveloped solutions for airport navigation service providers and MRO companies

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ●●●●

AVASANT

Kyndryl: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A Europe-based airline	• AI and analytics • Cloud	• The client wanted to improve the post-pandemic customer experience by adapting to the changing IT application landscape. • Kyndryl leveraged Kyndryl Vital to design the prototype of IT systems and facilitated the migration of existing systems to public and private cloud-native environment. It leveraged Kyndryl AIOps to optimize the use of applications, including booking, flight planning, crew management, and revenue management systems, depending on the workload.	• Enhanced customer experience • Improved operational efficiency with cloud-enabled infrastructure
A US-based airline	• AI and analytics • Cloud	• The client wanted to elevate the customer experience by making the existing IT infrastructure scalable. • Kyndryl utilized AWS cloud services for migrating the legacy system to an on-demand cloud platform. Additionally, it leveraged its Kyndryl AIOps capabilities, integrating advanced analytics to ensure the infrastructure's adaptability to scale according to varying customer demands.	• Improved customer experience • Enabled scalable IT architecture with a cloud platform
An Asia-based airline	• Cloud	• The client sought to modernize end-user services and consolidate back-end infrastructure, focusing on workplace transformation. • Kyndryl utilized the Kyndryl Bridge solution to implement virtual desktops and IT applications tailored to individual resource profiles. It modernized the infrastructure service stack using hyperconverged solutions, ensuring scalability through cloud resources.	• Improved employee productivity • Reduced onsite support and office requirement

AVASANT

Kyndryl: RadarView profile

Analyst insights

Practice maturity	★★★★

- Kyndryl provides various services, including infrastructure modernization, mainframe modernization, digital agility for employees, next-generation network transformation, and cyber incident recovery, to the A&A clients. For example, it helped an Asian airline shift to a hybrid multicloud environment from legacy IT infrastructure. It also helped an India-based airport develop a digital airport framework to enhance the end-to-end travel experience of the customer.
- It addresses the growing demand among A&A clients for optimizing IT system usage and improving efficiency by offering the Kyndryl Bridge platform. The solution provides visibility across IT estates, with insights to aid A&A clients in understanding, predicting, and making informed decisions. Additionally, the platform incorporates automation to ensure more stable operations. It has helped various industries, including A&A, avoid an annual cost of $1 billion.
- Embracing sustainability and ESG principles has become imperative in the A&A industries. To help A&A clients achieve the net-zero mark, it offers Kyndryl Sustainability Advisor, a platform for assessing energy consumption and GHG emissions across distributed workloads and generating reports on sustainability KPIs leveraging AI/ML. It also offers Kyndryl Green Guild, a program to develop sustainable business solutions.

Investments and innovation	★★★

- With the launch of new CoEs, Kyndryl is focused on strengthening its digital capabilities for multiple clients, including A&A clients. In 2023, it launched a CoE in partnership with Microsoft to develop various projects, including the modernization of applications and data on mainframes and integration into the hybrid IT model. In 2022, it partnered with AWS to open a CoE to optimize the cloud migration journey and modernize the business application.
- With more A&A clients adopting a cloud-first strategy, it aims to upskill its resources with various industry-specific training programs. For example, it provides a cloud certification program in partnership with Google and a hybrid learning program for AWS certification as part of the AWS Smart Start Program.
- To better serve A&A clients, it is developing the NewGen Digital Travel Framework, which leverages emerging technologies from partnered hyperscalers.

Partner ecosystem	★★★

- Kyndryl has been actively expanding its technology partnerships. It partnered with weavix to utilize its Internet of Workers platform, offering visual remote expert solutions to streamline below- and above-the-wings operations. It collaborated with Hanshow to provide bundled software services to airport retailers, enhancing the overall customer experience. It also teamed up with Five9 to modernize the contact center by leveraging AI capabilities for airline clients. Additionally, Kyndryl partnered with Amadeus to undertake system integration projects, optimizing passenger traffic and addressing operational constraints at the airport.
- It has partnered with key hyperscalers to serve A&A clients. For instance, it has partnered with Google to accelerate the digital transformation of IT infrastructure for A&A clients. It has also collaborated with AWS to leverage its platform to deliver cloud migration projects and provide tools for application modernization.

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LTIMindtree: RadarView profile

LTIMindtree

AVASANT RADARVIEW™

INNOVATOR

Airlines and Airports Digital Services 2024

Practice maturity	★★★★★
Investments & innovation	★★★★
Partner ecosystem	★★★★

Accelerates modernization with its strong portfolio of AI-based offerings and by leveraging its industry-specific partner ecosystem.

Practice overview

- Practice size: 2,200+
- Active clients: 10+
- Delivery highlights: 43 delivery centers globally catering to the travel, hospitality, and logistics domain

$4.2B	22+
Annual revenue in FY 2023	Years of functioning travel, hospitality, and logistics vertical

Industry-specific solutions/offerings

Airport NxT	A solution that helps intelligently manage end-to-end airport operations
Green Carpet	A solution to provide carbon emissions insights to A&A clients for monitoring and reporting
BagMate	An automatic solution with a speech feature to track baggage at the airport
CheckMate	A solution that enables automatic flight check-in and ancillary services

Sample clients

- A European-based airline
- A Middle East-based airline
- Global Travel Service Providers
- North America-based global airlines
- US-based low-cost carriers

Partnerships/alliances

aMaDEUS	Leveraged the Altéa platform to transform the passenger service system for A&A clients
Sabre	Partnered to deliver solutions to transform seating and departure control for airline clients
snowflake	Codeveloped solutions for A&A clients leveraging cloud capabilities
salesforce	Utilized cloud-native tools to modernize A&A clients' IT applications
Google Cloud	Collaborated to accelerate the digital transformation of A&A clients
aws	Leveraged its cloud capabilities to deliver system integration projects for A&A clients
SITA	Partnered to deliver modernization projects related to the flight planning process for airline clients
sherpa°	Leveraged its platform to meet travel identification requirements of customers at the airport

Service line coverage

- Pre-travel customer experience
- Post-travel customer experience
- Airline operations
- Airport operations
- Property operations
- Marketing and sales
- On-ground services

Darker color indicates higher industry concentration: ●●●●

AVASANT

LTIMindtree: RadarView profile

Case studies

Client	Capability	Summary	Business impact
North America-based global airline	• Cloud	• The client aimed to transform its business model by improving operational systems such as PSS, crew management, and MRO. • LTIMindtree integrated the PSS and crew management systems and introduced a new MRO and fleet management application. It leveraged SAP solutions to fortify back-office operations and migrated the legacy data center to the cloud, enhancing productivity and processes for the service support desk.	• Expanded operations internationally • Improved operational efficiency
US-based low-cost carrier	• Intelligent automation	• The client faced challenges with its legacy MRO system, unable to meet future needs due to factors such as maintenance complexity and network expansion. • LTIMindtree integrated a testing process into the Agile and distributed Agile software development life cycle (SDLC) process, covering smoke, functional, and component testing for the mainframe system, PowerBuilder, and Mosaic MRO. Moreover, LTIMindtree utilized the TOSCA tool for automated testing in PowerBuilder MRO and applied Autoit with JBehave for automating test cases in the mainframe and Mosaic MRO.	• Reduced cost of quality by detecting issues during the testing process, enabling faster resolution • Improved operational efficiency

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LTIMindtree: RadarView profile

Analyst insights

Practice maturity ★★★★★

- LTIMindtree has a strong foothold in the A&A industry, fostering long-standing client engagement. For instance, it has been engaged with a Middle East-based airline for 16 years, providing expertise in cabin crew management and connected travel experience solutions. Additionally, it has been supporting a North America-based airline for about 15 years, contributing to the development of mobile channels. Furthermore, it has been working with an Atlanta-based airline for seven years, assisting in developing above-the-wings applications and conducting testing across the aircraft unit.
- It focuses on adopting AI-enabled solutions to cater to different clients, including A&A clients. Its Genie on the Go solution provides multiple culinary options to elevate the passenger travel experience. Its BagMate solution provides an automated voice-based baggage tracker. It also provides the mTap solution that enables on-the-go purchases of products/services.
- It drives sustainability goals for its clients, including A&A clients, by helping reduce environmental impact. It offers multiple solutions, including the Green Carpet solution to automate and manage carbon emission insights reports and the smart spaces solution to manage and monitor ESG parameters of buildings.

Investments and innovation ★★★★

- To bolster its capacity to serve various clients, including A&A clients, LTIMindtree opened a digital experience center in Hyderabad in November 2022. This new center, equipped with automation capabilities, serves as a hub for prototyping, driving research, and delivering digital solutions.
- It emphasizes talent development and strengthens its ability to deliver high-quality solutions to A&A clients through employee training initiatives. Collaborating with Udacity and Coursera, it offers the Shoshin learning portal. The portal features over 30 A&A domain courses, providing over 50 hours of training per year.
- In 2024, LTIMindtree plans to make substantial investments to boost its AI capabilities, allocating $40M–$50M to develop AI-based digital solutions for various clients, including A&A clients.

Partner ecosystem ★★★★

- LTIMindtree has a strategic partner ecosystem tailored to enhance domain capabilities. It partnered with Amadeus to offer the Altéa platform to airline clients, providing reservations, inventory, and departure control capabilities. Additionally, its partnership with Sabre enables it to leverage Sabre's fulfillment platform for efficient airline operations and disruption management. It partnered with Sherpa to enhance the passenger travel experience by digitally providing required travel documents throughout the journey. Moreover, it partnered with SITA to deliver an application modernization project for flight planning.
- It partnered with hyperscalers to provide innovative solutions to A&A clients. It collaborated with AWS to harness its cloud capabilities to deliver system integration projects for airline clients. It also partnered with Google Cloud and Salesforce to focus on modernizing IT applications through cloud-native solutions.

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Mphasis: RadarView profile

Practice maturity ★★★

Investments & innovation ★★

Partner ecosystem ★★

Demonstrates strong expertise in AI and analytics to deliver bundled solutions for process transformation for airline and airport clients.

Practice overview

- Practice size: N/A
- Active clients: N/A
- Delivery highlights: Presence in more than 15 countries

$1.3B	16.7%
Total Contract value attained in FY 2023	YOY revenue growth in FY 2023

Industry-specific solutions/offerings

Airline Data Platform	A solution that stores customers' digital travel information, such as PNR, loyalty, and ticket information
Retail Availability Solution	A solution to enhance the air retailing experience by covering the aspects of schedule, availability, and price
Next-gen Agent Experience	An integrated solution enabling reservations, airport agents, and call centers for improved experience
Passenger Virtual Assistant	A chat/voice bot solution that assists customers throughout the journey with the airline

Sample clients

- A LATAM-based airline
- A Panama-based airline
- A Qatar-based airline
- A South America-based airline
- A US-based airline
- An Australia-based airline

Partnerships/alliances

Collibra	Utilized its data governance platform to implement workflow processes for the A&A clients
DATASTAX	Partnered to deliver a secure cloud-enabled database platform for the A&A clients
MuleSoft	Leveraged its iPaaS for delivering integration projects for the A&A clients
salesforce	Utilized cloud platform to modernize the IT applications for the A&A clients

Google Cloud	Collaborated to accelerate the digital transformation of the A&A clients
aws	Leveraged its cloud capabilities to deliver system integration projects for the A&A clients
UiPath	Used AI-based automation platform to deliver cognitive solutions for airport retailing
Verifaya	Leveraged its studio platform to perform automated testing of the IT programs for A&A clients

Service line coverage

- Pre-travel customer experience
- Post-travel customer experience
- Airline operations
- Airport operations
- Property operations
- Marketing and sales
- On-ground services

Darker color indicates higher industry concentration: ●●●●

Mphasis: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A South America-based airline	• AI and analytics • Intelligent automation	• The client's legacy platform led to high processing costs and poor user experience. The agents were required to undergo significant training to perform operational tasks on the platform. • Mphasis implemented an open platform that integrated enterprise architecture, operational data store, and analytics. The unified interface integrated with multiple automated systems, enhancing airline call center, reservation, and airport agent capabilities to ensure a better user experience.	• Reduced customer servicing time • Improved employee productivity
An Australia-based airline	• Intelligent automation	• The client faced many challenges, including a fragmented accounts payable process and the absence of a solution for data source integration. • Mphasis enhanced the mail communication procedure by establishing a standardized invoice receipt and handling protocol. It introduced an accounts payable automation solution and a web-enabled workflow tool to route invoices for approvals and exception management efficiently.	• Reduced retrieval and storage costs by 50% • Decreased the vendor payment processing time by 30 days

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Mphasis: RadarView profile

Analyst insights

Practice maturity	★★★

- With over 20 years of experience in the A&A industry, it demonstrates a strong expertise in offering end-to-end services covering the major part of the A&A value chain. It offers services in various lines of business, including reservation and distribution, fares and ticketing, airline operation, airport operation, airline maintenance, repair and overhaul, and back-end managed services.
- It addresses client's requirements across diverse industries, including the A&A sector, by providing digital solutions. It offers the HyperGraf™ solution, which delivers comprehensive real-time customer and enterprise metrics using analytics and AI/ML to facilitate informed decision-making. It also provides the Autocode.AI solution to expedite software development by utilizing AI/ML to generate various code elements, images, and wireframes. Furthermore, its InfraGraf® solution utilizes AI/ML and intelligent automation to predict and mitigate critical incidents related to airport IT infrastructure.
- To enable its A&A clients to achieve net zero, it offers sustainability services under its ESG practice. The services are tailored to ensure a focus on reducing carbon footprint, enforcing governance, regulation, and recognition, and advancing social and economic initiatives, among other areas.

Investments and innovation	★★

- In 2023, Mphasis introduced a new business unit, Mphasis.ai, to bolster its digital capabilities through AI-driven solutions. This unit will focus on providing services such as generative AI advisory, AI application development, conversion design for reinforcement learning, development of industry-specific models, large language model applications, and application testing for various sectors, including A&A.
- To enhance the value delivered across diverse industries, including the A&A sector, it offers the Talent Next Platform. This platform delivers training courses in AI/ML, cloud, and cybersecurity to employees through e-learning and cloud labs.
- To support the cloud-first initiative of various industries, including the airline sector, it acquired Silverline in October 2023 and eBECS in June 2023.

Partner ecosystem	★★

- Mphasis has partnered with several technology providers, including Collibra, DataStax, MuleSoft, and Verifaya, to accelerate digital transformation for A&A clients. For instance, it partnered with Collibra to provide a data governance platform to airport clients to deliver authentic data across the department. It teamed up with DataStax to provide airline clients with a secure cloud-based database platform to streamline business processes. It partnered with MuleSoft to provide iPaaS to deliver system integration projects for airline clients. It also collaborated with Verifaya to perform automated testing of the IT program to mitigate operational disruptions.
- It has partnered with hyperscalers such as AWS, Google, and Salesforce to deliver IT infrastructure modernization and cloud migration projects for A&A clients.

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Softtek: RadarView profile

AVASANT RADARVIEW™
CHALLENGER
Airlines and Airports Digital Services 2024

Practice maturity ★★★

Investments & innovation ★★

Partner ecosystem ★★

Adopts a comprehensive delivery model to drive digital transformation for industry-specific clients. Focuses on driving digital transformation by leveraging partnerships.

Practice overview

- Practice size: N/A
- Active clients: N/A
- Delivery highlights: 19 delivery centers

20+	15,000+
Country presence	Total employees in the organization

Industry-specific solutions/offerings

Automation and virtualization solution	An AI solution to respond to customers' needs by leveraging a virtual agent
Customer insight and analytics solution	A solution to enable A&A clients to understand their customers by analyzing customer behavior data
Remote workplace enablement solution	A solution that enables the client's workforce to access the workplace remotely
IT cost optimization solution	A solution that helps analyze the A&A IT budget and optimize the cost based on priority

Sample clients

- A Canada-based airline
- A Europe-based airline
- A Latin America-based airline
- A US-based airline
- A US-based domestic airline

Partnerships/alliances

aws	Leveraged its cloud platform to deliver cloud migration and assessment projects	**ATLASSIAN**	Collaborated to deliver digital transformation projects for A&A clients
SAP	Partnered to integrate the SAP platform with customer-facing systems for A&A clients	**BlueYonder**	Partnered to manage and optimize retail operations for airport clients
Microsoft	Leveraged cloud managed services to accelerate digital transformation for A&A clients	**servicenow**	Collaborated to deliver intelligent IT operations transformation projects for A&A clients
salesforce	Partnered to enhance CRM capabilities of A&A clients to accelerate digital transformation	**MuleSoft**	Utilized the Anypoint Platform to deliver automation solutions for airline clients

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ● ● ● ●

AVASANT

Softtek: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A Canada-based airline	• Cybersecurity • Intelligent automation	• The client aimed to enhance its cybersecurity maturity to secure customer data, prevent breaches, and ensure adherence to regulatory requirements. • Softtek conducted a security evaluation and established an enterprise IT security management road map. It also consolidated security functions, implemented automated monitoring to expedite incident detection, and provided audit assistance to ensure complete cybersecurity audit documentation.	• Reduced cost per threat by 20% • Increased cybersecurity assets coverage by 40%
A Europe-based airline	• Cloud	• The client wanted to execute an application migration project, but it was facing multiple challenges, including extended timelines, increased expenses, and technical complexity. • Softtek leveraged DevOps and infrastructure-as-code methodologies to handle ticketing and database services. It utilized various AWS cloud services, such as CloudWatch and CloudTrail, for maintenance and support. Furthermore, it helped optimize network components and facilitate the onboarding of customers.	• Provided support for an environment comprising more than 100 accounts • Improved operational efficiency
A Latin America-based airline	• Intelligent automation	• The client sought to enhance its legacy processes and organizational framework to expedite product delivery and fortify the project portfolio management office. • Softtek analyzed business needs to speed up product delivery, incorporating robust testing protocols and intelligent test automation for optimal functionality and quicker time to market for digital products. Additionally, it implemented a digital governance program to provide best practices.	• Increased product delivery capacity by three times • Improved employee productivity

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Softtek: RadarView profile

Analyst insights

Practice maturity	★★★

- Softtek provides multiple digital solutions to drive digital transformation for its A&A industry clients. The solutions offered for airlines are aligned with the Scaled Agile Framework (SAFe®) to help establish critical business services, connect application portfolio with infrastructure, map critical business services downstream to technology components, and help engage support operations and management to implement the services dashboard.
- To deliver digital solutions to A&A clients, Softtek adheres to a detailed customer engagement strategy, incorporating aspects such as customer journey, technology stack, and business functions. It adopts a bimodal approach and aligns operational methodologies to enhance customer experience. Additionally, the advanced delivery framework follows a seven-step process—agile requirement, development, integration, testing, delivery, deployment, and monitoring—ensuring coordination in terms of maturity and cadence among these processes.
- It drives sustainability objectives for diverse clients, including those in the A&A sector, by creating a sustainable development model within the Transcend business unit. It provides the blauLabs platform, designed to facilitate energy and utilities management by collecting and integrating data from IoT devices.

Investments and innovation	★★

- It focuses on better serving its diverse clients, including A&A, and enhancing its customer experience through new acquisitions. In November 2022, it acquired Aveshka to enhance its digital capabilities, including application development, business intelligence, and cybersecurity.
- In September 2022, it announced its plans to hire 5,000 resources at its Bengaluru delivery center by 2025. The move emphasizes its intention to strengthen its workforce to cater to more clients across sectors, including A&A.

Partner ecosystem	★★

- Softtek partners with enterprise software providers to deliver digital solutions to various clients, including A&A clients. It has partnered with Atlassian to deliver multiple projects, including cloud migration, integration of enterprise platforms, and improving the reporting management capabilities, for A&A clients. It has collaborated with Blue Yonder to provide services such as demand planning and fulfillment and warehouse management system to streamline clients' retail operations at the airport. It has partnered with MuleSoft to leverage its Anypoint Platform to deliver automation solutions for A&A clients.
- It has partnered with key cloud providers such as AWS to deliver cloud assessment and migration projects for A&A clients and Microsoft to leverage Azure managed services for application modernization projects.

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Sutherland: RadarView profile

Practice maturity ★★★

Investments & innovation ★★★

Partner ecosystem ★★★

Demonstrates deep domain expertise in delivering automated finance and accounting solutions. Leverages Sentinel AI to deliver intelligent digital solutions.

Practice overview

- Practice size: 900+
- Active clients: 26
- Delivery highlights: Six delivery centers for A&A industry

>10% YOY revenue growth from A&A, FY 2023	>40% Share of digital revenue from A&A, FY 2023

Industry-specific solutions/offerings

Sutherland altra®	A portfolio of finance solutions that provide end-to-end support to A&A clients
Sutherland Robility™	A hyper automation platform that helps derive insight from unstructured data for A&A clients
Sutherland CX360	A process monitoring platform that generates insights to improve efficiency
Sutherland Sentinel AI™	An AI-based security solution for monitoring A&A operations for a smooth working environment

Sample clients

- A Europe-based airline
- A MENA region airline
- A Middle Eastern airline
- A Nordic airline
- A Panama- based airline
- A Scandinavian airline
- A US-based airport
- An India-based airline

Partnerships/alliances

iConcile	Codeveloped altraDOC, a platform to automate cost and profitability management for the A&A clients	ORACLE	Partnered to deliver cloud migration project for the A&A clients
UiPath	Partnered to implement Robotic Process Automation solutions for the A&A clients	Microsoft	Leveraged its Microsoft Azure cloud to develop products such as Connect, Robility, and Sentinel AI
SAP	Used its multiple platforms, such as ERP, cloud modules, and analytics, for airport operation	aws	Utilized its cloud, managed, and professional services for delivering solutions for the airline client
Google Cloud	Codeveloped Contact Center AI solution to help with customer support for the airline client	zendesk	Partnered to leverage customer support solutions for its A&A clients

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ●●●●

AVASANT

Sutherland: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A Middle Eastern airline	• AI and analytics	• The client wanted to lower the high error and omission rates due to manual passenger revenue accounting. • Sutherland leveraged the Sutherland altra tool to streamline revenue accounting, audit, and account receivable reconciliation. It helped create a real-time dashboard on sales, revenue trends, seat factors, yields, and interline analytics.	• Improved operational efficiency • Reduced cost by 60% • Increased touchless fare audit by 85% • Recovered 5M+ YOY revenue leakage
A Nordic airline	• Intelligent automation	• The client sought to improve the consistent dips in the net-promoter score in its customer experience department and the revenue performance of its contact center because of poor conversion rates. • Sutherland helped digitally transform the client processes by providing an integrated CRM solution enabling the aerial view of the customer and resolution rates. It helped the client rapidly address the refund claims and automate the process, focussing on customer experience.	• Improved sales by 94% • Increased revenue by $2.5M • Improved first-call resolution by 17%
An India-based airline	• Intelligent automation	• The client wanted to solve processing delays due to manual invoice verification and changing rates of vendor contracts due to the legacy system. • Sutherland leveraged its altraDOC platform to define the agreements and rates of the vendor contract. The platform automated line-item level reconciliation defined for each vendor and automatically validated the invoices with transaction data and vendor contracts.	• Improved operation efficiency by 40% • Decreased manual effort
A MENA region airline	• Cloud • Intelligent automation	• The client needed to reduce its increasing distribution costs due to the high proportion of non-productive bookings and implement the booking policy. • Sutherland leveraged altraAUDIT, a booking audit module, that enabled automated verification of the passenger booking transactions, recovery of booking cost of non-productive booking by IATA Billing and Settlement Plan, and detailed reporting around the booking cost incurred.	• Recovered $3M from the wrongdoing agencies • Improved operational efficiency

AVASANT

Sutherland: RadarView profile

Analyst insights

Practice maturity ⭐⭐⭐

- Sutherland strongly emphasizes solutions for the A&A industry, offering significant platforms in emerging technologies such as AI, analytics, and intelligent automation. With deep domain expertise, the company excels in managing customer engagement, back-office revenue accounting, and finance operations. For instance, the Sutherland Connect platform facilitates understanding real-time insights into customer demands, enabling improved service delivery; the Sutherland Translate AI platform helps translate over 98 languages in real-time, and the Sutherland Extract AI enables data extraction from PDFs to workflow.
- It focuses on developing customer-centric solutions to meet A&A client demands. For example, it has developed comprehensive end-to-end solutions by identifying customer personas and mapping the customer journey, which helps in quicker time-to-value by customizing offerings. It offers market-driven solutions, such as Sutherland Altra, for the finance team to comply with the New Distribution Capability Framework and One Order Management approach.
- Aiming to become a leading sustainability operation partner by 2025, Sutherland helps A&A clients adopt energy and facility management as a service. Furthermore, it supports clients in achieving net-zero sustainability by creating an integrated solution, leveraging AI/ML and intelligent automation.

Investments and innovation ⭐⭐⭐

- Sutherland operates innovation centers that enhance its digital capabilities for A&A clients. For example, Sutherland TIG focuses on crafting customer experience journeys via research and design services, the Automation Command Center oversees the management and processing of bots for the airport, and the Automation Innovation Hub is for developing new products and conducting workshops for resources to experience the products offered to A&A clients.
- To enhance the domain knowledge of its employees, it has platforms such as My Academy, which provides training courses on the A&A industry, and SURE, which offers domain-specific courses on automation skills. Additionally, it has a Travel Training Academy to enable resources to train in the A&A domain.
- In 2022, it acquired Augment CXM, a company that specializes in analyzing customer interactions, for enhanced customer experience and productivity.

Partner ecosystem ⭐⭐⭐

- Sutherland has partnered with various platform providers, including IATA, iConcile, Oracle, Genesys, and Zendesk, to codevelop solutions for A&A clients. For instance, iConcile provides a platform to codevelop new solutions such as AltraDOC, Oracle has a platform with analytics capabilities to codevelop business process solutions for airport clients, and Zendesk offers a platform to build customer support solutions for airline clients.
- It has a strong partnership with legacy cloud providers, including AWS, Google, and Microsoft, to leverage cloud-native applications for codeveloping integrated solutions for A&A clients. For instance, Sutherland Robility and Sutherland Sentinel AI solutions are built on the Microsoft Azure platform.
- It has a long-standing partnership with SAP to leverage its S/4HANA platform with analytics capabilities to bolster the digital capabilities of the A&A industry

AVASANT

TCS: RadarView profile

Practice maturity ★★★★★

Investments & innovation ★★★★★

Partner ecosystem ★★★★★

Has expertise in developing AI solutions to deliver value for internal and external clients in the airline and airport industry.

Practice overview

- Practice size: N/A
- Active clients: N/A
- Delivery highlights: ~300 delivery centers

$27.9 B	17.6%
Annual revenue, FY 2023	YOY annual revenue growth, FY 2023

Industry-specific solutions/offerings

TCS Aviana™	A solution that provides operational metrics for informed decision-making
TCS Experiential Digital Commerce Platform	A solution that helps companies create an experiential commerce platform for airline retailing
Technical Ramp Smart Watch	A solution to streamline on-ground processes for airlines to enhance operational efficiency
TCS SWIFT MRO	An SAP-based platform that streamlines aircraft maintenance, repair, and overhaul operations

Sample clients

- A UK-based airline
- Garuda Indonesia
- Hawaiian Airlines
- KLM Royal Dutch Airlines
- Malaysia Airlines
- Scandinavian Airlines
- Singapore Airlines
- Star Alliance
- TAP Air Portugal
- United Airlines

Partnerships/alliances

Microsoft	Utilized Azure OpenAI to develop automation solutions for A&A clients
aws	Leveraged its platform to develop the TCS Aviana suite, providing airlines with operational visibility
Five9	Collaborated to help A&A clients switch to cloud-based contact centers
salesforce	Partnered to deliver cloud migration projects for A&A clients
Google Cloud	Utilized its digital capabilities to enable IT infrastructure modernization for A&A clients
Automation Anywhere	Partnered to deliver automation solutions utilizing AI/ML to enhance airport operations
Hewlett Packard Enterprise	Codeveloped solutions that use HPE's GreenLake edge-to-cloud platform for A&A clients
SAP	Leveraged its portfolio of cloud solutions to codevelop offerings for A&A clients

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ● ● ● ●

AVASANT

TCS: RadarView profile

Case studies

Client	Capability	Summary	Business impact
UNITED	• AI and analytics • Cloud	• United Airlines needed a digital tool to empower frontline staff with real-time information for informed decision-making to ensure on-time flight operations. • TCS utilized TCS Aviana to detect operational deviations and leveraged Amazon MSK, EMR, and Open Search for data processing. The solution identified critical issues early on, facilitating proactive mitigation and generating predictive insights to promptly address operational challenges.	• Enabled real-time insights on flight operations • Improved customer experience
STAR ALLIANCE	• Cloud	• Star Alliance wanted to enhance the travel experience by streamlining management applications, reducing provisioning timelines, ensuring disaster recovery for data, and driving development of new features for its products. • TCS used AWS for its IT infrastructure migration and cloud-native solutions, which enabled modernization and introduced new services like the interline flight transfer assistant and instant loyalty miles accrual. Additionally, Amazon Aurora helped baggage tracking through visible dashboards for airline agents.	• Enhanced customer experience by offering loyalty programs • Improved operational efficiency
malaysia AIRLINES	• Cloud	• Malaysia Airlines wanted to standardize its IT systems for a comprehensive view of its operations by migrating legacy applications to the cloud. • TCS leveraged its Netasthra tool to provide real-time updates on current issues, monitor changes using a Change Management module, generate system capacity reports, and help migrate applications to the cloud.	• Improved operational stability • Enabled real-time updates of business operations
HAWAIIAN AIRLINES.	• Cloud • Intelligent automation	• Hawaiian Airlines faced challenges with its decentralized accounts payable system, high costs, prolonged invoice cycles, limited traceability, and manual processes, resulting in inefficiency and a lack of real-time vendor visibility. • TCS utilized its TAP™ solution, delivering centralized, standardized, and consolidated processes. It helped the client achieve complete digitization, incorporating automation via features such as bulk invoice uploads and exceptions and approval handling.	• Enabled online reporting on productivity and invoice status • Enhanced operational efficiency

AVASANT

TCS: RadarView profile

Analyst insights

Practice maturity	★★★★★

- Serving a robust, global client base, TCS has significant domain expertise, providing comprehensive digital solutions for A&A clients. For example, it enhanced the customer experience for Scandinavian Airlines by creating an AI-enabled personal travel agent chatbot, Turi. Additionally, TCS assisted Lufthansa Group Business Services in developing an agile and cooperative finance operating model, integrating accounting solutions for all Lufthansa Group airlines to improve cash flow and operational efficiency.
- TCS delivers a tailored solution utilizing AI/ML for on-ground and flight operations. The TCS Aviana solution suite contains a connected journey suite to boost customer experience at various passenger touchpoints such as lounges, airports, and onboard. The solution suite also includes smart turn for complete visibility into aircraft turnaround operations, smart maintenance for predictive insights to minimize operational risks, resource uberization for managing airline employees, and IOCC discovery and resolve for a unified view of aircraft operations to enhance customer experiences.
- It offers its TCS Zero Carbon platform for A&A clients to achieve sustainability goals through tools such as emission reduction and digital reporting.

Investments and innovation	★★★★★

- With AI at the forefront of technology advancements, TCS has invested in creating a generative AI tool through an in-house, large-language-model algorithm for primary use in enterprise code generation to bolster the development of AI-enabled applications for clients in different industries, including A&A.
- To enhance its domain expertise, TCS collaborated with TAP Air Portugal to establish an Airline Digital Center in Portugal. This initiative aims to develop innovative systems utilizing digital technologies to elevate the customer experience throughout the A&A value chain.
- In February 2022, TCS collaborated with DeakinCo. to design corporate learning programs focusing on upskilling employees in emerging technologies for its Australian clients in different industries, including A&A.

Partner ecosystem	★★★★★

- TCS has a strong network of cloud partners. Partnering with AWS, it developed its TCS Aviana suite for high-speed data processing, benefiting aircraft operational metrics and decision-making. With Microsoft, it built airline automation solutions on the Azure cloud platform. Additionally, it delivered cloud migration projects for A&A clients in collaboration with Google Cloud and Salesforce.
- It partnered with automation solutions providers, including Automation Anywhere and Five9, to streamline business processes for A&A clients. Utilizing the Automation Anywhere platform, TCS delivers cognitive solutions to optimize airport IT operations. With Five9, it transformed traditional airline contact centers into AI-enabled facilities, expanding omnichannel capabilities and supporting a remote work strategy.

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Tech Mahindra: RadarView profile

TECH mahindra

AVASANT RADARVIEW™

INNOVATOR

Airlines and Airports Digital Services 2024

Practice maturity ★★★★★

Investments & innovation ★★★★

Partner ecosystem ★★★★

Offers a broad product portfolio that leverages intelligent automation and AI. Focuses on driving green digital transformation for airline and airport clients.

Practice overview

- Practice size: 1,100+
- Active clients: 35
- Delivery highlights: Eight delivery centers that support the travel industry

>60% Digital revenue share, FY 2023	>20% YOY growth from A&A segment, FY 2023

Industry-specific solutions/offerings

Airline Operational Control and Monitoring	A portfolio of digital solutions for controlling and monitoring airline operations
Metaverse for Airports/Aircraft Cabin	A solution that provides a digital immersive experience of an airport to enhance customer experience
Airline Catering Solution	A JD Edwards-based solution, which manages airline catering operations and reduces waste
Pricing Workflow Automation	An automation solution for pricing proposal workflow and approval processes for flight ticket pricing

Sample clients

- A Europe-based airport operator
- A Malaysia-based airport
- A Malaysian low-cost airline
- A Middle East air catering subsidiary
- A Singapore-based airport
- A Thailand-based airport
- A Turkey-based airline
- A UAE-based airline

Partnerships/alliances

Microsoft	Leveraged its cloud platform to accelerate digital transformation for clients	aws	Partnered to set up its cloud platform and codevelop solutions for airlines and airport clients
IDEMIA	Partnered to deliver identity-related security services to clients and their travelers	IBM	Partnered to deliver digital solutions leveraging AI/ML, cloud, and automation for A&A clients
DTP	Used its platform to optimize planning and operations for aviation transportation	veovo	Leveraged its intelligent airport platform to manage end-to-end operations for airports
I-TEK Tag | Track | Transform	Collaborated to provide baggage identification and tracking throughout all airport processes	Genetec	Utilizes its array of solutions to enhance security and automate airport operations

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ● ● ● ●

AVASANT

Tech Mahindra: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A Singapore-based airport	• AI and analytics • Cloud	• The client wanted to update its existing e-commerce platform with one that could handle traffic growth and provide a unified view of inventory data. • Tech Mahindra implemented a cloud-enabled content management platform to address increased traffic, integrating order fulfillment, a digital product catalog, omnichannel order orchestration for coordinating online and offline orders, analytics for real-time inventory data, and security services.	• Improved the customer shopping experience • Boosted operational efficiency by 80%
A Malaysian low-cost airline	• AI and analytics • Cloud	• The airline needed a scalable ERP solution to reduce hardware dependence, improve information accessibility, and transition to a fully digital operation. • Tech Mahindra implemented Oracle's ERP Cloud solution, which included Financials and Project Management Cloud as well as Oracle SCM Cloud modules, to meet supply chain requirements, offering Inventory Management Cloud with analytics and Supplier Management.	• Standardized business processes • Improved productivity and decision-making by automation
A Middle East air catering subsidiary	• AI and analytics • Intelligent automation	• The client wanted business intelligence and data warehousing solutions across its functions, with a unified and authoritative single source of truth for better decision-making. • Tech Mahindra implemented a solution using JD Edwards's application portfolio to help automate various functions, including financials, distribution, manufacturing, and planning. It also created a custom aircraft catering module with planning, meal ordering, and daily booking list features.	• Improved the decision-making process • Increased efficiency in the airline catering process
A Europe-based airport operator	• Cloud • Intelligent automation	• The client wanted to enable management and support for various solutions in SAP. Additionally, it wanted to set up a factory-model solution to manage the demands in traffic. • Tech Mahindra provided SAP factory software solutions with established tools and frameworks. It ensured efficient support billing through SAP Hybris Billing and supported planning through SAP Business Planning and Simulation.	• Reduced maintenance costs • Enhanced operational efficiency

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Tech Mahindra: RadarView profile

Analyst insights

Practice maturity	★★★★★

- Tech Mahindra provides value-chain support to the airline and airport (A&A) industry, including airport and on-ground operations. For example, in airlines, it offers a crew management platform, an e-commerce web portal service, and a customs handling platform; for online travel agencies, it supplies network and cybersecurity services and a managed e-commerce service; for airports, it affords a resource management system, intrusion detection solution, and airport information suite; and for back-office support, it provides a revenue accounting solution and supply chain management platform.
- It adopted DigitALL, a change management design thinking approach, to deliver solutions for A&A clients. The digital transformation themes are as follows: Strategy and Design, Digital Customer, Intelligent Core, Digital Insights, Into the NXT, and Responsive Enterprise.
- It focuses on delivering green IT solutions to A&A clients with domain-specific offerings. For instance, its Energy Optimization platform provides condition-based predictive maintenance for aircraft fuel efficiency; its ESG Data Management and Reporting platform offers tools and technologies for sustainability reporting; and its Remote Command Center, which achieves safety and welfare goals for its clients' workers.

Investments and innovation	★★★★

- Tech Mahindra operates a domain-focused AI lab called GenAI Studio to serve various industries, including the A&A industry. It has over 30 pre-built generative AI capabilities across six content forms, which are cloud-agnostic and can be integrated directly with a large language model.
- It operates CoEs that leverage emerging technologies to develop new A&A industry solutions. For example, it operates a dedicated A&A CoE that focuses on applications such as streamlining backend operations, reducing airline costs, and improving process responsiveness.
- In November 2023, it entered into a collaboration deed with NEOM Tech and a Digital Company called TONOMOUS to deliver solutions to increase productivity across the A&A industry value chain, improve profitability, and enhance customer satisfaction.

Partner ecosystem	★★★★

- Tech Mahindra has an industry-specific partnership with Idemia, which provides an identity-related security platform to A&A clients that includes facial recognition and a biometric identification platform for passenger processing at airports. It partners with Veovo, which furnishes platforms such as flight management, resource management, queue management, capacity optimizer, passenger forecasting, and revenue management to streamline airport operations. It also partners with I-Tek, which affords real-time passenger baggage tracking via radio frequency identification as part of airport operations and Genetec, which provides security, operations, and intelligence solutions to secure airports from external threats.
- It has partnered with key cloud providers, including AWS, Microsoft, and IBM, to accelerate digital transformation for A&A clients.

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Unisys: RadarView profile

Practice maturity ★★★

Investments & innovation ★★★

Partner ecosystem ★★

Possesses a strong capability in delivering workplace transformation projects. Focuses on building AI-based industry-specific offerings.

Practice overview

- Practice size: 200
- Active clients: 16
- Delivery highlights: 60+ delivery centers

>$50M	>60%
A&A segment revenue, FY 2023	Digital Revenue share of A&A segment, FY 2023

Industry-specific solutions/offerings

CloudForte®	A multicloud solution to accelerate data and application movement to the cloud for A&A clients
Airport Operations Suite	A portfolio solution that offers integrated services to manage end-to-end operations of an airport
Unisys AirCore®	A solution that enables airlines to optimize their sales and customer service across the passenger journey
Airport Passenger Facilitation Suite	A portfolio solution that helps manage passenger flow at the airport, reducing wait times

Sample clients

- A Europe-based airline
- An Australia-based airport
- Air France-KLM
- Board of Airline Representatives of Australia (BARA)
- Guangzhou Baiyun International Airport
- Turkish Airlines

Partnerships/alliances

aws	Leveraged its cloud platform to deliver IT modernization projects for A&A clients		Utilized its cloud platform to accelerate digital transformation for A&A clients
DELL	Partnered to optimize and secure data centers for A&A clients leveraging cloud solutions	Lenovo	Utilized a business application suite to enhance the workplace efficiency of A&A clients
Microsoft	Leveraged its cloud-native app to codevelop solutions for A&A clients	servicenow	Used its enterprise cloud platform to offer an application service suite for airport clients
JRTechnologies	Codeveloped solutions to manage distribution and fulfillment for airline retailing	nallian	Partnered to provide real-time insights into the ground handling operations at the airport

Service line coverage

Pre-travel customer experience
Post-travel customer experience
Airline operations
Airport operations
Property operations
Marketing and sales
On-ground services

Darker color indicates higher industry concentration: ○○○●

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Unisys: RadarView profile

Case studies

Client	Capability	Summary	Business impact
AIRFRANCEKLM GROUP	• AI and analytics • AR/VR • Cloud	• The client wanted to enhance its workplace and services to better serve customers, expanding its market share eventually. • Unisys deployed its AI-enabled Next-Generation Service Desk and AR-enabled Unisys Frontline Field Services to offer maintenance and support for in-house devices through the on-site tech team. Additionally, it deployed the cloud-based Unisys ClearPath® Solution to enhance the cost-effectiveness of the IT infrastructure.	• Enhanced customer experience • Improved operational efficiency by modernizing the workplace
BARA Board of Airline Representatives of Australia Inc. The leading voice of airlines	• Cloud	• The client sought to comply with the Aviation Security Act's regulations, ensuring efficient baggage reconciliation during travel. • To that end, Unisys implemented managed services, network infrastructure, security architecture, handheld scanners, and desk support through its cloud-based advanced baggage reconciliation solution.	• Improved security and operational efficiency without affecting passenger flow • Reduced cost and streamlined passenger service
A Europe-based airline	• Cloud	• The client aimed to modernize its legacy IT infrastructure to align with evolving business needs and enhance customer experience by improving services. • Unisys leveraged its cloud-based Unisys ClearPath platform, incorporating the Unisys Standard Airline System (USAS) application. This integrated solution provided infrastructure support and help desk as a managed service, effectively optimizing essential passenger services.	• Ensured high service availability to improve customer experience • Enhanced IT infrastructure scalability
BAIYUNPORT	• AI and analytics • Intelligent automation	• The client wanted real-time flight information and reliable baggage services at the new airport, ensuring a smooth transition of operations from the old one. • Unisys deployed an integrated information management system for optimizing baggage services and analytics-based daily flight operational metrics. It provided an automatic failover process, ensuring continuity and avoiding business disruptions.	• Improved operational efficiency by ensuring on-time flight departure • Reduced operational costs by modernizing the airport application

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Unisys: RadarView profile

Practice maturity ★★★

- Unisys caters to a global A&A client base with a robust array of digital solutions utilizing AI, cloud technology, and data analytics. For instance, it implemented the Check-In Assistance solution at Turkish Airlines to streamline check-in processes, expedite staff onboarding, and enhance agent satisfaction. Additionally, it helped multiple Australian airports manage and optimize networking infrastructure, security architecture, and end-user management.
- It delivers innovative solutions to elevate customer experiences across digital touchpoints. It offers Unisys AirCore solutions to multiple airline clients to manage and optimize ticketing, reservations, and inventory services efficiently. Additionally, it aligns with the ONE Order standard, ensuring standardized order records.
- It prioritizes sustainability, enabling various clients, including A&A clients, to achieve their net-zero target. Unisys provides diverse solutions, including the ESG Orchestration Manager solution, which comprehensively overviews the supplier landscape and associated risks with intelligent risk-scoring features to mitigate them.

Investments and innovation ★★★

- Unisys operates multiple innovation labs to broaden its offerings of AI-enabled solutions across diverse industries, including the A&A sector. Using generative AI capabilities, it has developed a POC to streamline the shipment booking process for nonstandard goods. It aims to facilitate the necessary certifications and approvals for shipping such goods using generative AI. The POC will be instrumental in developing AI-based solutions for passenger flights.
- To serve clients, including those in the A&A sector, the company prioritizes enhancing cloud and digital workplace capabilities through strategic acquisitions. In December 2021, it acquired CompuGain to bolster application modernization and cloud-native agile application development expertise. It acquired Mobinergy (November 2021) and Unify Square (June 2021) to transform traditional workplaces into experience-focused digital environments.

Partner ecosystem ★★

- To complement its strong domain skills, Unisys has a robust ecosystem of industry-specific partners. For instance, it has partnered with JR Technologies to combine its offer management system with Unisys AirCore Order Manager™ solution to meet the New Distribution Capability (NDC) needs of A&A clients. It has partnered with Nallian to provide real-time information on fleet and goods movement at the airport.
- Unisys has partnered with hyperscalers to enhance its cloud services capabilities. It has partnered with AWS to leverage cloud-native applications to modernize IT applications for A&A clients. It has collaborated with Google Cloud to utilize its cloud platform to deliver data center and IT infrastructure migration projects for airport clients. Additionally, its partnership with Microsoft focuses on utilizing Azure cloud-native applications to codevelop solutions for A&A clients.

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Wipro: RadarView profile

AVASANT RADARVIEW™ LEADER
Airlines and Airports Digital Services 2024

Practice maturity ★★★★★

Investments & innovation ★★★★★

Partner ecosystem ★★★★★

Offers bundled services leveraging AI and analytics. Focuses on expanding its services across new geographic regions.

Practice overview

- Practice size: 5,000+ (across the travel and transportation domain)
- Active clients: N/A
- Delivery highlights: 146+ delivery centers

~$11B	46
Revenue from IT services in FY 2023	Automation platforms and accelerators

Industry-specific solutions/offerings

CROAMIS ULD management	A solution to manage and track airplane cargo
TOPS	A solution to manage and streamline airline and crew operations to maximize profitability
Smart i-Airport	A solution to manage airport operations, including baggage, ground fleet, and passenger flow
Wipro Way2Go	A solution that simplifies the corporate travel experience through self-service booking tools

Sample clients

- A US-based airport
- A US-based airline
- A Canada-based airport
- An APAC region airline
- Aéroports de Montréal
- Greater Toronto Airports Authority

Partnerships/alliances

Adobe — Partnered to deliver integrated solutions using commerce and analytics solutions for A&A clients

Five9 — Collaborated to offer cloud contact center as a service and BPO as a service to A&A clients

Microsoft — Partnered to leverage its cloud-native app to deliver IT modernization projects

SITA — Teamed up to deliver airport collaborative decision-making (A-CDM) solutions for A&A clients

aws — Utilized its cloud platform to deliver cloud migration projects for data centers for airport clients

Google Cloud — Partnered to jointly deliver application modernization and cloud migration services

CISCO — Collaborated to jointly deliver a digital signage platform VisionEDGE to assist customers at the airport

salesforce — Utilized a cloud-based automation platform to optimize business processes for airline clients

Service line coverage

| Pre-travel customer experience |
| Post-travel customer experience |
| Airline operations |
| Airport operations |
| Property operations |
| Marketing and sales |
| On-ground services |

Darker color indicates higher industry concentration: ●●●●

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Wipro: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A US-based airport	• Intelligent automation • IoT	• The client wanted to improve the passenger experience at airport boarding and transit gates by addressing issues such as the lack of real-time visibility into shuttle movements. • Wipro implemented the automated Smart i-Connect™ platform at the airport, facilitating real-time vehicle location tracking through geo-mapping, route optimization, geo-fencing, and integration with other airport applications.	• Increased operational efficiency by 15% • Improved resource planning
Toronto Pearson	• AI and analytics • Cloud	• The client wanted a solution to streamline its IT infrastructure and enhance customer experience across its vast network. • Wipro implemented a unified platform integrating multiple airport operations, including check-in, baggage handling, and ramp management, and migrated IT infrastructure to the cloud. It also implemented AI-enabled solutions for predictive maintenance of ground support equipment.	• Reduction in turnaround times • Improvement in operational efficiency
ADM Aéroports de Montréal	• AI and analytics • Intelligent automation	• The client wanted to enhance its IT infrastructure to improve performance and increase efficiency. • Wipro leveraged the HOLMES® automation platform to optimize processes, digitize legacy applications, integrate monitoring tools with AI bots, and implement hyperautomation, reducing manual work in the IT ecosystem.	• Improved operational efficiency and profitability • Reduced IT downtime by 50%
An APAC region airline	• AI and analytics	• The client wanted to enhance its customer service unit by improving credit card IVR processing, chat capabilities, and speech analytics. • Wipro enabled process standardization of digital and multichannel platforms and inventory migration. It also incorporated intelligent scripts to enhance speech analytics and improve tracking and closure processes.	• Improved operational efficiency • Reduced training timelines by 40%

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Wipro: RadarView profile

Analyst insights

Practice maturity	★★★★★

- Wipro has a strong portfolio of clients in the A&A industry. For instance, it helped a Middle East-based airline transform IT and operational technologies infrastructure by implementing an ITSM-based service management framework and integrating a service desk that covered IT and OT systems across multiple terminals. It helped the Greater Toronto Airports Authority overhaul its IT infrastructure to deliver real-time operational insights using the Wipro HOLMES solution, enhancing the airport's core operations.
- To streamline the varied operations of airport clients, Wipro provides an extensive suite of end-to-end solutions with diverse capabilities. It offers Smart-i-Airport solutions with features such as a virtual queue management system for remote passenger queuing, asset management for overseeing airport assets such as hydraulic lifts and power cleaners, and a digital twin that simulates airport operations through a virtual replica.
- Wipro offers services to reduce carbon footprint in diverse industries, including the A&A industry, focusing on net-zero facilities, green data storage, and eco-friendly product strategies for sustainability.

Investments and innovation	★★★★★

- In August 2023, Wipro partnered with the Indian Institute of Technology Delhi to establish a CoE for generative AI to enhance its capabilities in delivering AI and analytics solutions across various industries, including the A&A sector. The CoE will focus on collaborative research, exploring use cases of generative AI and fostering talent development in this technology.
- Wipro has strengthened its cybersecurity capabilities through strategic acquisitions to aid clients from different sectors, including the A&A sector. In December 2021, it acquired Edgile to improve its cloud security, risk and compliance, and digital identity services. In April 2021, it acquired Ampion to enhance its cybersecurity offerings in Australia and New Zealand.

Partner ecosystem	★★★★★

- Wipro has partnered with industry-specific technology companies to enhance its digital capabilities in the A&A industry. For instance, it partnered with SITA to offer an airport collaborative decision-making (A-CDM) solution, facilitating improved real-time data sharing among airport stakeholders for increased efficiency. It partnered with Five9 to deliver a cloud-based contact center to airline clients, offering automation and AI-enabled features.
- To strengthen its offerings in the cloud, it has partnered with hyperscalers such as AWS to deliver modernized data centers for using cloud platforms, Google Cloud to help modernize IT applications using cloud-native applications for airline clients, and Microsoft to help deliver cloud migration projects for A&A clients.
- It has partnered with Adobe to leverage its analytics and commerce platforms to accelerate the digital transformation of A&A clients.

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WNS: RadarView profile

WNS

AVASANT RADARVIEW™

DISRUPTOR

Airlines and Airports Digital Services 2024

Practice maturity ★★★

Investments & innovation ★★★

Partner ecosystem ★★★

Leverages industry-specific portfolio of solutions to drive digital transformation engagement for clients. Focuses on building analytics-based solutions.

Practice overview

- Practice size: N/A
- Active clients: 35+ airline clients
- Delivery highlights: 66 delivery centers

$1.2B	10.3%
Annual revenue, FY 2023	YOY annual revenue growth in FY 2023

Industry-specific solutions/offerings

TravXP	A solution to help airline clients cater to customer requirements, including booking, refund, and helpdesk
TravOps	A solution to streamline A&A operations, including fulfillment support and shared services
TravRev	A solution to help clients manage and optimize revenue and inventory
TravControl	A solution to help A&A clients with financial controllership and support risk management

Sample clients

- A Chicago-based airline
- A France-based airline
- A global airline
- A globally operated airline
- A UK-based airline
- A UK-based global airline
- A US-based airline
- A US-headquartered airline

Partnerships/alliances

AUTOMATION ANYWHERE	Partnered to integrate task-based automation with cognitive capability for A&A clients	Google Cloud	Leveraged its cloud platform to accelerate the digital transformation of A&A clients
aws	Used its cloud platform to develop intelligent cloud data management services for A&A clients	uniphore	Utilized its AI and automation capabilities to offer the WNS EXPIRIUS solution to A&A clients
Microsoft	Leveraged the Azure OpenAI platform to enhance generative AI solutions for A&A clients	WNS DATATURF.ai	Leveraged its AI-based data management solution to enable A&A clients for insights delivery
NICE	Used its AI-based self-service and agent-assisted CX solution for A&A contact centers	UiPath	Utilized its intelligent automation platform to provide digital solutions to A&A clients

Darker color indicates higher industry concentration: ○ ○ ● ●

Service line coverage

| Pre-travel customer experience |
| Post-travel customer experience |
| Airline operations |
| Airport operations |
| Property operations |
| Marketing and sales |
| On-ground services |

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WNS: RadarView profile

Case studies

Client	Capability	Summary	Business impact
A US-based airline	• AI and analytics	• The client wanted to improve its chat process and establish a robust procedure with quality dashboards. • WNS utilized the analytics-based TravXP solution to improve the chat process. It also introduced a quality management system to ensure compliance with best practices.	• Achieved a calibration score of 82% • Enhanced customer experience
A UK-based global airline	• Intelligent automation	• The client wanted to implement automation solutions to enhance operational efficiencies and reduce claims processing and closure time. • WNS developed optimized future processes and selected a third-party RPA platform. Subsequently, it created and implemented bots to boost speed and agility, ensuring enhanced productivity and accuracy and expediting the refund process.	• Improved claim processing quality by over 90% • Increased productivity by about 30%
A global airline	• AI and analytics • Cloud • Intelligent automation	• The client faced challenges in identifying problem areas that hindered its ability to enhance revenue and gain a larger market share. • WNS utilized its cloud-based Commercial Planning Suite to provide a comprehensive view across crucial commercial areas, facilitating trend and root cause analysis while generating insights. The suite leveraged analytics to create dashboards covering passenger and ancillary revenue streams.	• Improved employee productivity by about 20% • Recovered revenue leakage of $12M
A globally operated airline	• Intelligent automation • Cloud	• The client wanted to simplify, standardize, and centralize billing transactions across multiple locations. • WNS implemented its EnABLE methodology and a three-tier governance structure to ensure the client's transition from business- and country-specific operations to standardized processes. It created an updated passenger revenue accounting system, incorporating a revised operating model.	• Increased productivity by 30% • Improved operational efficiency

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WNS: RadarView profile

Analyst insights

Practice maturity ★★★

- WNS has strong experience delivering innovative solutions to key clients in the A&A industry. It helped a US-headquartered airline reduce its customer wait times and complaints by training resources on the WorldTracer platform. It also helped an Australia-based airline consolidate its payment data and track records by enabling early, on-time, and late payment analytics. It enabled a Europe-based airline to transform its passenger revenue accounting (PRA) system by deploying a PRA CoE framework.
- It serves A&A clients by providing solutions through the WNS TRAVOGUE suite. This suite comprises services such as TravXP for enhancing the customer experience, TravOps for enabling complete airline operations, TravRev for effective airline revenue management, and TravControl for offering intelligent audit and revenue accounting services.
- To minimize the environmental impact, WNS offers the TravGreen solution. This solution aims to decrease dependency on fossil fuels, evaluate historical records on carbon reduction, forecast future environmental impacts, and develop strategies for reducing the carbon footprint in daily operations.

Investments and innovation ★★★

- WNS strengthens its analytics and automation capabilities by making strategic acquisitions to serve its diverse client base. In December 2023, it acquired The Smart Cube, and in December 2022, it acquired OptiBuy to enhance its analytics-based digital capabilities in the supply chain. In July 2022, it acquired Vuram to enhance its enterprise automation capabilities to deliver digital solutions.
- To drive customer experience and enhance its analytics capabilities for various industries, including A&A, WNS operates multiple CoEs. It operates dedicated customer experience CoEs to ensure best practices, research, and training to enhance customer experience by leveraging solutions such as WNS EXPIRIUS. It also operates the WNS Triangle CoE to deliver data-driven transformation for its broad range of clients, including A&A clients.

Partner ecosystem ★★★

- WNS has partnered with niche players to provide innovative solutions to A&A clients. It has partnered with NICE to leverage its AI-based self-service CX solution to transform contact centers for A&A clients. It has partnered with EvoluteIQ to leverage its automation platform to deliver process automation solutions to accelerate digital transformation for diverse clients, including A&A clients. It has also partnered with Uniphore to leverage its AI and automation capabilities to enhance the WNS EXPIRIUS solution for improved customer experience.
- It has also established partnerships with cloud platform providers such as AWS to provide a platform to deliver intelligent cloud data management services and Microsoft to leverage Azure's generative AI capabilities to deliver AI-based solutions.

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Appendix:
About RadarView

Airlines and Airports Digital Services 2024 RadarView assesses providers across three critical dimensions

Practice maturity

- This dimension evaluates the type, market acceptance, and quality of offerings in the airline and airport space. It also assesses the strength of the overall practice with respect to its size, certified employees, embedded expertise in emerging technologies, and value chain coverage.
- The width and depth of the client base, practice revenues, the use of proprietary/outsourced tools and platforms, and future strategy are important factors that contribute to this dimension.

Investments and innovation

- This dimension measures the strategic direction of investments and resultant innovations in the offerings and commercial model and how these align with the future direction of the industry.
- The overall strategic investments, both organic and inorganic, in capability and growth, technology development, and human capital development, along with the innovations that the service provider develops, are critical aspects of this dimension.

Partner ecosystem

- This dimension assesses the nature of the provider's partnerships and ecosystem engagement. It evaluates the partnerships' objective (codevelopment or co-innovation) and the provider's engagement with technology solutions or product providers, startup communities, and domain associations.
- The kind of joint development programs around offerings, go-to-market approaches, the overall depth of partnerships, and their leverage to deliver superior value to clients are this dimension's important aspects.

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Research methodology and coverage

Avasant has based its analysis on several sources:

Public disclosures	Publicly available information from sources such as Securities and Exchange Commission filings, annual reports, quarterly earnings calls, and executive interviews and statements
Market interactions	Discussions with enterprise executives leading digital initiatives and influencing service provider selection and engagement
Provider inputs	Inputs collected through the service provider capability decks and structured briefings from November 2023 to December 2023

Of the 39 service providers assessed, the following are the final 22 featured in the Airlines and Airports Digital Services 2024 RadarView:

accenture   Atos   Capgemini   Coforge

cognizant   DXC TECHNOLOGY   FUJITSU   HCLTech

HEXAWARE   IBM   Infosys   ITC INFOTECH Business-friendly Solutions

kyndryl   LTIMindtree   Mphasis The Next Applied   WNS

Softtek   SUTHERLAND   tcs TATA CONSULTANCY SERVICES   TECH mahindra

unisys   wipro

Note: Assessments for Accenture, Atos, Capgemini, Cognizant, Fujitsu, Hexaware, ITC Infotech, Mphasis, Softtek, TCS, Unisys, Wipro, and WNS were conducted based on public disclosures and market interactions only.

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Reading the RadarView

Avasant has recognized service providers in four classifications:

LEADER — Airlines and Airports Digital Services 2024

Leaders show consistent excellence across all key dimensions of the RadarView assessment (practice maturity, investments and innovation, and partner ecosystem) and have had a superior impact on the market as a whole. These service providers have shown true creativity and innovation and have established trends and best practices for the industry. They have proven their commitment to the industry and are recognized as thought leaders, setting the standard for the rest of the industry to follow. Leaders display a superior quality of execution and a reliable depth and breadth across verticals.

INNOVATOR — Airlines and Airports Digital Services 2024

Innovators show a penchant for reinventing concepts and avenues, changing the very nature of how things are done from the ground up. Unlike leaders, innovators have chosen to dominate in a few select areas or industries and distinguish themselves through superior innovation. These radicals are always hungry to create pioneering advancements in the industry and are actively sought after as trailblazers, redefining the rules of the game.

DISRUPTOR — Airlines and Airports Digital Services 2024

Disruptors enjoy inverting established norms and developing novel approaches that invigorate the industry. These service providers choose to have a razor-sharp focus on a few specific areas and address those at a high level of granularity and commitment, which results in tectonic shifts. While disruptors might not have the consistent depth and breadth across many verticals like leaders or the innovation capabilities of innovators, they exhibit superior capabilities in their areas of focus.

CHALLENGER — Airlines and Airports Digital Services 2024

Challengers strive to break the mold and develop groundbreaking techniques, technologies, and methodologies on their way to establishing a unique position. While they may not have the scale of the service providers in other categories, challengers are eager and nimble and use their high speed of execution to great effect as they scale heights in the industry. Challengers have a track record of delivering quality projects for their most demanding Global 2000 clients. In select areas and industries, challengers might have capabilities that match or exceed those of the providers in other categories.

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AVASANT

Key contacts

Amar Verma
Senior Analyst
amar.verma@avasant.com

Amitesh Chawla
Lead Analyst
amitesh.chawla@avasant.com

Jay Weinstein
Avasant Fellow
jay.weinstein@avasant.com

Praveen Kona
Associate Research Director
praveen.kona@avasant.com

Rakesh Patro
Partner
rakesh.patro@avasant.com

Swapnil Bhatnagar
Partner
swapnil.bhatnagar@avasant.com

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