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Freight and Logistics Digital Services 2024 RadarView™

Powering the next generation of freight and logistics with innovative technology August 2024

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## About the Freight and Logistics Digital Services 2024 RadarView



Service providers are accelerating digital transformation in the freight and logistics industry through digital platforms for real-time shipment tracking while improving operational efficiency and customer service through automation and data analytics. They are also investing in digital commerce platforms, decarbonization initiatives, and generative AI to optimize operations, enhance sustainability, and integrate end-to-end logistics services.



Avasant evaluated 32 service providers using a rigorous methodology across the key dimensions of practice maturity, investments and innovation, and partner ecosystem. Through our analysis, we recognized 15 providers that brought the most value to the market over the past 12 months.



The *Freight and Logistics Digital Services 2024 RadarView* aims to provide an in-depth capability assessment of the leading service providers for the freight and logistics industry. Based on our methodology, we have categorized the service providers into four broad segments: leaders, innovators, disruptors, and challengers.



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 and 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 defined in the second point.





## Executive summary

## Freight and Logistics Digital Services: Scope

This study focuses on digital services delivered to B2B enterprise customers across the below-listed industry segments.

Sub-industries	Description	Enterprise examples
Logistics services	<ul> <li>Companies that provide inbound and outbound transportation, fleet management, warehousing, and third-party logistics.</li> </ul>	<b>DB</b> Cargo
Air and express delivery services	<ul> <li>Companies that offer expedited, time-sensitive, end-to-end services for parcels or cargo transportation via airways.</li> </ul>	WORLDWIDE
Freight rail	<ul> <li>Companies that offer long-distance transportation of high volumes of cargo through networks of railroads and trains.</li> </ul>	NetworkRail
Maritime	<ul> <li>Companies that move cargo by water through carriers, seaports, and terminals.</li> </ul>	MAERSK amazon
Trucking	<ul> <li>Companies that provide over-the-road cargo transportation through motor vehicles such as trucks.</li> </ul>	CSX FedEx

**Digital services definition:** Digital services accelerate digital transformation using emerging technologies such as AI and analytics, blockchain, cloud, cybersecurity, IA, and IoT across the high-tech value chain. This study will assess service provider offerings in advisory and consulting, PoC development, building and testing, implementation, system integration, and development and maintenance.

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

Inbound logistics	Operations/ warehousing	<b>Outbound logistics</b>	Marketing and sales	Customer service



Avasant recognizes 15 top-tier service providers supporting the freight and logistics industry in digital transformation



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

## Provider comparison (1/2)

Service provider	Practice maturity	Investments and innovation	Partner ecosystem	Key highlights
accenture	****	****	****	Delivers digital operations solutions to air cargo carriers. Is strengthening its digital services to freight and logistics customers through active acquisitions.
Capgemini	****	****	****	Forms industry partnerships with supply chain and logistics companies to deliver connected logistics to trucking enterprises.
Coforge	***	**	***	Delivers cargo operations to freight handlers to enable shipment visibility using its pool of proprietary industry-specific solutions.
Cognizant	****	*****	****	Delivers digital operations solutions to shipping and transportation companies. Leverages Gen AI to build freight and logistics-focused solutions.
EVIDEN	***	****	***	Codevelops decarbonization and operations optimization solutions for logistics organizations in collaboration with startup technology companies.
FUJITSU	***	** .	***	Delivers data management and data analytics solutions to logistics customers. Develops data-driven transformation solutions through partner collaborations.
<b>HCLTech</b>	****	****	****	Delivers digital operations leveraging its proprietary solutions. Codevelops and innovates in the logistics industry utilizing its wide partner ecosystem.
IBM	****	***	***	Combines AI and automation capabilities with hybrid cloud to deliver proprietary offerings to logistics customers.

## Provider comparison (2/2)

Service provider	Practice maturity	Investments and innovation	Partner ecosystem	Key highlights
Infosys®	****	****	****	Utilizes partner platform capabilities to deliver automation services to ocean, freight, and logistics companies.
kyndryl	****	**	**	Delivers IT infrastructure services through cloud modernization and migration by collaborating with cloud providers.
C LTIMindtree	****	***	****	Provides legacy modernization and cloud migration services to logistics customers through its solutions and partner ecosystem.
CONSULTANCY SERVICES	****	****	****	Delivers smart logistics solutions to logistics enterprises, focusing on parcel and postal services, by leveraging its pool of industry-specific solutions.
Tech Mahindra	****	****	****	Delivers digital solutions to freight rail and maritime segments leveraging its wide and niche domain partner ecosystem and industry solutions.
UNISYS	***	****	****	Delivers air cargo solutions leveraging its proprietary domain offerings and through its industry-specific partner ecosystem.
wipro	****	****	****	Invests in AI, data, and analytics solutions. Delivers the solutions through collaboration with domain companies and by leveraging its proprietary offerings.



## Supply-side trends

# Service providers are using emerging technologies such as AI, automation, digital twin, and IoT to enable digital transformation in the freight and logistics industry (1/2)

Service providers are transforming the manufacturing industry by adopting digital technologies to enhance innovation, bolster supply chain resilience, deploy smart factory solutions, provide real-time insights and process visibility, optimize aftermarket services, and achieve sustainability objectives. The capability analysis of 15 service providers has revealed compelling trends and insights, as shared below.

#### Enterprise focus

#### Service provider initiatives

- Enhancing real-time visibility and tracking
- **Ninety-three percent** of the service providers are implementing advanced digital platforms that offer real-time visibility and tracking of shipments.
- **Forty percent** of service providers are delivering supply chain solutions and services to enhance operational efficiency, reduce costs, improve visibility, and provide better customer service by leveraging automation, data analytics, and real-time tracking.

#### Examples\*



Capgemini

Infosys<sup>®</sup>

Streamlining operations through digital commerce platforms

- **Twenty-seven percent** of the service providers are delivering digital commerce platforms to help freight and logistics enterprises deliver omnichannel experiences.
- They are delivering digital commerce and freight marketplaces to automate freight booking, improve transparency in pricing and service options, and efficiently connect shippers with carriers for optimized logistics management.

Adopting green technologies and practices

- **Sixty percent** of the service providers are deploying decarbonization solutions using a data-driven approach to enhance efficiency, productivity, and profitability.
- They are optimizing routes for fuel savings and enhancing supply chain sustainability through eco-friendly operations and technologies.

Cognizant kyndryl accenture

tors consultancy services

**HCLTech** 

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\*Logos used in the boxes 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 15 service providers on specific solutions/offerings/IPs in the freight and logistics space.

# Service providers are using emerging technologies such as AI, automation, digital twin, and IoT to enable digital transformation in the freight and logistics industry (2/2)

Service providers are transforming the manufacturing industry by adopting digital technologies to enhance innovation, bolster supply chain resilience, deploy smart factory solutions, provide real-time insights and process visibility, optimize aftermarket services, and achieve sustainability objectives. The capability analysis of **15 service providers** has revealed compelling trends and insights, as shared below.

#### Enterprise focus

Service provider initiatives

- Optimizing routes and enhancing decision-making
- **Thirty-three percent** of the service providers are leveraging data to drive insights and optimize processes for informed decision-making.
- **Sixty percent** of service providers are using data analytics and big data to enhance decision-making and improve overall processes.



Capgemini () wipro)

Infosys Cognizant

**HCLTech** accenture

Delivering end-toend logistics services

> Leveraging automation and generative Al

- **Sixty percent** of the service providers are making acquisitions to enhance their capabilities, enabling freight and logistics companies to offer integrated end-to-end logistics services by expanding their technology, expertise, and operational reach.
  - They are acquiring companies to enhance capabilities in providing asset management, automation, and data-driven solutions.
- All service providers are deploying automation for transport management, warehouse operations, inventory control, and order fulfillment to reduce manual intervention, minimize errors, and enhance supply chain efficiency and cost-effectiveness.
- **Sixty percent** of the service providers are using generative AI to create PoCs for optimizing inventory and warehouse operations and are developing use cases for fleet management, yard planning, and freight management.

Coforge kyndryl.

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\*Logos used in the boxes 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 15 service providers on specific solutions/offerings/IPs in the freight and logistics space.

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## Service provider profiles

## Accenture: RadarView profile

>	Practice overview	Industry-specific solution	ons/offerings	Sample clients
accenture	<ul> <li>Practice size: N/A</li> <li>Active clients: N/A</li> <li>Delivery highlights: 100+ delivery</li> </ul>	Connected Ports	A centralized port operations system to track the availability and real-time performance of key equipment	<ul> <li>Air France KLM Martinair Cargo</li> <li>DHL</li> </ul>
AVASANI RADARVIEW™	centers worldwide	Logistics control tower	An integrated logistics solution that provides real-time visibility into operations	<ul> <li>Imperial Logistics</li> <li>Indonesia Port Corporation</li> </ul>
Freight and Logistics Digital Services 2024	USD 6.3B Revenue from industrial, including freight and logistics, FY 2023 VOY revenue growth for the industrial vertical, FY 2023	Ocean Cargo Accenture Logistics Platform	An automated software to improve billing processes for ocean cargo carriers A demand forecasting and dynamic route optimization platform to transform last mile delivery model	<ul> <li>Nippon Express</li> <li>Poste Italiane</li> <li>Werner Enterprises</li> <li>A US freight transportation company</li> </ul>
Practice maturity $\star \star \star \star$				
Investments and	Partnerships/alliances			Service line coverage
innovation Partner ecosystem $\star \star \star \star$	Built the Connected Google Cloud leveraging its cloud deliver centralized p	Ports solution platform to ort systems	Leveraged its financial solution to provide efficient and data-driven reporting to logistics customers	Inbound logistics
Delivers digital operation	Partnered to develo based logistics oper optimization platfor	ations	Implemented its enterprise software to streamline and automate logistics processes	Operations/warehousing
carriers. Is strengthening i	Leveraged its cloud	technologies	Utilized its supply chain cloud	Outbound logistics
digital services to freight	ORACLE to deliver interconne intelligent supply ch	ected and ain networks	solutions to deliver improved customer experience	Marketing and sales
through active acquisition	Developed connect Chain solutions joint supply chain platfor	ed supply y, using its n	Used Azure platform to create a digital twin of the supply chain for deliveries and logistics operations	Customer service

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## Accenture: RadarView profile

Client	Capability	Summary	Business impact
A US freight transportation company	<ul> <li>Analytics</li> </ul>	<ul> <li>The client wanted to execute digital transformation for its linear asset management operations.</li> <li>Accenture developed a blueprint to transform the reactive asset maintenance approach to predictive maintenance for its assets. It also helped combine the geographic information system, measurement system, and train control system with the SAP Intelligent Asset Management and linear asset management software.</li> </ul>	<ul> <li>Provided easy-to-read visual insights and dashboards for asset accounting, budget control, maintenance operations, materials management, and asset life cycle management</li> </ul>
	<ul><li>Analytics</li><li>Automation</li><li>Blockchain</li></ul>	<ul> <li>Imperial Logistics wanted to enhance its supply chain control tower (SCCT) capabilities to expand its market reach and unlock new revenue.</li> <li>Accenture provided an SCCT SaaS solution that enabled tailoring solutions to the customer's specific needs. It used its supply chain method to accelerate SCCT customer onboarding. It also provided a dynamic risk assessment capability that used blockchain for integrated visibility. It used predictive analytics and automation to align the supply chain with stores.</li> </ul>	<ul> <li>Enabled scheduling and optimization across everything from planning to fulfillment</li> <li>Provided greater oversight and traceability</li> <li>Minimized human errors and transactional tasks</li> </ul>
WERNER	<ul><li>Automation</li><li>Cloud</li></ul>	<ul> <li>Werner Enterprises wanted to modernize its trucking management system and improve its processes across human resources, finance, asset management, supply chain, and reporting.</li> <li>Accenture implemented Workday Financials solution, a digitized cloud-based system, to establish a blueprint to provide time savings, real-time reporting, and increased automation.</li> </ul>	<ul> <li>Reduced report creation time from 5-7 days to about 20 minutes</li> </ul>
<b>Poste</b> italiane	<ul><li>Automation</li><li>Cloud</li></ul>	<ul> <li>Poste Italiane wanted to consolidate accounting data on SAP S/4HANA by creating a centralized process controlling model on Microsoft Azure.</li> <li>Accenture provided governance, accounting, finance, and technology architecture for the project. It ran simulations for the main business processes before the solution was deployed across 300 new functions.</li> </ul>	<ul> <li>Provided flexible data management and reporting</li> <li>Automated 70% of control processes</li> <li>Led to annual business savings of EUR 2M</li> </ul>

## Accenture: RadarView profile

### Analyst insights

#### Practice maturity

 Accenture has experience delivering digital operations to its customers in the air cargo industry. In 2019, it launched Accenture's Freight and Logistics Software (AFLS) Exchange platform in collaboration with Air France KLM Martinair Cargo, delivering quicker partner network integration. In 2023, Accenture Federal Services also won a digital transformation deal worth USD 25M to modernize operations for the Air Force Sustainment Center, including its three Air Logistics Complexes, by creating an industrial IoT enterprise platform for automation, using cloud, edge computing, and IoT technologies.

- It enhances sustainable supply chains by improving operational efficiency and customer experience for its logistics customers. To bolster its capabilities, in January 2024, it acquired OnProcess Technology, which specializes in reverse logistics and circular operations through automation, AI, and data-led decisions.
- It has logistics and warehouse management expertise, which it delivers to its freight and logistics customers through its industry-specific solutions such as connected ports and logistics control tower. This was further strengthened when it acquired MacGregor Partners in 2022, adding to its supply chain network and fulfillment transformation capabilities.

#### Investments and innovation

- Accenture continues to invest in strengthening its technology and digital engineering capabilities in Japan. In May 2024, it agreed to acquire OPENSTREAM Holdings and its subsidiaries, Open Stream and Neutral, to strengthen its cloud, AI, and smart logistics capabilities. It also established a joint venture with Mujin, called Accenture Alpha Automation, to help manufacturing and logistics companies automate management infrastructure with data-driven solutions.
- It expands its logistics capabilities through acquisitions. In March 2024, it acquired Flo Group to help customers design and manage logistics platforms. It also acquired Einr AS in 2023 to deliver logistics solutions using SAP technologies.
- It has a rail and transit CoE with 1,500 experts to optimize rail operations, manage resources, and ensure connectivity using next-generation technology.

#### Partner ecosystem

- Accenture is enhancing its suite of over 50 intelligent supply chain solutions by integrating Microsoft Copilot and Supply Chain Center. For example, Accenture's logistics control tower has transformed to interpret unstructured data from news alerts to forecast delays and suggest inventory reallocation.
- It has a strong partnership with Blue Yonder in delivering supply chain transformation solutions for various industries, including freight and logistics. It also leverages its supply chain platform in co-developing industry-specific connected supply chain solutions.
- It partners with cloud providers such as Google Cloud Platform, Microsoft Azure, and Oracle to deliver supply chain transformation solutions to freight and logistics customers.

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## Capgemini: RadarView profile

Conconsisti	Practice overview		Industry-specific solutions/offerings			Sample clients
Capyerviru	<ul> <li>Practice size: 5,000+</li> <li>Active clients: N/A</li> <li>Delivery highlights: 13 research</li> </ul>		Supply chai tower	n control	A technology-enabled platform to deliver transparency and real-time insights on current shipment status	<ul> <li>A freight railroad company</li> <li>A French postal and</li> </ul>
AVASANI RADARVIEW™	labs, innova worldwide	ation labs, and CoEs	Lucas DOM		A central platform that provides a holistic view of items in inventory/shipment in real time	<ul><li>parcel service</li><li>A global logistics company</li></ul>
Freight and Logistics Digital Services	\$500M-\$	1B >60%	XIoT		An IoT platform to collect and analyze data in real time to deliver insights for product usage	<ul><li> A global logistics and supply chain company</li><li> Hellmann</li></ul>
2024	Revenue from fre and logistics, FY 2	ight 2023 Digital revenue share from freight and logistics, FY 2023	Predictive a maintenanc	sset e	A solution to monitor assets and analyze data for prediction of machine failure or maintenance	<ul><li>FedEx</li><li>DB Schenker</li></ul>
Practice maturity $\star \star \star \star$	Destaurali	/_ll'				
Investments and	Partnerships/	alliances				Service line coverage
innovation Partner ecosystem	IBM	Utilized its services to d multicloud and hybrid o environments with Al so	eploy cloud olutions	III I wisetech ' ıl ' global	Used its CargoWise One TMS to transform business processes for air and sea operations	Inbound logistics
Forms industry	intel.	Leveraged its connecte platform to deliver real- shipment tracking and	d logistics time monitorina	aws	Utilized its cloud platform to deploy physical shipment monitoring dashboards	Operations/warehousing
chain and logistics	Klarys.	Used its eProcurement digitize processes for o	platform to perational	SAP	Developed the SAP BRIM solution on S/4HANA for subscription-	Outbound logistics
	-	efficiency and data relia	ability		based services in real time	Marketing and sales
trucking enterprises.	ति, OneRail	Utilized its omnichanne solution to provide logi service	l fulfillment stics as a	🙆 Google Clou	Leveraged its platform to deliver d cloud migration to its logistics customers	Customer service

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Darker color indicates higher industry concentration:

## Capgemini: RadarView profile

Client	Capability	Summary	Business impact
A French postal and parcel service	<ul><li> AI</li><li> Analytics</li></ul>	<ul> <li>The client wanted to improve its logistics network and implement digital solutions to handle growing demand and customer expectations, including next-day delivery, better service, lower costs, and reduced CO2 emissions.</li> <li>Capgemini developed a touchless and agile order delivery system. It built a system for supply chain planning and a control tower, using analytics and AI to provide activity planning and operations supervision. It also provided a target operating model and implementation support for the client.</li> </ul>	<ul> <li>Improved service quality from 94% to 98%</li> <li>Reduced per parcel cost by 30%</li> <li>Increased next-day delivery rate by 40%</li> <li>Saved EUR 50M in workforce and EUR 75M in transportation costs</li> <li>Improved service level by 1%</li> </ul>
A global logistics company	<ul><li> AI</li><li> Analytics</li><li> Automation</li></ul>	<ul> <li>The client acquired a company and wanted a unified and standardized operating model to streamline operations, enhance compliance, and improve customer satisfaction.</li> <li>Capgemini integrated the process standardization initiatives in APAC, EMEA, and the Americas. It implemented intelligent automation for payments and dispute resolution, deployed a command center to manage critical operations, and used AI and analytics to enhance decision-making processes.</li> </ul>	<ul> <li>Reduced operational costs by 20%</li> <li>Increased processing speed by 10%</li> <li>Reduced manual efforts by 10%</li> <li>Improved customer satisfaction</li> </ul>
A global logistics and supply chain company	<ul> <li>Analytics</li> </ul>	<ul> <li>The client wanted to modernize its system for monitoring sensitive shipments to prevent decay and potential risks in shipment handling and compliance.</li> <li>Capgemini designed and developed a physical monitoring dashboard using Angular and a microservice architecture deployed on AWS cloud. The dashboard provided real-time visualization of critical physical attributes of shipments, including temperature and humidity.</li> </ul>	<ul> <li>Provided detailed analytics</li> <li>Reduced shipment incidents</li> <li>Enhanced compliance</li> <li>Reduced manual intervention</li> </ul>
A freight railroad company	• Automation	<ul> <li>The client wanted an enterprise platform to integrate the editing of files by multiple business units and the management of positive train control (PTC) geographic information system (GIS) files with the dispatch territory and route optimization databases.</li> <li>Capgemini delivered a web-based tool for process automation, consolidating 500 separate database files in a GIS database.</li> </ul>	<ul> <li>Expanded the scope of the database files to engineering, telecom, dispatch, and other related IT organizations</li> </ul>

## Capgemini: RadarView profile

### Analyst insights

#### Practice maturity

- Capgemini has experience in delivering services to trucking customers in the freight and logistics industry. It has maintained a 22-year-old relationship with a logistics and transportation company, providing services including operational model, track and trace, and fleet insight.
- It has expertise in providing digital transformation services to freight railroad companies. It offers PTC system services by delivering safety plan documentation and testing to enable customers to implement PTC.
- It leverages its library of generative AI assets and accelerators to develop use cases for customers in the freight and logistics industry. These solutions include a gen AI assistant for shipping/delivery insights and support, an anomaly detection solution for detecting deviations in billing and identifying risks, and a gen AI assistant for application incident resolution.
- It supports freight and logistics companies with decarbonization solutions. In partnership with Kouros, an industrial investment company, Capgemini and Frog launched a mobility platform for decarbonizing heavy-duty mobility with hydrogen.

#### Investments and innovation

- Capgemini develops supply chain orchestration service offerings in collaboration with Kuehne+Nagel. It integrates customers' planning and logistics
  management to provide seamless information flow and data exchange.
- It drives innovation through its Applied Innovation Exchange (AIE) global network and innovation labs. It developed an intelligent tool with AIE Hyderabad and Mumbai to assist calls, reduce workload, and enhance compliance understanding for Network Rail. It also supports trucking, logistics management, and warehousing services through its IoT labs at the Bangalore delivery center.
- It is focused on strengthening its digital twin offerings in the industry. In 2024, it acquired software provider Unity to accelerate the adoption of real-time 3D.

#### Partner ecosystem

- Capgemini collaborates with supply chain and logistics companies to serve its customers. It partnered with Ligentix to develop a supply chain in a box solution, which streamlines processes, minimizes manual interventions, and delivers transparency across supply chain operations. It also partners with WiseTech to leverage its CargoWise One TMS solution to transform air and sea operations for its freight and logistics customers.
- It partnered with Airbus to develop the Skywise platform, which enables customers to visualize and manage alerts and use predictive and ML capabilities to manage an aircraft fleet over its entire lifespan and integrate its operations and maintenance.

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## Coforge: RadarView profile



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nvestments and nnovation	**
artner ecosystem	***

Delivers cargo operations to freight handlers to enable shipment visibility using its pool of proprietary industryspecific solutions.

Practice overview	Industry-specific solu	Sample clients		
<ul> <li>Practice size: N/A</li> <li>Active clients: N/A</li> <li>Delivery highlights: 24 delivery</li> </ul>	Coforge Freight Pricing & Rating Engine (PRISM)	A platform that provides quick response to market opportunities for less-than-truckload (LTL) carriers	<ul> <li>A container carrier and logistics provider</li> <li>An Asian cargo</li> </ul>	
centers worldwide	Quasar eBOL	A cost-effective solution for extraction and process automation of Bills of Lading for freight handling	handling services provider	
INR 15B ~25%	COSYS+	A cloud-based cargo terminal handling and management system to enhance air cargo operations	<ul><li>handling division</li><li>Estes</li><li>IAG Cargo</li></ul>	
Revenue from Travel, Transportation, & Hospitality, FY 2023	Video monitoring	A robust supply chain management solution to optimize warehouse and inventory management		
Partnerships/alliances	Service line coverage			
Leveraged its platform snowflake legacy data ecosystem cloud for freight custor	to update s to the ners	Leveraged its integrated product to deliver streamlined operations for maritime logistics customers	Inbound logistics	
SITA Implemented its managemented its ma	and ime data	S Utilized its cloud platform to deliver cloud deployment and migration	Operations/warehousing	
Utilized its platform to PRISM platform for tran	ouild the salesfor	Used its cloud platform to digitize and automate the process for	Outbound logistics	
and logistics customer		faster cargo claims solutions	Marketing and sales	
<b>ESTES</b> deliver pricing plans to freight rates for shippe	generate Goog	deliver transformation and migration of cloud operations	Customer service	

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## Coforge: RadarView profile

Client	Capability	Summary	Business impact
A container carrier and logistics provider	• Automation	<ul> <li>The client wanted a new system to integrate agencies and provide real-time information, including vessel schedules, allocations, and product catalogs.</li> <li>Coforge implemented an integrated web-based product in partnership with Trade Ship for the client's IT ecosystem. The product delivered automated features for flexibility to support business processes. It also provided support and maintenance services for various subdomains, including billing, booking, product catalog, ship planning, terminal operations, and vendor management.</li> </ul>	<ul> <li>Improved productivity by 25%</li> <li>Enabled quick business decisions</li> <li>Reduced total cost of operations</li> </ul>
An Asian cargo handling services provider	<ul><li>Analytics</li><li>Automation</li></ul>	<ul> <li>The client wanted to build an efficient cargo terminal with the right cargo management system to accurately cater to the business processes.</li> <li>Coforge developed and implemented a warehouse operating system, integrated with a material handling system for end-to-end cargo management. The solution modules included an automatic truck control system, claims and service request automation, in-depth analysis, and a mobile workforce.</li> </ul>	<ul> <li>Improved ground handling with real-time updates</li> <li>Increased cargo handling capacity by 50%</li> <li>Saved costs of more than 12,000 hours per year due to reduced efforts</li> <li>Reduced transshipment time by 37%</li> </ul>
An airline's cargo handling division	<ul><li>Analytics</li><li>Cloud</li></ul>	<ul> <li>The client wanted to transform the IT management solution for its cargo operations to improve infrastructure and streamline support processes.</li> <li>Coforge developed and implemented an end-to-end management system to streamline the business process and improve the existing infrastructure and architecture. It migrated the client's legacy systems to the cloud and provided services such as technical architect services, business analysis, development, and testing.</li> </ul>	<ul> <li>Consolidated 10% of IT components</li> <li>Improved digital platform bookings by 25%</li> <li>Saved 20% per year in support costs</li> </ul>



## Coforge: RadarView profile

### Analyst insights

#### Practice maturity • Coforge has deployed cargo applications across 17 terminals in eight continents and continues to provide ongoing support. These applications address multiple business areas, including warehouse management, export, import, transshipment, customs, and flight management.

- It has expertise in delivering cargo-handling services to airline logistics customers, such as end-to-end cargo management, real-time shipment information, and streamlined processes.
- It has developed various proprietary industry-specific solutions for the freight and logistics industry. Its video monitoring solution delivers streamlined overage, shortage, and damage management for an efficient supply chain. It also offers the PRISM platform to LTL carriers, integrating industry-standard rates, customizable pricing structures, and a business rules engine.

#### Investments and innovation

- Coforge has developed innovative use cases for customers in various segments, including freight and logistics, by leveraging generative AI and partnering with Microsoft for its Azure OpenAI platform.
- It leverages technologies such as blockchain to develop cold supply chain solutions integrated with IoT sensors to track and trace temperature- and humidityregulated products and increase visibility into product handling.

#### Partner ecosystem

- Coforge partners with companies across various industries to cater to its customers in the freight and logistics industry. With Estes, it offers a go-to-market (GTM) platform that addresses the complex pricing plans required to generate optimal freight rates for shippers and brokers. It also implemented SITA's airport and resource management systems to improve airport management and provide accurate real-time data.
- It collaborates with platform providers such as Pega to deliver industry-specific solutions, Salesforce to automate cargo claims processes, and Snowflake to transform data ecosystems to the cloud.

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## Cognizant: RadarView profile

Practice overview		Industry-specific solution	ns/offerings	Sample clients
cognizant	<ul> <li>Practice size: 3,200+</li> <li>Active clients: 60+</li> <li>Delivery highlights: 60+ delivery</li> </ul>	Shipper and Carrier Experience and Collaboration	A real-time asset tracking solution for the tolling industry using product selection and connected GPS	<ul> <li>A critical storage and logistics infrastructure services provider</li> </ul>
$\bigwedge V \bigwedge S \bigwedge N T$	centers worldwide	Intelligent and Automated Logistics	A cloud-native tolling solution that provides blockchain and IoT- enabled carrier bid management	<ul> <li>A temperature-controlled logistics provider</li> <li>An American truckload,</li> </ul>
Freight and Logistics Digital Services	USD 4.6B 23.9%	Transportation and Distribution Asset Modernization	A solution that delivers asset digitalization, digital transport management, and diagnostics	intermodal, and logistics services provider • Network Rail
2024	Revenue from products and resources, including logistics, FY 2023	Cognizant Ocean	A solution that helps to navigate the effects of climate change in the ocean industry	<ul> <li>PostNord</li> <li>Transportation Insights</li> <li>Wallenius Wilhelmsen</li> </ul>
Practice maturity $\star \star \star \star \star$				
Investments and	Partnerships/alliances			Service line coverage
innovation Partner ecosystem ++++++	Leveraged its logistics of software to enhance vertices	ssel loading	Utilized its platforms to accelerate digital transformation for agile process delivery	Inbound logistics
Delivers digital operations	Partnered to deliver Al- servicenow. automation to enhance operational effectivene	driven ss	Used its cloud platform to deliver app modernization and container orchestration solutions	Operations/warehousing
transportation companies.	Used its multi-carrier sh	ipping ce Microsoft Dynamics 365	Leveraged its data-driven CRM and ERP applications for enhanced	Outbound logistics
freight and legistics	businesses		customer experience	Marketing and sales
focused solutions.	salesforce Delivered streamlined, experiences and managutility services	connected ged digital	Leveraged its cloud solutions to develop industry solutions for key verticals	Customer service

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## Cognizant: RadarView profile

Client	Capability	Summary	Business impact
An American truckload, intermodal, and logistics services provider	Analytics	<ul> <li>The client wanted to enhance partner onboarding experience by reducing turnaround time.</li> <li>Cognizant implemented a self-service application (mobile and desktop) for micro, small, and large carriers, which offered end-to-end transportation tracking and near real-time view of business transactions such as load recommendation, one-touch buy load, and pricing.</li> </ul>	<ul> <li>Provided digital transport management (DTM) for smooth business operations</li> <li>Enabled asset tracking to monitor the movement of vehicles, trailers, and containers globally</li> </ul>
A temperature- controlled logistics provider	• Cloud	<ul> <li>The client had disparate systems from 17 different warehouses with labour- intensive operations that hampered growth.</li> <li>Cognizant built a new warehouse management system and warehouse execution system, leveraging edge and cloud for optimizing real-time material handling.</li> </ul>	<ul> <li>Optimized management of inventory data</li> </ul>
NetworkRail	Analytics	<ul> <li>Network Rail was facing challenges with service failures from network operations.</li> <li>Cognizant provided asset management transformation by integrating data from more than 80 systems and developed more than 15 digital products for around 10,000 users to enhance operations through data-driven insights.</li> </ul>	<ul> <li>Saved 1.3M hours of manual maintenance</li> <li>Avoided 500,000 minutes of passenger delays</li> <li>Reduced service failures by 10%</li> </ul>
A critical storage and logistics infrastructure services provider	• Cloud	<ul> <li>The client was struggling with lack of business growth because of asset management tracking.</li> <li>Cognizant implemented a new cloud-scalable freight forwarding and asset management system. It partnered with Neurored for freight forwarding and IFS Ultimo for program management of assets.</li> </ul>	<ul> <li>Saved 50% on quotation generation</li> <li>Optimized maintenance costs by 8%</li> </ul>

## Cognizant: RadarView profile

### Analyst insights

#### Practice maturity

- Cognizant specializes in delivering asset tracking and management services to the trucking and railways subsegment. Most of its freight and logistics customers, including Network Rail, belong to this subsegment.
- It is betting high on generative AI and has several platforms for its Gen AI offerings, such as Cognizant Neuro AI, Cognizant Neuro IT Operations, Cognizant Neuro Business Processes, and Cognizant Skygrade. It has introduced Innovation Assistant in collaboration with Microsoft and Gemini Studio in collaboration with Google. It has established an Advanced AI Lab in San Francisco to promote innovation and IP development.
- It has developed the Sustainability Accelerator framework with its partner Microsoft for accelerating both digital and sustainability transformations to help customers capture, track, manage, and report on ESG data for their ESG initiatives. It has also collaborated with Tidal, a project inside X, Alphabet's Moonshot Factory, to make Tidal's ocean information platform widely available and help decarbonize large ocean-based industries.

#### Investments and innovation

- Cognizant has more than 3,200 resources and over 200 domain consultants. It is focused on developing core domain expertise in intelligent, automated logistics operations and transportation and distribution asset modernization.
- It has set up a 125,000 sq ft lab focused on IT/OT integration capabilities for transportation, with 700 virtual machines and 1,100 test bed (physical) machines. It has also set up a robotics lab in Atlanta in partnership with GreyOrange and a Cognizant Mobility Lab in Germany.
- Its transportation and logistics (T&L) academy, Logistician, is a knowledge hub and promotes thought leadership, capability building, certified learnings, and
  innovation. In the last one year, it has certified over 14,000 associates, launched 15 T&L-focused courses, and organized more than 10 field and industry connects.

#### Partner ecosystem

- Cognizant acquired Thirdera and Linium, both specialized in the ServiceNow platform, to develop smart digital enterprise workflows. Its acquisition of Bright Wolf
  brings expertise in industrial IoT for energy operations automation, connected equipment, and predictive maintenance.
- It collaborates with Georgia Tech, ARMI, Carnegie Mellon University, Austin State University, IIT Madras, Chennai Institute of Technology, TU Delft, and Oxford Economics for thought leadership-based training and industry research and to develop solutions.
- It partners with Softeon, Siemens, AVEVA, and ABB to enhance warehouse management, CX transformation, robotics, and machine automation domain capabilities. It has partnered with Google Cloud to leverage its cloud platform to deliver unified data to logistics customers.

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## Eviden: RadarView profile

		Practice over	Practice overview		pecific solutior	Sample clients	
		<ul> <li>Practice size transportation</li> <li>Active client</li> </ul>	<ul> <li>Practice size: 5,000+ in transportation and logistics</li> <li>Active clients: N/A</li> <li>Delivery highlights: Operations in 71 countries</li> </ul>			A set of digital services and solution for easier cloud consumption and performance visualization	<ul> <li>A global logistics company</li> <li>A logistics company</li> </ul>
		<ul> <li>Delivery hig 71 countries</li> </ul>			on	A scalable end-to-end solution delivering pretrained and customizable AI models	<ul> <li>A logistics provider</li> <li>A postal and logistics company</li> </ul>
Freight an Digita	d Logistics al Services 2024	EUR 5.09 Revenue from Eviden busines FY 2023	B 2.9% YOY revenue growth from Eviden, FY 2023	Roll contain manageme service Smart conr vessels	ner ent as a nected	A solution for roll container optimization with IoT beacons that track location, payload, and activity An IoT platform-integrated solution that increases fleet performance and profitability using data-driven insight	<ul> <li>La Poste</li> <li>Network Rail</li> <li>SNCB</li> </ul>
Practice maturity	***						
Investments and		Partnerships/	alliances				Service line coverage
nnovation Partner ecosystem	***	verizon	Partnered to develop with private 5G multi- computing for predict	IoT solutions access edge tive analytics	BT	Codeveloped a computer vision solution leveraging its digital connectivity offerings	Inbound logistics
Codevelo decarbonizatio	ps on and	IBM	Codeveloped packag logistics optimization reduce expenses	ing and solutions to		Leveraged its software platform Orquestra to deliver an end-to-enc quantum computing solution	Operations/warehousing
operations opti solutions for lo	mization		Partnered to develop	a vaccine	e	Integrated its Last Mile solution to	Outbound logistics
organizatio	ns in		solution to manage su	a pply chain	the.	delivery to logistics providers	Marketing and sales
	h startup		Codeveloped a smart	connected rease fleet	Microsof	Used Azure Synapse Analytics to to develop a data lake solution to	Customer service

## Eviden: RadarView profile

Client	Capability	Summary	Business impact
A global logistics company	• Cloud	<ul> <li>The client wanted to upgrade its legacy systems to cloud-agnostic microservices to calculate real-time ratings.</li> <li>Eviden designed a cloud-ready real-time rating platform using a reactive microservice architecture with non-blocking I/O. The platform managed high-speed data in large volumes, processing several messages in a second.</li> </ul>	<ul> <li>Delivered consistent pricing and customer experience rating globally</li> <li>Increased delivery of packages per day by three times to 25M packages</li> </ul>
A postal and logistics company	• AI • RPA	<ul> <li>The client wanted to streamline operations and improve the end customer experience through digital transformation.</li> <li>Eviden introduced a helpdesk solution to update the traditional business model with RPA and AI-enabled proactive and predictive call response. This also helped build and maintain more than 200 applications. It also deployed a digital factory and a data factory, which included an agile resourcing model and enabled professional release train engineers to augment agile service delivery.</li> </ul>	<ul> <li>Provided 95% customer satisfaction scores</li> <li>Bolstered competitiveness in product and service delivery</li> <li>Reduced cost of resources by 30%</li> <li>Delivered 98% compliance with SLAs</li> <li>Reduced total cost of ownership by 30%</li> </ul>
A logistics provider	<ul><li>AI</li><li>Analytics</li></ul>	<ul> <li>The client aimed to optimize shipments to avoid daily international port detentions, reduce significant financial losses, and limit customer interactions with service agents for query resolutions.</li> <li>Eviden established an innovation hub to build big data and analytics solutions for the client. It implemented a data lake solution leveraging Azure Synapse Analytics to manage and analyze data pertaining to shipment and clearance across 180 countries and integrated AI workflows to ease the burden on consumers.</li> </ul>	<ul> <li>Lowered shipment delays</li> <li>Reduced international shipment detainment cost by 16%</li> <li>Provided 20% higher clearance through process intelligence</li> <li>Reduced overall platform costs</li> <li>Increased customer satisfaction</li> </ul>
A logistics company	<ul><li>AI</li><li>Automation</li></ul>	<ul> <li>The client wanted to decrease timelines and enhance efficiency by upgrading manual monitoring processes for more than 100 bots.</li> <li>Eviden offered its Bot Command Center to ensure a unified and automated solution for monitoring bots. It used AI models to automatically identify and resolve issues and a dashboard to provide real-time RPA solution updates.</li> </ul>	<ul> <li>Reduced average handling time by 30%</li> <li>Reduced mean time to intervention by 60%</li> <li>Increased mean time between failures by 40%</li> <li>Eliminated round-the-clock support team requirement</li> </ul>

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## Eviden: RadarView profile

### Analyst insights

#### Practice maturity

- Atos Group has experience delivering digital operations to its customers in the freight and logistics industry. It leverages its industry-specific solutions, such as the smart connected vessels IoT platform, to deliver data-driven insights to increase fleet performance and profitability.
- It has developed various mobile applications for parcel delivery. For instance, a smart glasses camera captures the image, and an advanced recognition software processes it, providing end-to-end tracking of packages.
- It delivers decarbonization solutions to logistics organizations. It has enabled a global shipping company to reduce fuel consumption in container ships by 7%. In 2021, it also collaborated with the Port of Esbjerg to create an IoT solution with data analytics and AI components to calculate carbon footprint for different transport modes and routes. This enabled sea, rail, and truck logistics companies to choose the mode and route with the lowest carbon footprint.
- It leverages cutting-edge technologies, including AI, to develop client business solutions. For example, it developed a digital logistics solution to accurately calculate goods delivery time using advanced analytics to deliver an efficient supply chain.

#### Investments and innovation

- Atos Group is driving innovation in the logistics industry by partnering with telecommunications providers. In 2022, it collaborated with Verizon to create advanced IoT solutions utilizing private 5G multi-access edge computing for various industries, such as logistics. It also launched a computer vision solution, Digital Vision, in partnership with BT to transform industries, including logistics.
- As part of its Scaler program, it focuses on co-innovating decarbonization solutions with startups. The startup and small and medium-sized enterprise program brings together Atos' technology teams with selected startups, such as Woop, a French company that delivers a last-mile delivery platform, to develop solutions to address delivery requirements for the logistics industry, including decarbonization criteria.

#### Partner ecosystem

- Atos Group has a long-standing partnership with Siemens. Through this partnership, it has codeveloped various solutions for its logistics customers, including the smart connected vessels solution.
- It collaborates with technology companies such as HERE and Zapata AI to deliver last-mile delivery optimization solutions and end-to-end quantum computing solutions, respectively.
- It has partnered with Microsoft Azure and AWS to provide cloud transformation to its industry clients, including freight and logistics. It also partners with Google Cloud to provide application modernization using the Atos OneCloud offering.

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## Fujitsu: RadarView profile

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CHAL	LENGER
Frei	ght and Logistics Digital Services 2024
Practice maturity	***
nvestments and nnovation	**
Partner ecosystem	***

Delivers data management and data analytics solutions to logistics customers. Develops data-driven transformation solutions through partner collaborations.

Practice overview	Industry-specific solution	ustry-specific solutions/offerings				
<ul> <li>Practice size: N/A</li> <li>Active clients: N/A</li> <li>Delivery highlights: 17 labs</li> </ul>	Fujitsu Computer Vision	An image recognition solution to automate, analyze, and interpret visual data	<ul> <li>Mazda Motor Logistics</li> <li>Europe</li> <li>Pacific National</li> </ul>			
worldwide	Fujitsu Kozuchi	A set of cloud-based AI solutions that deliver enhanced productivity of business operations	<ul><li>C. Steinweg Group</li><li>Toll Group</li></ul>			
JPY 2,137.5B 7.7%	Fujitsu Track and Trust	A digital ledger technology for supply chain transparency and traceability				
Revenue from Service Solutions, FY 2023 YOY revenue growth from Service Solutions, FY 2023	Unified Logistics	A solution that connects shipper and logistics provider information to deliver data standardization services				
Partnerships/alliances			Service line coverage			
Used its platform to de to-end solution for end customer experience	eliver an end- nanced <b>Statabricks</b>	Leveraged its data lake to collect data for analyzing performance of vehicle wheelsets	Inbound logistics			
Implemented IT servic servicenow operations manageme upgrade legacy platfo	e and IT ent to rms	Utilized its services to accelerate legacy application modernization to the cloud	Operations/warehousing			
Leveraged its Maximo TEM management software operations and asset r	asset to upgrade nanagement	Used its S/4HANA and cloud ecosystem to provide digital transformation to enterprises	Outbound logistics			
YEDIGITAL Partnered to deliver ef distribution center ope logistics customers	ficient erations to	Leveraged its Azure platform to build data lakes for data collection and analysis	Customer service			

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Darker color indicates higher industry concentration:

## Fujitsu: RadarView profile

Client	Capability	Summary	Business impact
<u>pacific</u> national	<ul><li>AI</li><li>Analytics</li></ul>	<ul> <li>Pacific National wanted a data analysis platform to assess the data generated by the cameras monitoring its wheelsets' condition.</li> <li>Fujitsu engaged its subsidiary, Versor, to develop an AI solution that collected data in a Databricks data lake on Azure. The solution assesses the generated data and analyzes data points over 12 months to determine wheelset wear rates for multiple parameters.</li> </ul>	<ul> <li>Quicker identification of bad and good performers in the fleet</li> <li>Improved decision-making</li> <li>Improved safety</li> </ul>
C. Steinweg Group	<ul> <li>Automation</li> </ul>	<ul> <li>Steinweg wanted a solution to scale its growing operations to enhance best practices, quality assurance, and the development of new features.</li> <li>Fujitsu implemented ServiceNow IT Service Management and IT Operations Management to replace legacy platforms for the client's global operations and provide faster project delivery to production. It also incorporated automation and a structure for access requests.</li> </ul>	<ul> <li>Ensured adherence to company standards and best practices</li> <li>Reduced operational efforts</li> </ul>
	• Jira software	<ul> <li>Mazda Motor Logistics Europe wanted to upgrade its basic incident and service request management system to reduce the time it takes to resolve incidents and respond to requests.</li> <li>Fujitsu designed a self-service portal integrated with ServiceNow and Jira software to improve the system. It integrated incident management and portal requests with Jira software to send incidents to ServiceNow after the development.</li> </ul>	<ul> <li>Achieved 25% faster resolution time</li> <li>Resolved 40% of incidents without manual intervention</li> </ul>
TOLL	• Cloud	<ul> <li>Toll Group wanted to modernize and migrate its data platform to the cloud to improve the reliability of its reports and the data it provides to its customers.</li> <li>Fujitsu Data and AI built a cloud-based data platform and reporting solution on Azure to consolidate data and provide reporting solutions for the business.</li> </ul>	<ul> <li>Reduced customer support incidents by 30%</li> <li>Stabilized the legacy platform</li> </ul>

## Fujitsu: RadarView profile

### Analyst insights

#### Practice maturity

- Fujitsu utilizes the expertise of Versor, a data analytics management consultancy that it acquired in 2021, to enhance the data capabilities of its freight and logistics clients. It developed an AI-enabled solution to assess the generated data and analyze wagon and locomotive wheel wear characteristics, identifying optimal and poorly performing vehicle wheelsets.
- It leverages its data-driven management solutions to deliver decision-making and sustainable growth capabilities to freight and logistics customers. Offerings
  such as Fujitsu Track and Trust deliver supply chain transparency and traceability while Fujitsu Kozuchi enhances business operations productivity using AIenabled solutions.
- It increases operational efficiency and flexibility for logistics customers through its Unified Logistics solution. This solution connects land, sea, and air logistics data to increase efficiency, flexibility, and business sustainability.

#### Investments and innovation

- Fujitsu is leveraging AI to develop data analysis solutions for customers in the freight and logistics industry. It collaborated with Toyota Material Handling Japan to
  jointly develop an AI Forklift Driving Analysis service that analyzes operator movements and forklift surroundings to evaluate safety driving levels for logistics
  warehouses.
- It has formed a strategic partnership with ServiceNow to develop innovative cross-industry supply chain operations management solutions through an innovation center, focused on digital transformation and customer success.

#### Partner ecosystem

- Fujitsu collaborated with Japan Freight Railway Company to introduce a new system to streamline the maintenance and management of rolling stock for railway
  operators. The system helps reduce labor requirements for maintenance activities and implement standardized processes across operations.
- It partners with companies such as ServiceNow, SAP, Microsoft, and Salesforce to deliver data-driven transformation solutions for freight and logistics organizations.
- It collaborates with niche companies such as YE DIGITAL to leverage its warehouse operations automation solutions to deliver automated facilities in distribution center operations and planning for operations transformation.

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## HCLTech: RadarView profile

	Practice overview		Industry-specific solutions/offerings			Sample clients
HCLIech	<ul><li> Practice size</li><li> Active client</li><li> Delivery hig</li></ul>	<ul> <li>Practice size: 6,500+</li> <li>Active clients: N/A</li> <li>Delivery highlights: 60+</li> </ul>			An IoT-enabled solution that provides vehicle monitoring and proactive maintenance of the fleet	<ul> <li>A freight railroad company</li> <li>A logistics company</li> </ul>
AVASANT RADARVIEW™	innovation labs worldwide		Geospatial Asset Management		An IoT and analytics-based asset visualization and condition-based monitoring automation solution	<ul> <li>A North American railroad company</li> <li>A US-based railroad</li> </ul>
Freight and Logistics Digital Services 2024	USD 435N Revenue from fre and logistics,	1+ 5%-10% From freight and	CoTrust Warehouse	of the	A blockchain platform to accelerate the adoption of enterprise blockchain A digital solution that delivers automated operations, ESG, and	company
Practice maturity $\star \star \star \star \star$	FY 2023	FY 2023 logistics, FY 2023 asset connectivity				
nvestments and	Partnerships/alliances					Service line coverage
nnovation XXXX Partner ecosystem XXXX	infor	Partnered to enable m the latest versions and models	igrations to SaaS-based	<b>9</b> GreyOrange	Leveraged its platforms to integrate warehouse logistics with WES and WMS	Inbound logistics
Delivers digital operations leveraging its proprietary	ındra	Delivered system integ product development and logistics customer	gration and to freight s	SAP	Utilized its platforms to deliver business process transformation to freight and logistics customers	Operations/warehousing
solutions. Codevelops and innovates in the logistics	PEGA	Codeveloped solution rail ticketing fraud and	s for transit concessions	+ BlueYonder	Leveraged its WES/WMS systems to deliver warehouse automation	Outbound logistics
industry utilizing its wide partner ecosystem.	aws	Leveraged its platform an assets connectivity p	to develop platform	HARRIS	Codeveloped a geospatial image and video analytics platform using its analytics technology solutions	Marketing and sales Customer service

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## HCLTech: RadarView profile

Client	Capability	Summary	Business impact
A freight railroad company	• Cloud	<ul> <li>The client wanted to optimize resource and trip logistics to reduce costs.</li> <li>HCLTech implemented a cloud-native application to ensure an always- available system that adapts to unpredictable business workloads. The solution provides real-time GPS functionality and supports continuous application updates.</li> </ul>	<ul> <li>Saved annual costs by USD 12M</li> <li>Maintained SLA availability of 99.95%</li> <li>Enabled zero cost for software license because of the use of open-source technologies</li> </ul>
A logistics company	• Blockchain	<ul> <li>The client wanted support for its multiple networks and connected blockchain networks across disparate protocols with real-time updates.</li> <li>HCLTech designed a platform supporting multiple blockchain protocols and networks using its CoTrust suite of solutions and Google Remote Procedure Call to enable connectivity between services and components. It also provided network node monitoring and platform maintenance.</li> </ul>	<ul> <li>Delivered high components performance</li> <li>Improved request fulfillment time by 67%</li> </ul>
A North American railroad company	<ul> <li>Automation</li> </ul>	<ul> <li>The client wanted to improve locomotive reliability and provide accurate production release and asset availability to improve labor productivity and personnel experience.</li> <li>HCLTech built a solution for rolling stock maintenance based on its iMRO SAP solution extension. It implemented model-specific visual parts lists and automated material reservation and data cleansing.</li> </ul>	<ul> <li>Improved maintenance cost visibility</li> <li>Enhanced reliability analysis accuracy</li> <li>Optimized locomotive release predictability</li> <li>Boosted rail network throughput and velocity</li> </ul>
A US-based railroad company	<ul><li>Analytics</li><li>Cloud</li><li>Machine learning</li></ul>	<ul> <li>The client wanted to monitor equipment health to reduce disruptions due to false alarms from detectors and avoid train accidents due to defective wheels.</li> <li>HCLTech developed a solution to process data from over 5,000 devices, generating more than 35M events daily, for anomaly detection and predictive analytics. The solution includes edge computing and a cloud-based system utilizing APIs and microservices. It also has cold wheel detection through big data statistical analysis. HCLTech provided the client real-time image analytics with ML models that allowed immediate halting of trains.</li> </ul>	<ul> <li>Improved algorithm processing accuracy by more than 95%</li> <li>Reduced false positive alerts rate to less than 2%</li> <li>Increased operational safety</li> </ul>

## HCLTech: RadarView profile

### Analyst insights

#### Practice maturity

- HCLTech has expertise in delivering digital operations and warehousing services to freight and logistics customers. It provides trucking and logistics companies with connected fleet platforms, infrastructure and application integration, and fleet visibility platforms.
- It leverages its solutions to deliver sustainable offerings to freight and logistics customers. It utilizes HCLTech EcoSustain to deliver sustainable freight experience to freight and air and express delivery clients. It also leverages the Net-Zero Intelligent Operations solution to provide logistics organizations with consumption and emission analysis and help them reduce energy costs.
- It utilizes technologies such as generative AI to deliver software development life cycle automation to railroad companies to increase productivity and market speed and ensure security. It also leverages its generative AI-enabled Supply Chain Optimizer solution to address the overall constraints arising from all personnel in logistics parts shortages and unplanned outages.

#### Investments and innovation

- HCLTech helps develop blockchain-based solutions for the industry, partnering with Blockchain in Transportation Alliance (BiTA), which determines best practices
  and standards for blockchain in the transportation industry. BiTA's members include FedEx, SAP, and Uber Freight.
- It promotes innovation in the industry by partnering with foundations such as the Cloud Native Computing Foundation and CloudFoundry Foundation to develop cloud-native technologies utilized by various industries, including logistics.
- It has launched a travel, transport, logistics, and hospitality academy to provide domain training certifications in railroads and logistics subverticals.

#### Partner ecosystem

- HCLTech collaborates with platform companies such as Google, AWS, Microsoft, Oracle NetSuite, and Infor to deliver services to freight and logistics customers, including loyalty, settlement, and revenue management.
- It has codeveloped an IoT-enabled Smartfleet solution with AWS, utilizing its PICASSO platform framework. This solution delivers vehicle monitoring and proactive maintenance to fleet operators.
- It partners with robotics and automation technology companies such as BlueBotics and GreyOrange, leveraging their software solutions to develop automated guided vehicles for the freight and logistics industry.

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## IBM: RadarView profile

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DISR	UPTOR
Freig	ght and Logistics Digital Services 2024
Practice maturity	****
Investments and innovation	***
Partner ecosystem	***

Combines AI and automation capabilities with hybrid cloud to deliver proprietary offerings to logistics customers.

Practice overview		Industry-spe	ecific solutio	Sample clients	
<ul> <li>Practice size: N/A</li> <li>Active clients: N/A</li> <li>Delivery highlights: Operations in</li> </ul>		IBM Cloud Pak® for Business Automation		An integrated solution for hybrid cloud that delivers AI-enabled work automation	<ul> <li>CSL Group</li> <li>MNG Kargo</li> <li>Scharff</li> </ul>
more than 1	75 countries	IBM Security QRadar® EDR		An endpoint detection and response solution that detects anomalous behavior and remediates in real time	<ul> <li>TM International Logistics</li> <li>Yunda Express</li> </ul>
USD 61.8B 2.2%		IBM Turbonomic		A software platform that helps manage, automate, and optimize IT infrastructures	
Total revenue FY 2023	e, YOY revenue growth, FY 2023	IBM Sterling Transformation Extender		A solution that automates complex transformation and validation of data between various formats	
Partnerships/a	alliances				Service line coverage
Soogle Cloud	Provided end-to-end so modernization, automa migration to its cloud p	upport for ation, and platform	salesforce	Implemented its solutions across the business to deliver digital transformation	Inbound logistics
📥 Red Hat	Leveraged its OpenShi to deploy IBM software	ft platform	aws	Used AWS's cloud and hybrid cloud environments to implement IBM watsonx, an AI and data platform	Operations/warehousing
	Deployed ERP and HCM cloud		SAD	Deployed S/4HANA for logistics	Outbound logistics
	costs for application m	anagement		tracking	Marketing and sales
3 <u>2</u> 6it	Partnered to deliver bu process development f and parcel delivery cus	isiness or courier tomers	Microsof	Leveraged Azure cloud to deploy SAP S/4HANA to build real-time logistics services	Customer service

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## IBM: RadarView profile

Client	Capability	Summary	Business impact
MNGkargo	<ul><li>Automation</li><li>Cloud</li></ul>	<ul> <li>MNG Kargo wanted a platform that could scale with its business needs and enable a digital, automated document management system for effective content management throughout the organization.</li> <li>IBM leveraged its partnership with 32bit to design a platform using the IBM Cloud Pak for Business Automation solution to simplify and automate the client's processes. It created a comprehensive solution for monitoring, recording, and reporting processes and provided training for the client's IT team on application development and system operations.</li> </ul>	<ul> <li>Enabled tracking of 2,500 business process requests and 8,000 tasks daily</li> <li>Accelerated resolution of and compensation for claims</li> <li>Enhanced customer and supplier satisfaction</li> <li>Improved employee efficiency</li> <li>Delivered secure storage of documents</li> </ul>
YUNDA :	<ul><li> AI</li><li> Automation</li><li> Cloud</li></ul>	<ul> <li>Yunda wanted a unified security architecture and data platform to upgrade from siloed data security and difficult development processes.</li> <li>IBM developed a strategy to consolidate the client's disparate security systems into a centralized security control center utilizing IBM Cloud Pak for Security and IBM QRadar solutions, embedded with AI and automation, running on a hybrid cloud platform and the Red Hat OpenShift container platform.</li> </ul>	<ul> <li>Provided six times faster responses to security incidents</li> <li>Improved efficiency</li> <li>Achieved cost reduction</li> </ul>
	• Cloud	<ul> <li>CEVA Logistics needed a partner to support its electronic data interchange (EDI) services connecting its clients, suppliers, and logistics partners.</li> <li>IBM assisted the client in documenting the trading partner's requirements and migrating them to the cloud. It also identified and implemented performance improvements for the IBM Supply Chain Business Network cloud solution, reducing the processing time for advance shipping notices to minutes.</li> </ul>	<ul> <li>Enabled 90% faster scaling of EDI capability</li> <li>Delivered 40% faster time to market for new trading partners</li> </ul>
<b>Jella Volpe</b>	Cloud	<ul> <li>Della Volpe wanted to upgrade its infrastructure to SAP S/4HANA.</li> <li>IBM deployed IBM Power Systems and IBM Storage to help the client implement the SAP S/4HANA infrastructure.</li> </ul>	<ul> <li>Reduced 75% data center footprint</li> <li>Improved operational efficiency</li> </ul>

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## IBM: RadarView profile

### Analyst insights

#### Practice maturity

- IBM shows expertise in delivering hybrid cloud capabilities to its freight and logistics customers. It collaborates with cloud companies to use their platforms and leverages proprietary solutions, such as IBM Cloud Pak and IBM Sterling Supply Chain Business Network, to deliver automated business processes, unified control centers, and other services.
- It has experience delivering digital transformation services in the operations and warehousing value chain of the freight and logistics industry, delivering
  employee productivity and cost reductions. It has a wide industry clientele, including companies such as CSL Group, TM International Logistics, and Grupo
  Scharff.
- It demonstrates strong AI and automation capabilities through its platforms and solutions across various industries, including logistics. For instance, its Sterling Supply Chain Intelligence Suite delivers AI solutions for predictive analytics, inventory planning, and real-time product tracking.

#### Investments and innovation

- IBM focuses on advancing digital transformation services and technology implementation for industries, including freight and logistics. In 2023, it acquired Equine Global, an Indonesia-based ERP and cloud consulting services provider, to enhance its business transformation services and hybrid cloud and AI strategy. It also acquired Manta in 2023 to provide visibility into data environments to businesses, including logistics customers.
- It invests in accelerating business transformation with AI. In 2023, it established a CoE comprising over 1,000 consultants specializing in Gen AI. The CoE aims to boost productivity in IT operations and key business processes, including HR and marketing, to improve customer experiences.

#### Partner ecosystem

- IBM maintains a strong AI partner ecosystem, including Adobe, AWS, Microsoft, Salesforce, and SAP, to plan, build, implement, and operate Gen AI solutions for various industries, including freight and logistics.
- It partners with cloud providers to deliver digital services to the freight and logistics industry. It collaborates with Oracle, GCP, AWS, and Salesforce to provide infrastructure modernization to logistics customers.
- It collaborates with digital transformation solutions providers, including 32bit, to deliver business process development to its freight and logistics customers.

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## Infosys: RadarView profile

	Practice overview		Industry-specific solutions/offerings			Sample clients	
II IIOSys	<ul> <li>Practice size</li> <li>Active clients</li> <li>Delivery high</li> </ul>	: ~11,000 s: 70+ hlights: 25+ R&D and	Infosys Equ	inox	A cloud-native digital commerce and marketing platform for omnichannel experiences	A North America-base freight brokerage company     A clobal parcel evers	əd
AVASANT RADARVIEW™	innovation centers, COEs, and labs		Logistics M	arketplace	A solution for freight and logistics, which includes order-to-cash and pickup-to-deliver processes	<ul> <li>A global parcel expre freight company</li> <li>An Australian logistics provider</li> </ul>	55
Freight and Logistics Digital Services	\$500M-\$1	B 15%-20%	Dynamic Ro Planning ar Optimizatic	oute nd on	A demand-driven last-mile route planning and dynamic pricing solution that uses Al/ML	<ul> <li>A global container shipping and logistics company</li> <li>A German shipping and</li> </ul>	; nd
2024	Revenue from frei and logistics, FY 2023	ght YOY revenue growth from freight and logistics, FY 2023	TradeEdge		A cloud platform that provides channel visibility and helps gain new distributors	<ul> <li>container transportation</li> <li>A global 3PL and warehousing companies</li> </ul>	on ıy
Practice maturity $\star \star \star \star \star$	Partnershins/	alliances				Sorvico lino covorado	
Investments and	Turtherships/c						
Partner ecosystem	FarEye	Collaborated to help co get real-time shipment and optimized delivery	ompanies visibility	🧐 Wolters Kluwe	Leveraged Enablon to provide r analytics on safety and sustainability	Inbound logistics	
Utilizes partner platform	III I wisetech ' II ' global	Leveraged Cargowise for integration and support for transportation plann	or t services ning	BLUME global.	Implemented its digital supply chain platform for logistics, manufacturing, and retail	Operations/warehousing	
capabilities to deliver automation services to	+ BlueYonder	Partnered for supply ch solutions for demand p	ain Ianning and	aws	Leveraged its cloud platform to accelerate enterprise cloud	Outbound logistics	
ocean, freight, and logistics		transportation manager	ment		journeys	Marketing and sales	
companies.	<b>FOUR</b> KITES	Partnered to provide re supply chain visibility sc	al-time olutions	Google Cloud	Used its cloud platform to design and develop cloud transformation and migration services	Customer service	

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## Infosys: RadarView profile

Client	Capability	Summary	Business impact
A North America- based freight brokerage company	<ul> <li>Mobile application</li> </ul>	<ul> <li>The client wanted to build a digital freight marketplace along with a mobile application for its core business.</li> <li>Infosys, through its four-year partnership, developed a digital freight marketplace and a driver mobile application that integrated intermodal platforms and enhanced UI/UX functionality.</li> </ul>	<ul> <li>Consolidated 620,000 drivers, 48,000 carriers, and 45,000 customers on a single digital freight marketplace</li> <li>Delivered freight transactions of over \$3B</li> <li>Created a new business pipeline of \$3B</li> <li>Increased freight booked per cycle by 35%</li> </ul>
A global container shipping and logistics company	<ul><li>Automation</li><li>Cloud</li></ul>	<ul> <li>The client was facing challenges with the manual validation process for bill of lading, which involved multiple validation points across different systems and agents.</li> <li>Infosys automated the shared service to improve productivity and streamline services. It also automated the bill of lading draft generation for every second draft with an API-based validation process.</li> </ul>	<ul> <li>Reduced operational cost by \$3.7M per annum</li> <li>Recorded 28% automated booking confirmation with zero human intervention</li> </ul>
A global parcel express freight company	<ul><li> AI</li><li> Analytics</li><li> ML</li></ul>	<ul> <li>The client wanted higher accuracy in various parameters, including predicting delivery delays and estimating date of delivery.</li> <li>Infosys developed a data science-based AI/ML program to predict delays and estimate date of delivery. It also estimated the time window of delivery of client express and ground shipments.</li> </ul>	<ul> <li>Increased the accuracy of predicting the arrival time of shipments</li> <li>Reduced the number of calls to the call center</li> <li>Enhanced customer experience</li> </ul>
An Australian logistics provider	<ul><li> AI</li><li> Analytics</li><li> ML</li></ul>	<ul> <li>The client wanted to match its purchase needs to the points of supply and reduce working capital.</li> <li>Infosys developed an AI/ML-enabled solution to match its purchase needs to the points of supply, reducing operational cost and working capital. It delivered on-demand analytics of order status, simplifying and streamlining the process.</li> </ul>	<ul> <li>Enhanced configuration management</li> <li>Achieved process efficiency of 30%</li> <li>Reduced unit cost by 10%</li> </ul>

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## Infosys: RadarView profile

### Analyst insights

#### Practice maturity

- Infosys specializes in delivering route optimization, demand forecasting, and dynamic pricing to ocean, trucking, and third-party logistics companies. Distribution, railroads, maritime/ports, and courier services make up 70% of its customers. It has launched a digital freight marketplace to help businesses measure business output rather than engineering throughput.
- It leverages generative AI under Infosys Topaz, with 12,000 AI use cases, over 150 pretrained AI models, and more than 10 AI platforms. It is betting big on its
  cloud logistics offerings, such as Oracle Transportation Management Cloud and Warehouse Management Cloud. It is also investing in its Warehouse as a Service
  offering, which combines the capabilities of TradeEdge and Equinox.
- It enables freight and logistics firms to achieve their ESG goals by helping them reduce Scope 3 emissions, implementing a carbon tracker that generates Carbon Intensity Indicator (CII) and Energy Efficiency Operational Index (EEOI) reports, offering an Eco Calculator for emission estimates, and creating a digital emissions solution for railroad yards to promote sustainability and regulatory compliance.

#### Investments and innovation

- Infosys has dedicated freight and logistics delivery centers and innovation labs in India and is scaling operations in Europe and Latin America.
- It has formed academic relationships in AI with Politehnica University of Bucharest, University of Manchester, University of Cambridge, Cardiff/Bristol Universities, and Lulea University of Technology for a steady talent pool and access to research.
- Its acquisitions of BASE, Oddity, Blue Acorn, Carter Digital, Kaleidoscope Innovation, Simplus, and Fluido have helped it boost its presence among freight and logistics clients in the US, APAC, and Europe markets.

#### Partner ecosystem

- Infosys has dedicated \$500M to identify early-stage startups that develop innovative, next-generation solutions and technologies in the areas of AI/ML and automation, big data and analytics, physical-digital convergence, and infrastructure and cloud. It partners with Zebox (an incubator of the startup ecosystem) to co-innovate use cases in transportation, mobility, supply chain, energy, and decarbonization.
- It has a joint GTM with Neurored for multimodal transport management and supply chain management systems, which are built on the Salesforce platform, for freight forwarders, shippers, 3PLs, and port operators. It also has long-standing cloud partnerships with Microsoft, Google, Oracle, and AWS to complement and strengthen its delivery capabilities, industry solutions, and services.

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## Kyndryl: RadarView profile

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	SANT ∧rview™			
CHAL	CHALLENGER			
Frei	ght and Logistics Digital Services 2024			
Practice maturity	****			
Investments and innovation	**			
Partner ecosystem	**			

Delivers IT infrastructure services through cloud modernization and migration by collaborating with cloud providers.

Practice overview	Industry-specific soluti	Industry-specific solutions/offerings		
<ul> <li>Practice size: N/A</li> <li>Active clients: N/A</li> <li>Delivery highlights: Operations in</li> </ul>	Kyndryl Bridge	An open integration platform that provides stable operations and visibility through automation	<ul> <li>A North American freight railroad</li> <li>A post and parcel delivery company</li> <li>Pitney Bowes</li> <li>Takargo Rail</li> </ul>	
66 countries	Kyndryl Advanced Logistics Management	A data analytics solution to optimize the flow of goods and materials within a supply chain		
USD 16B >10%	Asset Management	A solution that provides greater visibility and decision-making to increase effectiveness	<ul><li> iHub Solutions</li><li> SBS Ricoh Logistics</li></ul>	
Total revenue, FY 2024 Revenue share from the industrial sector, FY 2024	Intelligent Supply Chain	A solution that delivers real-time visibility across channels and helps forecast demand		
Partnerships/alliances			Service line coverage	
Partnered to deliver of Service to logistics cu	generative Al ent customer stomers	<ul> <li>Leveraged its products to deliver multicloud management services</li> </ul>	Inbound logistics	
Utilized its infrastruct DCLL Technologies integrated hybrid clo to accelerate cloud tr	ure to deliver ud solutions ansformation	Utilized its control tower solution to provide visibility in billing for post and parcel delivery clients	Operations/warehousing	
Used its platform to c	leliver gen Al	Partnered to provide migration	Outbound logistics	
analytics and custom	er support	from ERP systems to S/4HANA	Marketing and sales	
Leveraged its data ar solutions to deliver ir insights for data cent	alytics telligent ers and cloud	Leveraged the Azure platform to off migrate, modernize, and manage SAP	Customer service	

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Darker color indicates higher industry concentration:

## Kyndryl: RadarView profile

Client	Capability	Summary	Business impact
A post and parcel delivery company	• Cloud	<ul> <li>The client wanted to integrate monitoring and management for its multicloud environment and migrate workloads from on-premises data centers.</li> <li>Kyndryl designed the AWS landing zone using AWS Control Tower, delivering a simplified view of production events and streamlined resolution. It also enabled a multicloud management system to connect the client's networks to monitor and maintain the migrated workloads.</li> </ul>	<ul> <li>Delivered secure data access</li> <li>Enabled cost prediction through a consolidated view of operations</li> </ul>
<b>Takargo</b> <sub>rail</sub> O TERTIR	• Cloud	<ul> <li>Takargo wanted hybrid cloud and IT infrastructure management services to enhance customer experience and optimize the IT infrastructure.</li> <li>Kyndryl implemented the Office 365 stack, providing its employees with a better team collaboration experience. It also designed and built a new Microsoft Azure cloud solution, delivering a cloud-based environment and platforms.</li> </ul>	<ul><li>Improved internal processes</li><li>Optimized IT infrastructure</li></ul>
pitney bowes 🝈	<ul><li> Al</li><li> Analytics</li><li> Cloud</li></ul>	<ul> <li>Pitney Bowes wanted to digitally transform its business by harnessing technologies such as cloud and AI.</li> <li>Kyndryl leveraged AI, advanced analytics, and hybrid cloud to implement an agile IT infrastructure environment. It also managed core infrastructure, including servers, storage systems, end-user computing, and networking.</li> </ul>	<ul> <li>Enhanced operations</li> </ul>
A North American freight railroad	<ul> <li>Analytics</li> </ul>	<ul> <li>The client wanted to optimize its asset management system to ensure safety and reliability.</li> <li>Kyndryl provided systems, communications, and platforms to manage data using data analytics through detectors to help determine risk levels. It offered proactive maintenance and insights to the rail network control center.</li> </ul>	<ul><li>Reduced unplanned interruptions</li><li>Increased asset utilization</li></ul>

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## Kyndryl: RadarView profile

### Analyst insights

#### Practice maturity

- Kyndryl has expertise in delivering hybrid cloud solutions to freight and logistics customers. It provides managed services for customers' hybrid cloud to deliver workload monitoring and management services. It also leverages the hybrid cloud to deliver agile IT infrastructure for enhanced operations.
- It provides supply chain services to logistics customers. It collaborates with shipping and logistics providers to help manage and modernize their IT infrastructure and integrate their legacy technology systems with new applications.
- It leverages its proprietary AI-powered, open-integration digital business platform Kyndryl Bridge to deliver integrated on-premises and cloud environments and services to logistics companies. Its logistics customers realized a 93% reduction in IT-related disruptions using the platform.
- It supports decarbonization in the shipping industry by providing digitization solutions using a data-driven approach to enhance efficiency, productivity, and profitability for its maritime customers.

#### Investments and innovation

- Kyndryl focuses on accelerating generative AI solutions adoption by logistics customers. It collaborated with Google Cloud to deliver a gen AI pilot that provides efficient customer service to iHub Solutions, a Singapore-based provider of smart warehouse, last-mile delivery, contract logistics, and e-commerce fulfillment services. It also established an innovation factory with AWS in 2023 to cocreate industry-specific use cases using gen AI and ML solutions.
- It invests in expanding cloud services to various industries, including freight and logistics. In 2024, it acquired cloud services provider Skytap, enhancing its capabilities to modernize IT environments and migrate customers' workloads to the Microsoft environment using Azure solutions.

#### Partner ecosystem

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- Kyndryl partners with technology companies, including Dell and Cisco, to deliver cloud transformation and management services to its freight and logistics customers. It also partners with NVIDIA to accelerate the adoption of gen AI by developing industry use cases for various industries, including freight and logistics.
- It cocreates generative AI and ML use cases with cloud companies, including AWS. In 2023, it established an innovation factory with AWS to accelerate clients' cloud modernization journeys and business transformations.

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## LTIMindtree: RadarView profile

	Practice overview	Industry-	specific solution	ns/offerings	Sample clients
(-7) L'INIndtree	<ul> <li>Practice size: 5,000- transportation, and</li> <li>Active clients: N/A</li> </ul>	)+ in travel, I hospitality Solution	ed Tracking	An IoT real-time automated solution that provides efficient supply chain operations	<ul> <li>A European logistics company</li> <li>A global logistics</li> </ul>
AVASANI RADARVIEW™ DISPUPTOP	<ul> <li>Delivery highlights: centers worldwide</li> </ul>	: 70 delivery Operatio	ed ns	An IoT solution for autonomous operations through connected assets, processes, and workforce	provider • A global shipping and logistics company
Freight and Logistics Digital Services 2024	INR 53.56B Revenue from Y consumer bu business, FY 2023 gr	~4.8% YOY consumer usiness revenue rowth, FY 2023	Т	An IoT solution that enables remote asset monitoring and asset life cycle management An IoT solution for real-time visibility and analytics insights on asset performance	• Lufthansa Cargo
Practice maturity $\star \star \star \star$					
Investments and	Partnerships/alliance	es			Service line coverage
innovation Partner ecosystem $\star \star \star \star$	Levera	aged its Migrate for Comput e for accelerated and safe tion		Used its automated functional testing tool to provide automation and performance tests	Inbound logistics
Provides legacy modernization and cloud	Utilize TIBC solution platfor	ed its connected intelligence on to deliver connected rms to logistics customers	/\naplan	Leveraged its solutions to deliver connected planning to its logistics customers	Operations/warehousing
migration services to	Used i	its Watson IoT platform to a solution for asset life cycle	SAD	Utilized its Extended Warehouse Management (EWM) solution to	Outbound logistics
logistics customers through	manag	gement and monitoring		deliver automated support	Marketing and sales
its solutions and partner ecosystem.	Levera KINOXIS <sup>®</sup> solutio manac	aged its RapidResponse on to deliver supply chain gement	Microsoft	Leveraged Azure to build unified shipping platforms for logistics companies	Customer service

## LTIMindtree: RadarView profile

Client	Capability	Summary	Business impact
A European logistics company	• Cloud	<ul> <li>The client wanted to transform its legacy applications to a cloud architecture to scale the business and reduce overhead for maintenance and support.</li> <li>LTIMindtree built a unified shipping platform through an Azure cloud-based solution. The platform provided a fast label printing solution, a real-time status of booked shipments, and a complete overview of shipments to customers.</li> </ul>	<ul> <li>Improved user experience and efficiency</li> <li>Provided transparency for booked parcel deliveries</li> <li>Ranked 91% on ease of usage for creating shipments</li> </ul>
A global shipping and logistics company	<ul> <li>Automation</li> </ul>	<ul> <li>The client wanted to design, implement, and execute automation and performance tests across ocean, terminal, financial, and web businesses.</li> <li>LTIMindtree implemented an automation approach using the HP QTP tool and its proprietary Hybrid Test Automation Framework (HTAF). It automated more than 20 applications using HTAF, including web and desktop applications. It developed a new keyword-based automation framework for the client and automated more than 100 EDI test flows for validating integration configurations and data flows in various applications.</li> </ul>	<ul> <li>Reduced automation test execution period by 80%</li> <li>Automated 50%-60% manual test in each application</li> <li>Reduced regression testing efforts by 90%</li> <li>Ensured test reliability</li> <li>Reduced cost and service maintenance</li> </ul>
🔄 Lufthansa Cargo	• Automation	<ul> <li>Lufthansa Cargo wanted to enhance technology for better responsiveness, faster time to market, improved service support, automated services, and reduced costs.</li> <li>LTIMindtree integrated all the platforms into a single framework using TIBCO's Connected Intelligence solution. It collected business requirements, managed application maintenance, and oversaw software migration.</li> </ul>	<ul> <li>Integrated more than 80 applications and systems</li> <li>Bridged the wide data gap</li> </ul>
A global logistics provider	• Cloud	<ul> <li>The client wanted to modernize its logistics and supply chain solutions for its clients by building a Progressive Web Application (PWA).</li> <li>LTIMindtree developed a PWA that catered to various user types and devices, provided consistent user experience across more than 130 countries, and supported over 44 languages. It tested browsers' compatibility using cloudhosted devices and provided features such as paperless shipment documentation, shipment drop-off, and shipments tracking.</li> </ul>	<ul> <li>Improved customer and omnichannel experience</li> <li>Enabled visibility of shipment data</li> <li>Resulted in greater market share</li> <li>Helped shippers and the shipment comply with customs regulations</li> </ul>

## LTIMindtree: RadarView profile

### Analyst insights

#### Practice maturity

- LTIMindtree has expertise in delivering digital services to maritime, air, and logistics customers. It helps customers transform their legacy applications and provides automated applications to enhance the flow and visibility of data across the applications.
- Leveraging its proprietary solutions, it accelerates cloud modernization and migration for freight and logistics customers. It helps discover application
  dependencies on infrastructure components and configuration with the ComPass solution. It uses the ATLAS 360 solution to provide a view of the architectural
  debt and boosters for cloud deployment.
- It also caters to some specialized subsegments of the freight and logistics industry, such as cold storage logistics. It enabled efficient shipment tracking for a
  refrigerated logistics provider by upgrading their warehouse management system, consisting of inbound operations, outbound operations, inventory
  management, invoicing, billing, reports, and enquiries applications.

#### Investments and innovation

- LTIMindtree collaborates with platform startups to accelerate client development and business prototyping. To strengthen its blockchain technology capabilities, it partners with CargoX, a startup that provides blockchain solutions for various sectors, including logistics.
- It supports continuous domain learning through its learning portals such as ShotClasses, a next-gen learning platform that enables stakeholders to learn effectively.

#### Partner ecosystem

- LTIMindtree leverages its partners' platforms and solutions to build offerings for the freight and logistics industry. It collaborated with HP to develop HTAF, which tests the automation life cycle using its automated functional testing tool, and with IBM to build the Asset+ solution using its Watson IoT platform.
- It maintains a strong partnership with SAP, leveraging its logistics solutions to enable agile and efficient logistics. It uses SAP Logistics Solution to lower sourcing costs, S/4HANA Simple Logistics to enable 360-degree visibility, and SAP EWM for automated support and warehouse management.
- It partners with cloud companies such as Microsoft, AWS, and Google to provide cloud modernization and migration services to its freight and logistics customers.

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## TCS: RadarView profile

	Practice overview	Industry-specific solutio	ns/offerings	Sample clients
CONSULTANCY SERVICES	<ul> <li>Practice size: 80,000+ consultants from consumer business group</li> <li>Active clients: N/A</li> </ul>	TCS Aviana™	A centralized, autonomous, and digital airline operations platform that improves operational metrics	<ul> <li>A parcel logistics company</li> <li>CSX</li> </ul>
AVASANT RADARVIEW™	<ul> <li>Delivery highlights: 40+ research and innovation centers</li> </ul>	TCS DigiFleet™	An IoT and AI/ML-powered solution that provides real-time insights for assets on the move	<ul><li>Gulftainer</li><li>PostNord</li><li>Rail Delivery Group</li></ul>
Freight and Logistics Digital Services	INR 393.57B 4.9%	TCS DynaPORT	A cloud-ready terminal operation system that automates all marine terminal processes	<ul> <li>UPS</li> <li>Maersk</li> <li>Forth Ports</li> </ul>
2024	Consumer business revenue, including TTH, FY 2024 YOY revenue growth from consumer business, FY 2024	TCS Dexam™	A data exchange and marketplace platform to democratize, monetize, and commercialize data securely	• bpost
Practice maturity $\star \star \star \star \star$	Partnerships/alliances			Service line coverage
Investments and nnovation $\star \star \star \star$ Partner ecosystem $\star \star \star \star \star$	<b>infor</b> <b>industrialized cloud a</b> for logistics enterprise	o deliver pplications es	Leveraged its product suite to deliver demand pricing systems and freight management	Inbound logistics
Delivers smart logistics	Leveraged its location enable location-based for IoT fleet managen	a platform to d innovation nent solution	Collaborated to develop customized TTH services to deliver omnichannel transportation service	Operations/warehousing
enterprises, focusing on parcel and postal services,	Used its AI/ML platfor BlueYonder business planning, ex	m to deliver ecution,	Implemented its cloud solutions and enterprise app software to	Outbound logistics
by leveraging its pool of industry-specific solutions.	Converse, and labor so Leveraged its digital s deliver supply chain v transportation manag	solutions to isibility and ement	Used its Azure platform to provide ft truck departure optimization	Marketing and sales Customer service

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## TCS: RadarView profile

Client	Capability	Summary	Business impact
Rail Delivery Group	<ul> <li>Analytics</li> </ul>	<ul> <li>Rail Delivery Group faced problems accessing a large amount of siloed data efficiently.</li> <li>TCS collated disparate data sources into a single digital service by developing the Rail Data Marketplace platform using its data and analytics solution, TCS Dexam. This allowed users to decentralize and monetize data, providing them access to open data.</li> </ul>	<ul> <li>Enabled seamless data exchange</li> <li>Ensured 800 data-sharing agreements in two months</li> </ul>
postnord	<ul><li> AI</li><li> Analytics</li></ul>	<ul> <li>PostNord sought to achieve optimal utilization of parcel trucks for mid-mile transportation and real-time optimization of truck departure schedules.</li> <li>TCS delivered a touchless, AI-based, real-time image analytics solution hosted on Azure. The solution used security CCTV cameras to measure truck fill rates, helping the client improve operations.</li> </ul>	<ul> <li>Enabled the client to view and access data in real time</li> <li>Enhanced security at terminals</li> </ul>
CSX	<ul><li>Automation</li><li>Cybersecurity</li></ul>	<ul> <li>CSX wanted a flexible operating model with built-in scalability, to focus on enterprise standardization, intelligent automation, financial clarity, and business reimagination.</li> <li>TCS standardized the client's operations to maximize automation and security product capabilities, managing the end-to-end security. It provided application development, maintenance, infrastructure support, cybersecurity, transformation, and organizational change management.</li> </ul>	<ul> <li>Ensured operational efficiency and safety</li> </ul>
UPS	<ul><li>Analytics</li><li>ML</li></ul>	<ul> <li>UPS was facing challenges with logistics planning and operations due to extreme weather conditions and natural disasters.</li> <li>TCS digitally transformed its global transportation planning system by building Network Planning Tool (NPT), an integrated route and hub application suite. It helped forecast the package volume and weight based on analysis of historical data and uses ML algorithm to analyze the past decisions and assesses the impact of those on customer satisfaction and internal costs.</li> </ul>	<ul> <li>Saved annual costs of more than USD 100M</li> <li>Handled courier volume surge</li> </ul>

## TCS: RadarView profile

### Analyst insights

#### Practice maturity

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- TCS excels in delivering smart logistics solutions to courier, express, and parcel companies. TCS Research and TCS Pace teams have developed robotic solutions, such as autonomous mobile robots (AMRs), pickers and packers, and a platform to manage robots to lower expenses and enhance performance. It employs digital twin technology and robot sensor data in the AMRs to enable collision-free navigation and automate operations in the logistics industry.
- It delivers AI technology solutions along with AI infrastructure to its freight and logistics customers. It delivers proprietary solutions that provide Gen AI models to customers to accelerate the development of industry use cases. It has developed a digital assistant using Gen AI for a postal company; it answers any HR-related policy questions. It has also created a Gen AI application to enable the postman to pose questions to the assistant before addressing customer queries.
- It offers industry solutions, such as TCS TwinX<sup>™</sup>, an AI powered enterprise digital twin solution which helps optimize decisions and proactively manage outcomes.
- It is inclined toward having delivery centers closer to its customer service space and has established five nearshore delivery centers in countries such as Mexico, Portugal, Spain, and Ireland. It is hiring local talent to deliver relevant solutions to its customers.

#### Investments and innovation

- TCS drives industry innovation through its eight established Pace Port co-innovation hubs. Through its Pace Ports in Europe, it accelerates digital transformation and develops solutions for customers in various segments, including postal services, with clients such as bpost and PostNord.
- It is focused on talent upskilling and hiring for the TTH industry. In 2023, more than 5,400 associates upskilled in tech skills, including Gen AI, Microsoft Azure, and AWS Cloud Computing, and more than 1,700 associates completed certification in niche skills, including Azure Administrator and Google Cloud Engineer. It hires talent through its Talent and Leadership Program by collaborating with more than 67 global universities, including Cornell Tech and Carnegie Mellon University.
   Through the TCS Co-Innovation Network™ (COIN™), it partners with more than 2,900 startups to innovate in areas such as ML, AI, computing, and cybersecurity.

#### Partner ecosystem

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- Partnering with logistics technology and solutions providers, TCS delivers transport management, shipping, and tracking solutions to freight and logistics customers. It integrates the CargoWise product suite with third-party solutions, integrators, and freight platforms to deliver demand pricing and freight management services. It also partners with HERE Technologies to upgrade its fleet management solutions.
- It maintains strong partnerships with hyperscalers, such as AWS, Google, and Microsoft, to leverage AI and data to deliver offerings to freight and logistics customers. For instance, it is leveraging Azure AI to develop a tool to interpret, investigate, and respond to emails for the trucking subsegment.
- It collaborates with SAP to develop industry-specific solutions such as TCS Crystallus<sup>™</sup> for Cargo and Logistics, accelerating SAP S/4HANA transformations.

## Tech Mahindra: RadarView profile

Tech Practice overview		Industry-specific solution	s/offerings	Sample clients
Mahindra	<ul> <li>Practice size: 2,550+</li> <li>Active clients: 27</li> <li>Delivery highlights: 25+ delivery</li> </ul>	Connected Logistics	A product development and SaaS implementation-based transport management system	<ul> <li>A global logistics service provider</li> <li>Major ports under the</li> </ul>
AVASANT RADARVIEW™	centers worldwide	RailNXT Assets	A rail asset management platform that provides automation, predictive maintenance, and smart monitoring	government of India • A South African port operator
Freight and Logistics Digital Services 2024	\$100M-\$250M Revenue from freight and logistics, FY 2023 SW-10% YOY revenue growth from freight and logistics, FY 2023	Port Enterprise Business Systems SmartPort Logistics	An ERP solution for business process re-engineering and digitalization of seaports and business operations A unified blockchain platform for secure and faster clearance	<ul> <li>A US-based freight railroad</li> <li>Gati</li> </ul>
Practice maturity $\star \star \star \star$			processes for port procedures	
Investments and	Partnerships/alliances			Service line coverage
innovation Partner ecosystem	Developed a use case to maritime industry using surveillance services	for the Softeon	Implemented its warehouse management system for third-party logistics customers	Inbound logistics
Delivers digital solutions to freight rail and maritime	Leveraged its platform rail network traffic to de and cyber threats in inf	to monitor etect risks rastructure	Used its technology platform to optimize sea terminals' efficiency	Operations/warehousing
segments leveraging its	Utilized its rail scheduli	ng platform	Leveraged its solutions to deliver	Outbound logistics
wide and niche domain	vehicle productivity		system for port management	Marketing and sales
industry solutions.	Used its rail gate solution automation and access the rail and maritime in	on for gate control for idustry	Utilized its transport management solution to provide consolidated transportation operations	Customer service

## Tech Mahindra: RadarView profile

### Case studies

Client	Capability	Summary	Business impact
A US-based freight railroad	• Generative Al	<ul> <li>The client was facing SLA delays due to manual rail operations employee claims processing and reported that 25% of the claims were automatically paid due to the expiration of the review time.</li> <li>Tech Mahindra implemented generative AI solutions to digitize employment agreements, a business rule engine to validate employee claims according to digitized rule mappings, and a cognitive claims scoring engine to identify invalid claims based on historical claims data.</li> </ul>	<ul> <li>Supported annual savings of \$0.6M</li> <li>Reduced human errors</li> <li>Reduced efforts in processing employee claims by approximately 40%</li> </ul>
Major ports under the government of India	<ul><li>Analytics</li><li>Cloud</li><li>Cybersecurity</li></ul>	<ul> <li>The client wanted to completely upgrade its manual port operations systems and other processes, which were human-intensive and prone to errors. It also had disjointed departments that were missing integration with the national portals of the Government of India.</li> <li>Tech Mahindra transformed the paper-based manual processes into digitalized processes for all key functions of a port. It also implemented an SAP S/4HANA-based solution and integrated it with a port operating system, new and existing applications, a private cloud, cybersecurity enablement, and a unified dashboard for six major Indian ports.</li> </ul>	<ul> <li>Provided better user experience and high employee productivity</li> <li>Streamlined port operations</li> </ul>
A South African port operator	<ul><li>Analytics</li><li>Automation</li></ul>	<ul> <li>The client wanted to upgrade its port system landscape from legacy systems to remove data inconsistency.</li> <li>Tech Mahindra migrated the port's old legacy systems to the newest version of SAP and provided managed support services for S/4HANA. It also enabled automated reporting and data analytics with reports and dashboards.</li> </ul>	<ul> <li>Improved systems efficiency</li> <li>Increased employee productivity</li> <li>Provided clear data flow</li> <li>Reduced IT operational expenses by 20%</li> </ul>
A global logistics service provider	<ul><li>Automation</li><li>Blockchain</li></ul>	<ul> <li>The client aimed to upgrade its customs clearance process to cater to small cross-border e-commerce shipments and gain visibility over the supply chain.</li> <li>Tech Mahindra built a blockchain-based customs clearance platform for cross-border e-commerce and provided automatic approval and customs clearance.</li> </ul>	<ul> <li>Increased process efficiency</li> <li>Reduced e-commerce operations cost by 20%</li> <li>Provided 100% visibility and traceability</li> </ul>

## Tech Mahindra: RadarView profile

### Analyst insights

#### Practice maturity

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- Tech Mahindra specializes in delivering digital solutions to air and express delivery service customers. More than 50% of its freight and logistics industry revenue is generated through this subsegment with clients such as Gati. For instance, it provided consulting to a courier, express, and parcel services company in setting up a joint venture in India, aiding deployment and support for the logistics transaction platform and delivering architecture that saved \$5M over two years.
- Its strongest subsegments are freight rail and maritime, for which it has developed various digital solutions. Its RailNXT service offering delivers multiple solutions, such as rail assets, yard operations, and sustainable railroads. Its PortNxT suite of solutions is scalable and provides port and marine business operations management. ShipNxT delivers complex shipping operations and next-generation business technology for ship owners, managers, and agents.
- It leverages technologies such as generative AI to develop proof of concepts (POCs) for the freight and logistics industry. It has developed generative AI models
  to analyze weight, size, and fragile parameters and differentiate products to optimize load planning. It has also developed AI-driven reporting, cloud-based
  visualization, and analytics solutions to allow port management companies to visualize, measure, and manage themselves with an AI inspection report.

#### Investments and innovation

## • Tech Mahindra acquired Altavec, an asset management company, in 2022. This acquisition has helped it deliver rail asset management solutions to its freight rail customers. In 2021, it acquired Perigord, which provides packaging supply chain solutions, to help logistics customers focus on sustainable packaging.

- It has set up a CoE with niche domain partners to achieve high revenues from delivering solutions and services around niche domain partner products.
- It has established a drone innovation lab for the maritime segment in Bhubaneshwar, India. The lab focuses on innovating maritime operations through unmanned aerial vehicles and drones. Through this lab, it conducts research and develops and implements drone-based solutions in collaboration with startups and academia.

#### Partner ecosystem

- Tech Mahindra partners with multiple niche domain companies, such as Softeon for cloud-based warehouse management systems, Shipnet for maritime ERP suite, and Cervello Security for rail cybersecurity solutions.
- It has strong partnerships with companies delivering solutions in the freight rail subsegment. It partners with Visy to leverage its rail gate solution to automatically detect, image, and identify all rail properties and with INFORM to utilize its rail scheduling platform to increase rail crane and yard vehicle productivity by reducing rehandles and improving storage.

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## Unisys: RadarView profile

	Practice overview	Industry-specific solution	ons/offerings	Sample clients
UIIISYS	<ul> <li>Practice size: 500+</li> <li>Active clients: N/A</li> <li>Delivery highlights: 60+ delivery</li> </ul>	Unisys Cargo Portal Service	A solution that provides flight schedules, capacity visibility, and pricing to logistics providers	<ul> <li>A global cargo airline</li> <li>A global logistics company</li> </ul>
AVASANI RADARVIEW™ DISPUPTOP	centers	Unisys Logistics Optimization™	An analytics solution that maximizes transport capacity by optimizing cargo utilization using data	<ul> <li>A logistics solutions provider</li> <li>MASkargo</li> </ul>
Freight and Logistics Digital Services	\$100M-\$250M >60%	Unisys Cargo Management Solution	An end-to-end integrated solution to manage cargo throughout its life cycle	
	Revenue from freight and logistics, FY 2023 Digital revenue from freight and logistics, FY 2023	Unisys Cargo Connect	A solution that connects transport and cargo management systems using IATA-compliant messaging	
Practice maturity $\star \star \star$	Partnerships/alliances			Service line coverage
Investments and				
Partner ecosystem	Accelerated cloud mig Microsoft industry-specific solut on the Azure cloud pla	gration and ions hosted atform	Utilized its hardware to deliver the <sup>ies</sup> Unisys Logistics Optimization solution for logistics customers	Inbound logistics
Delivers air cargo solutions	Incorporated its quant annealing technology use cases with multipl	tum to support e constraints	Leveraged its cloud platform to deliver unified data to logistics customers	Operations/warehousing
leveraging its proprietary	Utilized its transport m		Integrated its cargo management	Outbound logistics
through its industry-specific	<b>' I ' global</b> system to integrate wi management systems	s IDSSORWOR	provide booking connectivity	Marketing and sales
partner ecosystem.	Leveraged its analytic deliver advanced syste application monitoring	s platform to ems and g CHAMP	Integrated its cargo management system with logistics providers to provide booking connectivity	Customer service

#### Darker color indicates higher industry concentration:

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## Unisys: RadarView profile

Client	Capability	Summary	Business impact
maskargo <b>}</b>	<ul><li>AI</li><li>Analytics</li></ul>	<ul> <li>MASkargo aims to lower its operational costs arising from spending time manually selecting and assigning shipments to unit load devices.</li> <li>Unisys implemented its Logistics Optimization solution, which uses quantum computing, advanced analytics, and AI to provide flight planners with a graphic cargo plan that maximizes cargo capacity, profitability, and the management of priority shipments.</li> </ul>	<ul> <li>Improve operational efficiency</li> <li>Enhance tracking of shipment exceptions</li> </ul>
A global logistics company	<ul> <li>Automation</li> </ul>	<ul> <li>The client wanted to reduce quality assurance efforts, deploy testing automation, and align testing for Agile development while implementing a system to integrate all units on a single platform.</li> <li>Unisys developed a testing strategy and quality assurance framework for test planning, tracking the issue, and defect logging. It also automated regression test scripts and integration testing.</li> </ul>	<ul> <li>Reduced maintenance efforts by 70%</li> <li>Enabled 100% product availability globally</li> <li>Decreased quality assurance cost</li> </ul>
A logistics solutions provider	• Cloud	<ul> <li>The client wanted to design and develop a next-generation data platform for unified information and data.</li> <li>Unisys provided data migration and warehousing from on-premises to an AWS cloud platform and deployed Microsoft Power BI for quick report creation.</li> </ul>	<ul> <li>Reduced manual process by 90%</li> <li>Improved data availability from 5 hours to 10 minutes</li> <li>Improved data accessibility for analysis</li> </ul>
A global cargo airline		<ul> <li>The client wanted to ensure proper handling and safe delivery of cargo, including perishables, valuables, live animals, and human remains.</li> <li>Unisys deployed its cargo solutions for air cargo operations management, providing initial booking through the warehouse, flight management, and real-time tracking, control, and delivery.</li> </ul>	<ul> <li>Improved customer satisfaction</li> <li>Improved cargo capacity to more than two billion ton-miles annually</li> <li>Delivered 99.9% shipping and cargo operations reliability</li> </ul>



## Unisys: RadarView profile

### Analyst insights

#### Practice maturity

- Unisys has experience in delivering digital transformation services to air cargo customers. It has collaborated with MASkargo for over eight years to enhance its cargo operations. It implements a cloud-based logistics management system and provides logistics operation management for improving visibility and monitoring of shipments and extending its market reach.
- It demonstrates expertise in delivering cargo solutions to its logistics clients using its proprietary solutions. Under its Unisys Cargo suite, it offers multiple solutions, such as Unisys Cargo Mobile, which provides shipment scanning and tracking capabilities to warehouse and loading staff. This is complemented by Unisys Cargo Management Solution, which provides end-to-end management of the cargo, starting from booking to loading and reporting.
- It is leveraging generative AI across its industry solutions. It uses generative AI in capacity and route optimization in its Unisys Logistics Optimization solution. It also plans to use generative AI to enable inventory and warehouse optimization for its logistics customers.

#### Investments and innovation

- Unisys, with more than 2,000 technical resources, is focused on investing in solution and product development. It is working toward enhancing route optimization solutions for its customers by consolidating its existing Unisys Logistics Optimization and Unisys Cargo Portal Services solutions.
- It invests in new data centers to enhance the service delivery of its proprietary, industry-specific solutions, including Cargo Management Services, Cargo Connect, Cargo Portal Services, and Cargo Mobile.
- For some key clients, such as MASkargo, it is investing in co-innovation activities governed by an innovation council to improve the clients' business case development and prioritization of strategic objectives.

#### Partner ecosystem

- Unisys has formed partnerships with industry-specific companies, such as CHAMP and IBS Software, for providing booking connectivity to air freight providers with the airlines serviced by these companies.
- It also partners with transport management system solution providers such as WiseTech Global and Softlink to integrate transport management systems with airlines' cargo management systems.
- It collaborated with technology companies, including D-Wave, Datadog, and Pendo, to develop the Unisys Logistics Optimization advanced analytics platform, which optimizes cargo usage of any transport capacity.

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## Wipro: RadarView profile

wipro	Practice over	Practice overview		ecific solution	Sample clients	
	<ul> <li>Practice size</li> <li>Active client</li> <li>Delivery hig</li> </ul>	<ul> <li>Practice size: 6,000+</li> <li>Active clients: N/A</li> <li>Delivery highlights: ~31 delivery centers worldwide</li> <li>Cargo handling solution</li> <li>CROAMIS</li> <li>CROAMIS</li> <li>INR 893.8B Revenue from IT services segment, FY 2024</li> <li>Connected supply chain solution</li> <li>Smart Track</li> </ul>		lling	A cloud-native platform that delivers automated processes, real-time tracking, and business insights	<ul> <li>A global logistics company</li> <li>A logistics company</li> </ul>
AVASANT RADARVIEW™	centers wor				An automated air cargo solution that streamlines operations throughout the shipment life cycle	<ul> <li>A global logistics and transport company</li> <li>Menzies Aviation</li> </ul>
Freight and Logistics Digital Services	INR 893.8			supply on	An end-to-end supply chain visibility solution that delivers a connected experience	<ul> <li>Mazda Motor Logistics</li> </ul>
2024	Revenue from services segme FY 2024			A cold chain monitoring solution to track air, land, or sea shipments with real-time product health status		
Practice maturity $\star \star \star \star$	Partnerships/	Partnerships/alliances				
innovation $\star \star \star \star$ Partner ecosystem $\star \star \star \star \star$		Partnered to deliver a la delivery solution with n routing, and delivery co	ast-mile avigation, onfirmation	infor	Leveraged its platforms to deliver ERP solutions to reduce costs and improve profitability	Inbound logistics
Invests in AI, data, and analytics solutions. Delivers	🚓 BlueYonder	Used its supply chain management products to predict demand and transform product delivery		servicenow	Utilized its Loom anomaly detector to detect delivery failures in shipping	Operations/warehousing
the solutions through collaboration with domain	KINGXIS	KINGXIS:Leveraged its cloud supply chain management software to connect data, processes, and peopleIIII wise globaMicroUtilized its connected planning platform to upgrade enterprise performance solutions to the cloudIIII wise globa		III I wisetech	Used its logistics execution platform to deliver freight forwarding and track and trace	Outbound logistics
companies and by	A HAAIS			. II . Global		Marketing and sales
leveraging its proprietary offerings.	<b>/</b> {naplan			Microsoft	Leveraged its Azure platform to deliver large and long-term data storage	Customer service

## Wipro: RadarView profile

Client	Capability	Summary	Business impact
ENZIES	<ul><li>Analytics</li><li>Automation</li><li>Cloud</li></ul>	<ul> <li>Menzies Aviation wanted to transform its air cargo management services to grow its services and use new technologies.</li> <li>Wipro delivered a cargo handling solution using cloud-native technologies to address the client's needs. It provided greater visibility of cargo location to the client and its customers, increased transparency and automation, and enabled real-time tracking and business insights.</li> </ul>	<ul> <li>Improved business efficiency</li> <li>Enhanced employee experience and customer service</li> </ul>
A global logistics company	<ul><li> AI</li><li> Automation</li><li> Cloud</li></ul>	<ul> <li>The client wanted an automated solution to process nonstandard and standard packages for various categories.</li> <li>Wipro used its ai360 solution to develop an Al automation solution using scalable hybrid architecture, cloud-native microservices, and low-latency processing to reduce disruption in automated sorting. It automated over 85% of the total package volume, processing more than 700M packages in 18 months at over 55 facilities.</li> </ul>	<ul> <li>Achieved 98% accuracy for all package categories</li> <li>Increased revenues</li> <li>Reduced operations costs</li> <li>Improved customer experience</li> </ul>
A global logistics and transport company	<ul><li>Analytics</li><li>Cloud</li><li>ML</li></ul>	<ul> <li>The client wanted a data-driven solution to enhance delivery tracking, rate accuracy, and operational efficiency.</li> <li>Wipro provided a data platform with real-time data feed, an ML model to detect anomalies and predict maintenance, and a data lake for decision prediction, support, and reporting. It used Azure and Databricks to deliver large and long-term storage for better predictions and accurate operation research models.</li> </ul>	<ul><li>Improved prediction</li><li>Increased operational efficiency</li></ul>
A logistics company	<ul><li>AI</li><li>Analytics</li></ul>	<ul> <li>The client wanted an enhanced shipping failures prediction app as frequent failures were causing client dissatisfaction and revenue loss.</li> <li>Wipro developed a solution leveraging the Loom anomaly detector and HOLMES to detect probable failures in delivery and timecard applications. It provided a UI for analytical insights behind failures and an AI-enabled app.</li> </ul>	<ul> <li>Reduced fault detection time by approximately 50%</li> <li>Increased client satisfaction and revenue</li> </ul>

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## Wipro: RadarView profile

### Analyst insights

#### Practice maturity

- Wipro has expertise in delivering connected logistics solutions to its freight and logistics clients. It provides streamlined supply chains, better visibility and tracking using cloud technology, and accurate insights into the processes using analytics. It also leverages its Blockchain for Supply Chain platform to improve asset tracking and visibility, delivering solutions such as reverse logistics.
- It focuses on delivering the talent, training, scalability, research, and co-innovation capabilities required to expedite AI adoption across diverse segments, such as supply chain, customer experience, and ESG, through its Lab45 AI platform and its partners, including Microsoft, Google, AWS, OpenAI, and Meta.
- It offers a wide range of industry-specific solutions and frameworks to support its freight and logistics customers, focusing on third-party logistics providers. The
  solutions include HOLMES, an end-user computing platform that enables 24X7 support availability; CROAMIS, an automated air cargo solution for streamlined
  operations; and Smart Track, a monitoring solution to track the real-time health of shipments.

#### Investments and innovation

- Wipro focuses on expanding AI, data, and analytics solutions and developing R&D and platforms. In 2023, it launched Ai360, an AI innovation ecosystem, and committed to investing USD 1B over three years to advance AI capabilities.
- In 2021, it acquired LeanSwift Solutions, a system integrator for one of its domain partners, Infor. The acquisition adds to its Infor cloud practice and offers ERP, supply chain, and warehouse management systems to clients in various industries, including distribution.
- It is a part of Blockchain in Transport Alliance (BiTA), an industry group that sets blockchain standards for the freight industry, and drives innovation and adoption of blockchain technology in the logistics and transportation industry.

#### Partner ecosystem

- Wipro collaborates with domain companies to deliver logistics management solutions. It partners with WiseTech Global to leverage the CargoWise logistics execution platform that provides freight forwarding, transportation optimization, and warehouse management solutions. It also partners with LogiNext to deliver last-mile delivery solutions, providing automatic and manual allocation, routing and navigation, delivery confirmation, and customer feedback channels.
- It partners with SAP to deliver SAP Intelligent Asset Management, a cloud-based suite of products from SAP. It provides enhanced asset management operations across the supply chains of logistics customers.

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Appendix: About RadarView

# Freight and Logistics Digital Services 2024 RadarView assesses providers across three critical dimensions

Practice maturity	<ul> <li>This dimension evaluates the type, market acceptance, and quality of offerings in the freight and logistics 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.</li> <li>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.</li> </ul>
Investments and innovation	<ul> <li>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.</li> <li>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.</li> </ul>
Partner ecosystem	<ul> <li>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.</li> <li>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.</li> </ul>

## 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	accenture
Market	Discussions with enterprise executives leading	

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 May-July 2024

final 15 featured in the Freight and Logistics Digital Services 2024 RadarView: Capgemini Coforge IEM HCLIech kyndry *Ervices* LTIMindtree Tech Mahindra **V**UNISYS

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Of the 32 service providers assessed, the following are the

Note: Assessments for Accenture, Coforge, Eviden, Fujitsu, IBM, Kyndryl, LTIMindtree, and Wipro were conducted based on public disclosures and market interactions only.

## Reading the RadarView

### Avasant has recognized service providers in four classifications:



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.



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.



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.



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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