ISG Provider Lens™

Internet of Things – Services and Solutions

Mobile Asset Tracking and Management

A research report comparing provider strengths, challenges and competitive differentiators

QUADRANT REPORT | JUNE 2022 | U.S.

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Clients demand quick ROI and long-term transformation

Internet of Things (IoT) agendas are becoming increasingly ambitious. Clients demand strategic roadmaps with a compelling vision and scalable implementations that yield measurable ROI. The ability to optimize operations, address security threats and leverage data analytics are top priorities. Emerging technologies such as intelligent automation, 5G, AI and machine learning identify new opportunities to create value.

Partnerships and Acquisitions

A robust partner ecosystem is key to success in this dynamic environment. At a foundational level, alliances with platform providers integrate connected devices with cloud resources, global teams and external networks and systems. Key players include: hyperscalers such as AWS, Google and Microsoft; product lifecycle management (PLM) providers such as Aras, Dassault, PTC and Siemens; and smart IoT platform providers such as IBM Watson and ThingWorx. Interoperability and plug-and-play functionalities are imperative, as clients seek flexibility to address new, unanticipated requirements and avoid vendor lock-in.

Partnerships also enable industry focus and end-to-end security. While many providers invest in building in-house vertical expertise, alliances with niche providers can fill gaps and address specific last-mile criteria around regulatory standards and user and customer requirements. In terms of security, providers must combine traditional models with expertise in zero trust architectures, software-defined perimeters

IoT agendas are becoming increasingly ambitious.

and secure e-SIMs. Industry- and region-specific regulatory requirements around practices and certifications pose an additional challenge. A complement of organic and third-party resources is often essential to a comprehensive approach.

Sustainability

IoT technology creates unique opportunities to address sustainability. Data from smart energy and water meters can, for example, reduce energy and water usage. IoT-enhanced logistics can optimize trucking routes to reduce fuel consumption. Enterprises, moreover, are discovering that a focus on waste reduction and environmental sustainability yields positive business results. However, sustainability maturity levels vary among IoT service providers. Some have committed to net zero goals or ambitious improvement targets for their own operations and have proactively integrated sustainability objectives into their customer strategies. In other cases, provider initiatives are limited to responding to client requests.

Talent

Attrition poses a major challenge for providers aiming to support IoT growth. Clients and providers are working to de-risk their footprints in India by opening delivery centers in Eastern Europe, Latin America and Asia Pacific. Domestic talent strategies include expanded internship programs to engage with prospective employees while they are still in school. Such initiatives build relationships and reduce ramp-up times and learning curves. Some India-based providers are looking beyond tier 1 engineering universities and targeting quality programs in less heavily recruited areas. Retention efforts increasingly include career journey plans that chart goals and measure progress, along with cross-training sabbatical initiatives to expose employees to new skills and different parts of the business.

The Competitive Landscape

Major players continue to dominate the IoT landscape and Leader quadrants of this year's IoT study. However, recent shifts in market dynamics could be disruptive. One development is the formation of Kyndryl – the spin-off of IBM's managed infrastructure services company – in late 2021. In addition to a comprehensive managed services portfolio, Kyndryl offers advisory and implementation services on digital technology and integration. While creating new options and opportunities, the move is stirring confusion among customers.

Another notable development is the recent merger between Larsen & Toubro Infotech (LTI) and Mindtree. Employing more than 80,000 people, LTI Mindtree will become India's fifth-largest IT services provider and create a significantly expanded U.S. presence. Advantages include minimal overlap in areas of expertise and opportunities to compete for large deals, particularly in the financial services and communications sectors. Meanwhile, risks include the potential of increased employee attrition at a time of peak demand for skills.

Cyient's recent acquisition of Finnish-based Citec, a product engineering services company focused on the energy, process, oil and gas and manufacturing industries, also is an important development. Although primarily targeted to expand Cyient's European and Nordic footprints, the integration of new capabilities across geographies could create opportunities for the U.S. market.

Methodology: This year's study assesses Strategy Consulting and Implementation and Integration as separate quadrants. The intent is to focus specifically on providers' ability to define IoT roadmaps and vision on the one hand, and to drive successful executions on the other. By contrast, the 2021 study examined IoT strategy capabilities in conjunction with implementation services. In addition, last year's Connected Mobility quadrant focused primarily on connected vehicles. Meanwhile, this year's Mobile Asset Tracking and Management quadrant considers the use of connected sensors to monitor products, equipment and people in transit and in remote environments. Finally, this year's study assesses Data Management and AI on the Edge as a U.S. quadrant, while the 2021 study was global in scope.

Strategy Consulting

Effective IoT strategies combine a high-level vision of future possibilities with concrete short-term results. Involving clients in strategy formulation is key. Many providers deploy co-innovation and ideation labs and workshops that bring clients, providers and partners together in a collaborative environment. The application of design thinking principles is common to support a clean slate approach that identifies new business models and approaches. End-to-end capabilities that integrate strategy with deployment ensure a seamless transition from abstract ideation to specific timelines and concrete results. Security and sustainability criteria are a core consideration throughout.

Implementation and Integration

IoT implementations are shifting from discrete proofs of concept (PoCs) to scalable initiatives that create new opportunities to improve business operations and strategic value. Horizontal technology expertise, along with industry-specific insight into customer and regulatory requirements, is essential. Compatibility and interoperability ensure that IoT ecosystems continue to expand. Innovations such as AI, advanced analytics and image recognition enhance functionality. Digital twin virtual representation models accelerate time to market. Security capabilities address network, device and endpoint requirements, and meet regulatory standards.

Managed Services

Managed IoT service models focus on optimizing performance and driving continuous improvement. Intelligent tools and analytics identify root causes of problems, define new sources of value and reveal continually evolving security threats. Remote monitoring and OTA capabilities optimize efficiency and scale resources across multiple geographies – a critical capability in a tight labor market. Managed services play a key role in sustainability by leveraging analytics from day-to-day operations to minimize carbon impact, reduce energy consumption and increase user device efficiency. Effective talent strategies ensure that resources keep pace with growing demand.

Mobile Asset Tracking and Management

The ability to accurately locate, identify and monitor a wide range of assets is creating opportunities to solve a wide range of critical business problems. Solutions leverage smart sensors and analytical platforms to improve operations, enhance personal and product safety, align with regulatory standards and provide insights into customer activity

and preferences. Use cases include helping fleet managers track the location of trucks and goods in transit; support for emergency room nurses that need to quickly identify and locate equipment to care for patients; and visibility for pharmacies that must ensure cold chain viability of medicines as they move from the factory to the store.

Data Management and AI on the Edge

Edge computing applications are being driven by innovations in two areas: the ability to capture, store and process massive volumes of visual data directly at the source of critical activity; and the application of AI and machine learning techniques to analyze that data and draw actionable conclusions. As an example, consider an autonomous vehicle approaching a crosswalk where a pedestrian waits at the curb. The vehicle's video analytics system must assess the situation in real time, determine who has the right of way and proceed accordingly. Industrial applications include smart manufacturing, where edge solutions monitor equipment for quality control and predictive maintenance.

IoT technology creates unique opportunities to address sustainability.

Provider Positioning

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	Strategy Consulting	Implementation and Integration	Managed Services	Mobile Asset Tracking and Management	Data Management and AI on the Edge
Accenture	Leader	Leader	Leader	Product Challenger	Product Challenger
Atos	Leader	Leader	Leader	Leader	Leader
Birlasoft	Product Challenger	Product Challenger	Product Challenger	Contender	Contender
Bosch	Product Challenger	Leader	Product Challenger	Product Challenger	Product Challenger
Capgemini	Leader	Leader	Leader	Leader	Leader
Cognizant	Leader	Leader	Leader	Leader	Leader
Cyient	Not In	Product Challenger	Rising Star ★	Product Challenger	Not In
Deloitte	Product Challenger	Not In	Not In	Not In	Not In
DXC Technology	Not In	Contender	Not In	Contender	Not In
eInfochips	Product Challenger	Product Challenger	Rising Star ★	Product Challenger	Product Challenger
EY	Product Challenger	Not In	Not In	Not In	Not In

Provider Positioning

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	Strategy Consulting	Implementation and Integration	Managed Services	Mobile Asset Tracking and Management	Data Management and AI on the Edge
HARMAN DTS	Market Challenger	Leader	Leader	Leader	Leader
HCL	Leader	Leader	Leader	Leader	Leader
Hitachi Vantara	Rising Star ★	Rising Star ★	Not In	Not In	Not In
HPE	Product Challenger	Rising Star ★	Not In	Not In	Product Challenger
IBM	Leader	Leader	Market Challenger	Leader	Leader
Infosys	Product Challenger	Leader	Product Challenger	Product Challenger	Product Challenger
Innominds	Not In	Not In	Product Challenger	Not In	Not In
LTI	Contender	Contender	Product Challenger	Not In	Product Challenger
LTTS	Contender	Leader	Product Challenger	Product Challenger	Not In
Lumen	Product Challenger	Product Challenger	Product Challenger	Not In	Not In
Microland	Not In	Not In	Product Challenger	Contender	Not In

Provider Positioning

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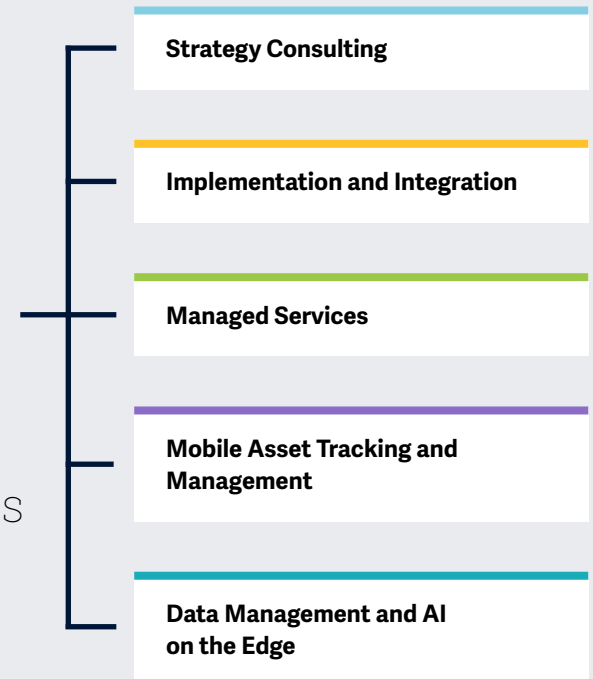
	Strategy Consulting	Implementation and Integration	Managed Services	Mobile Asset Tracking and Management	Data Management and AI on the Edge
Mindtree	Product Challenger	Product Challenger	Contender	Product Challenger	Product Challenger
NTT	Product Challenger	Product Challenger	Not In	Not In	Rising Star ★
PwC	Not In	Not In	Not In	Leader	Not In
Siemens	Leader	Product Challenger	Market Challenger	Leader	Leader
SLK Software	Not In	Product Challenger	Product Challenger	Product Challenger	Product Challenger
TCS	Product Challenger	Leader	Product Challenger	Rising Star ★	Product Challenger
Tech Mahindra	Product Challenger	Product Challenger	Product Challenger	Contender	Product Challenger
UST	Not In	Contender	Not In	Not In	Not In
Verizon	Contender	Market Challenger	Leader	Market Challenger	Leader
VVDN	Not In	Product Challenger	Product Challenger	Not In	Product Challenger
Wipro	Product Challenger	Product Challenger	Leader	Product Challenger	Product Challenger

This study focuses on what ISG perceives as key success factors in 2022 for Internet of Things Services and Solutions



Simplified Illustration Source: ISG 2022

Definition

Internet of Things (IoT) applications continue to expand across industries and geographies. According to various reports, the total number of connected devices may reach 27.1 billion by 2025. In maturing markets, IoT initiatives are evolving from discrete, customized proofs of concept to enterprise-wide, scalable solutions. As part of this maturity, the ability to address industry-specific business and regulatory requirements is becoming essential. Rather than being viewed as a distinct entity, IoT is increasingly being integrated into broader transformational strategies.

A key IoT focus area is the deployment of integrated networks of smart devices that can monitor the location and movement of vehicles, equipment, goods and people, plus collect and analyze data about asset use. These initiatives support benefits such as predictive maintenance, product safety, streamlined logistics and supply chain visibility. IoT relevance is also being driven by the use of AI and data processing technologies directly at the points of business activity to securely collect, process and analyze large volumes of information.

IoT initiatives often require technology partner support in three areas: strategy consulting to identify opportunities, define objectives and chart a journey; technology implementation expertise to integrate multiple devices, applications and platforms; and ongoing management of the IoT ecosystem through managed services.

Scope of the Report

This ISG Provider Lens™ quadrant study examines the following five quadrants: Strategy Consulting; Implementation and Integration; Managed Services; Mobile Asset Tracking and Management; and Data Management and AI on the Edge.

The study offers IT decision-makers:

- Transparency on the strengths and weaknesses of relevant providers
- A differentiated positioning of providers by segments
- Focus on regional markets

Takeaways include insights into positioning, key relationships and go-to-market considerations. ISG advisors and enterprise clients use information from these reports to evaluate their existing vendor relationships and potential engagements.

Provider Classifications

The provider position reflects the suitability of IT providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes, classes and industries. In case the IT service requirements from enterprise customers differ and the spectrum of IT providers operating in the local market is sufficiently wide, a further differentiation of the IT providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions IT providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

- **Midmarket:** Companies with 100 to 4,999 employees or revenues between US$20 million and US$999 million with central headquarters in the respective country, usually privately owned.
- **Large Accounts:** Multinational companies with more than 5,000 employees or revenue above US$1 billion, with activities worldwide and globally distributed decision-making structures.

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product Challenger, Market Challenger and Contender), and the providers are positioned accordingly. Each ISG Provider Lens quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star.

Number of providers in each quadrant: ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).

Provider Classifications: Quadrant Key

Product Challengers offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths.

Leaders have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

Contenders offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/services and a follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

Market Challengers have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study.

★ **Rising Stars** have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader quadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

Not in means the service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.

Mobile Asset Tracking and Management

Who Should Read This

This quadrant report is relevant to U.S.-based enterprises for evaluating providers that offer mobile asset tracking and management solutions. Here, ISG highlights the positioning of such providers in the U.S. market and how each provider addresses challenges faced by enterprises in the region.

Providers can use the report findings to understand the market dynamics and competition in the IoT space, while enterprises can explore new capabilities with incumbent providers or evaluate new ones.

In the mobile asset tracking segment, enterprise face challenges such as limited visibility into assets, workflow inefficiencies and improper asset utilization. They seek a one-stop-shop solution for consulting, design, tracking and monitoring assets and can leverage technologies such as AI, machine learning, telematics and intelligent video analytics to enhance asset safety and productivity.

In the U.S., the mobile asset tracking market is being driven by the transportation, logistics and automotive industries. At the same time, adoption of asset tracking is expanding to other verticals such as healthcare, travel and hospitality, further driving the fast-paced growth of the mobile asset tracking market. The convergence of cloud, 5G, AI, machine learning and computer vision along with expanding use cases across industry verticals also contributes to this growth in the region.

Service providers are adopting solution-led offerings along with value-added services for mobile asset tracking. They also bring a mix of technology and partners to help enterprises reach their desired business outcomes.

Strategy professionals should read this report to understand the relative positioning and capabilities of providers that can assist with end-to-end mobile asset tracking and management solutions to deliver the benefits with higher efficiency and effectiveness.

Digital transformation professionals should read this report to understand how IoT mobile asset tracking and management services fit their digital transformation initiatives and how providers compare to each other.

Technology professionals should read this report to understand how service providers leverage the latest technologies to provide mobile asset tracking services with a future-ready solution that is flexible and scalable.

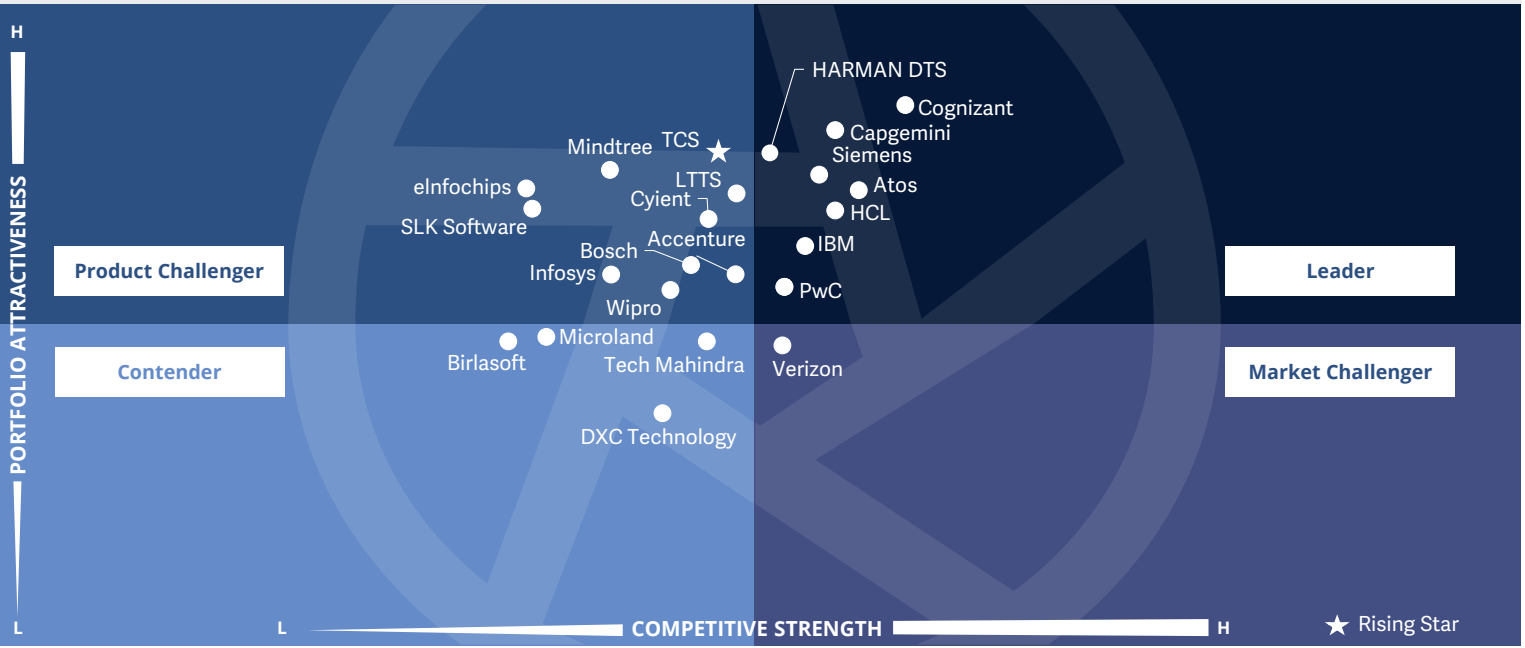
Cybersecurity professionals should read this report to understand how service providers in the U.S. protect networks, data and endpoint devices from security threats in mobile asset tracking deployments.

ISG Provider Lens™

Source: ISG RESEARCH

Internet of Things – Services and Solutions
Mobile Asset Tracking and Management

U.S. 2022



Mobile asset tracking and management solutions must provide **transparency** into the location, movement and environments of equipment, products and people. **Data analytics** are essential to provide **actionable intelligence** that solves problems and drives improvement.

Alex Kozlov

Definition

This quadrant assesses provider capabilities around implementing intelligent, industry-focused solutions that connect devices to monitor the location, movement and environment of vehicles, equipment, products and people. The combination of smart mobile connectivity, remote monitoring and visual analytics is applicable to a wide range of critical business requirements in industries such as transportation, healthcare, energy and construction, and can drive dramatic improvements in logistics, supply chain visibility, safety and regulatory compliance.

Effectively deploying such solutions requires integration of sensors, track-and-trace solutions, video systems and analytical platforms, along with a deep understanding of industry challenges and client requirements. In this context, cross-disciplinary partnerships serving multiple industries and the ability to integrate a variety of technologies and functions are essential.

Eligibility Criteria

1. Ability to **integrate track-and-trace solutions with emerging technologies such as AI and edge computing,** and ability to deploy specialized systems and provide support
2. Ability to **identify and measure benefits** such as improved efficiency, smooth logistics, supply chain visibility and sustainability
3. Ability to use **data collection and analysis to support continuous improvement**
4. Security coverage, including security engineering, for improved controls in operations, plus expertise in protecting mobile transportation and logistics ecosystems
5. **Expertise in network and connectivity services,** including 5G and the edge
6. Comprehensive **partner ecosystem** that integrates technology products (such as smart video systems) and industry knowledge (such as healthcare) to address specific requirements and identify and address critical issues

Observations

Of the 80 companies assessed, 23 have qualified for the Mobile Asset Tracking and Management quadrant, with eight identified as Leaders and one Rising Star.

Key characteristics of quadrant leaders are summarized below.

- **Alignment with customer and industry requirements:** Leaders deploy solutions that address specific customer requirements and regulatory standards. These include logistics and asset tracking in warehouses, cold chain compliance in pharmaceuticals and perimeter security at energy plants. Some providers invest in industry and domain expertise to develop niche capabilities, while others develop modular solutions that require minimal customization.
- **Partner strategies that fill gaps in technology or industry expertise:** Mobile asset tracking solutions typically require robust technology capabilities or detailed industry knowledge to address specific requirements and identify and address critical last mile implementation issues.
- **Ability to generate new layers of insight:** Leading mobile asset management solutions establish a foundation that enables a process of continual improvement. Consider, for example, a fleet management solution initially deployed to track basic metrics such as vehicle location and movement. Capabilities of that solution can be expanded to monitor heat and humidity levels within payloads, cargo pallets and products. Additional sensors can detect if containers carrying fragile goods have been jostled or dropped. AI and video analytics tools can monitor operator behavior and issue alerts for speeding, drowsiness or aggressive driving.

Atos

Atos' smart labels solution identifies and monitors assets by type and criteria such as location, movement and temperature. Partnerships address specific customer requirements in a wide range of industries such as on-vehicle security and communications in automotive, traceability in manufacturing, and cold chain compliance in healthcare/pharmaceuticals.

Capgemini

Capgemini's flexible model and pre-integrated business cockpits enable tailored solutions with minimal disruption. Its standardized APIs communicate with existing customer systems. Dashboards and a rigorous data model report key metrics. Industry use cases include logistics for defense, workforce tracking in oil and gas, and safety in nuclear energy.

cognizant

Cognizant's analytics and dashboards allow customers in multiple industries to track asset movement across the supply chain. Cold chain visibility integrates vehicles, sensors, workflows and enterprise systems to reduce spoilage and increase operational efficiency. Partnerships leverage capabilities in IoT sensors and connectivity, efficient cloud computing, and domain and digital expertise.

HARMAN
A SAMSUNG COMPANY

HARMAN DTS's modular model supports device onboarding, securing and monitoring; OTA updates; and data/event analysis in multiple environments.

Use cases include manufacturing (tracking equipment), transportation (fleet management), food and dairy (tracking and environmental monitoring), and retail (product tracking). Partners include smart tag and module vendors, telecom operators and global SIM providers.

HCL's Intelligent Asset Tracking and Management (IATM) solution can address a wide range of industry use cases with minimal customization. Tracking device and sensor options include soft tags (instead of physical tags) and fixed and mobile tag readers. Asset taxonomies cover a wide range of asset classes, types and relationships.

IBM

IBM's connected car architecture defines information flows and reference components to support an API platform. Developers can implement cross-domain business applications. IBM Maximo® mobile solutions deliver remote and AI-based expert assistance, real-time asset history and operational data from wearables, safety sensors and diagnostic interfaces to the digital twin.

PwC

PwC's patented Indoor Geolocation Platform is easy to deploy and operates with existing Wi-Fi and Bluetooth signals. Customers can define unique fingerprints within a facility and build geolocation databases to identify, locate and track assets and configure alerts. The solution operates independently of existing corporate networks and data systems.

Siemens

Siemens' Railigent, an AI-powered solution, monitors operations and maintenance processes to enable predictive analytics and approximately 100 percent availability. It enables clients to minimize IT investment and facilitate digitization and compatibility across the transportation ecosystem. Passengers benefit from an integrated trip planning platform. Mobile field maintenance enables faster response times and cost reduction.

TCS (Rising Star) has digital fleet and asset tracking solutions that deliver real-time, 24x7 visibility of moving assets. AI and machine learning capabilities support automated decision making, exception management and alerts to monitor supply chains and prevent disruptions. The solution assimilates and presents data from multiple heterogeneous sources in user-friendly formats in a single-pane-of-glass view.

Leader

"PwC's simple solution delivers robust benefits, ease of deployment and minimal disruption."

Alex Kozlov

PwC

Overview

PwC is co-headquartered in New York City and London, and operates in 156 countries. It has more than 295,300 employees across 719 global offices. In FY2021, the company generated $45.1 billion in revenue (+4.9 percent YoY), with assurance as its largest segment. Mobile asset management capabilities leverage a patented geolocation platform and a flexible implementation model to enable rapid deployment and speed to benefit.

Strengths

Geolocation platform: PwC's patented Indoor Geolocation Platform operates without in-room infrastructure or beacons that require maintenance. It communicates over a dedicated IoT network that minimizes potential security threats. The solution uses existing Wi-Fi and Bluetooth signals to define unique fingerprints for each room or space within a facility. An analytics dashboard can be leveraged for multiple IoT applications to create operational and energy efficiencies.

Ease of deployment and flexibility: PwC's geolocation solution can be deployed in one to two days with minimal disruption. Enterprises can scan indoor and outdoor spaces to create a geolocation database to identify, locate and track people or assets and configure alerts. Alerts are sent via SMS and email and displayed on a web-based dashboard. A low-power WAN eliminates the need for Wi-Fi or cellular connectivity.

Security: To enhance system security, PwC's solution operates independently of existing corporate networks and data systems and can push data inputs to corporate systems through an API.

Caution

PwC's focus on large enterprise customers indicates that its mobility services may not be suitable for the requirements of smaller enterprises.

Appendix

Methodology & Team

The ISG Provider Lens 2022 – Internet of Things Services and Solutions analyzes the relevant service providers in the global market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

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The research and analysis presented in this report includes research from the ISG Provider Lens program, ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of June 2022, for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars ($US) unless noted.

The study was divided into the following steps:

1. Definition of Internet of Things Services and Solutions market
2. Use of questionnaire-based surveys of service providers/ vendor across all trend topics
3. Interactive discussions with service providers/vendors on capabilities & use cases
4. Leverage ISG's internal databases & advisor knowledge & experience (wherever applicable)
5. Use of Star of Excellence CX-Data
6. Detailed analysis & evaluation of services & service documentation based on the facts & figures received from providers & other sources.
7. Use of the following key evaluation criteria:
   * Strategy & vision
   * Tech Innovation
   * Brand awareness and presence in the market
   * Sales and partner landscape
   * Breadth and depth of portfolio of services offered
   * CX and Recommendation

Lead Analyst

Alex Kozlov
Lead Analyst

Alex Kozlov brings more than 25 years of journalism and strategic marketing communications experience to his role as Lead Analyst on the ISG Provider Lens™ team. His role focuses on authoring thought leadership papers and service provider intelligence reports around the Internet of Things (IoT) and manufacturing industries, focusing on enterprise buyer priorities and challenges, and defining service provider capabilities and market differentiators.

As a journalist, media relations practitioner and marketing communications specialist, Alex has covered topics that include artificial intelligence, robotic process automation, the Internet of Things and digital transformation, and has explored how these technologies impact retail, hospitality, banking, manufacturing and other industry sectors.

Enterprise Context and Overview Analyst

Mukesh Ranjan
Senior Research Analyst

Mukesh is a senior analyst with ISG, with key interest in market and industry research across emerging technologies. He is responsible for supporting and co-authoring Provider Lens™ studies on intelligent automation, IoT, media and communication and others. His areas of expertise are automation, IoT, and technology research.

He is also involved in authoring enterprise context and the global summary report with market trends and insights. Mukesh has been part of several custom research engagements in areas of automation, competitive intelligence, and others.

IPL Product Owner

Jan Erik Aase

Partner and Global Head – ISG Provider Lens

Mr. Aase brings extensive experience in the implementation and research of service integration and management of both IT and business processes. With over 35 years of experience, he is highly skilled at analyzing vendor governance trends and methodologies, identifying inefficiencies in current processes, and advising the industry. Jan Erik has experience on all four sides of the sourcing and vendor governance lifecycle - as a client, an industry analyst, a service provider and an advisor. Now as a research director, principal analyst and global head of ISG Provider Lens™, he is very well positioned to assess and report on the state of the industry and make recommendations for both enterprises and service provider clients.

ISG Provider Lens™

The ISG Provider Lens™ Quadrant research series is the only service provider evaluation of its kind to combine empirical, data-driven research and market analysis with the real-world experience and observations of ISG's global advisory team. Enterprises will find a wealth of detailed data and market analysis to help guide their selection of appropriate sourcing partners, while ISG advisors use the reports to validate their own market knowledge and make recommendations to ISG's enterprise clients. The research currently covers providers offering their services across multiple geographies globally.

For more information about ISG Provider Lens research, please visit this webpage.

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ISG

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Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,300 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data. For more information, visit www.isg-one.com.

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