ISG Provider Lens™

Intelligent Automation – Services and Solutions

A research report comparing provider strengths, challenges and competitive differentiators

QUADRANT REPORT | JANUARY 2023 | U.S.

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Executive Summary

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Intelligent automation services define the digital roadmap.

Global enterprises are building new digital platforms to implement automation solutions that can replicate human action and eliminate employee routine tasks to achieve higher outcomes across industry verticals. Automation creates a new paradigm of people, processes and technology collaboration that complements and enhances business outcomes.

The U.S. is a leading adopter of automation technology, accounting for almost 45 percent of the market revenue share in 2022. Enterprises in this region are early adopters of the technology, and most industries have witnessed accelerated digital transformation by using these

solutions. They are increasing their spend on automation software to implement intelligent automation techniques for improving business processes and overall productivity. Given these positive trends, the intelligent automation market is forecast to reach over $19 billion by 2023.

Intelligent automation is a combination of RPA, business process management (BPM) and AI, which enables predictive action for business processes to decide the corresponding action. It involves designing and creating end-to-end processes that support augmenting human experience with automation.

As a result, enterprises globally are reconsidering different ways to accelerate their digital transformation journey. The technology has evolved to combine several approaches for addressing diverse business challenges. Business functions such as financial services, contact center outsourcing, BPO, human resources

Now is the **time** for **next-generation automation**

outsourcing (HRO) and procurement outsourcing are experiencing rapid growth in the automation space. In the financial sector, intelligent process automation (IPA) technology can assist institutions in managing routine processes. It allows minimal intervention and improved controllership, accuracy and compliance to regulations. Business leaders are evaluating automation capability to drive innovation and user experience in the healthcare sector too. It reduces costs and improves business function affordability by automating tasks such as customer/patient scheduling, health insurance processing, regulatory compliance and patient monitoring.

IT operation teams are constantly seeking solutions and tools to monitor the large volumes of data generated by enterprise systems for any alerts or anomalies. Most enterprises handle these tasks manually and perform the same process repeatedly, leading to an increase in downtime and outages as the data proliferates. Such manual processes result in heavy losses and increase the risk of human errors and longer resolution wait times.

AIOps solutions use machine learning algorithms to detect anomalies and correlate, streamline and resolve various processes by automating repetitive tasks. They assist by continuously learning from past issues and resolutions to suggest the best path. AIOps improves incident management by decreasing downtime and outages and enhancing performance and profitability.

These capabilities are increasingly driving technology operations through machine learning and deep learning for modernizing IT workflow platforms. Practice teams, product engineering groups and technology verticals combine the capabilities to build proprietary, in-house cognitive solutions for IT operations. These solutions integrate with information systems that generate a continuous data source through logs, files and alerts, which are tracked and processed through machine learning algorithms. Collection methods, analytical programming and presentation technologies converge through data visualization into a unified view for better management. The platform provides various IT operations disciplines with advanced analytical and automation capabilities.

Some of the major driving forces for the AIOps market include the growing demand of enterprises for modernizing and automating their IT operations, migration of workloads toward cloud and multi-cloud environments, and increased venture funding and investment activities in the AIOps sector over the last couple of years. In addition, the market presents a significant potential for automation and RPA vendors to align with the infrastructure management strategy. Globally, enterprises are shifting their focus to large-scale automation of the business process for all corporate functions to increase efficiency and gain a competitive edge.

The intelligent automation space is maturing and transforming business processes globally. Companies are seeing robots replicating human brain activity and improvising the business information technology processes. Manufacturing, supply chain, healthcare, financial institutions and many other industries are being transformed digitally by automating continuous and repetitive tasks. Integrating AI and machine learning with automation technologies has led to intelligent automation systems that can predict issues and create solutions to tackle emergencies and reduce human error. Furthermore, the combination

Executive Summary

of intelligent automation and RPA can transform business processes by using next-generation automation technologies.

The next-generation automation perspective redefines and guides businesses to comprehend future customer expectations and build service offerings to lead and guide the market. There is an increased focus on technology diverging from the human component, which is a crucial aspect covered in next-gen automation. Because customer expectations and experience are the top priorities, there is a need to exercise the fundamentals and design thinking concepts to reengineer customer journeys. Companies are increasingly adopting design thinking to drive innovation at every stage of the journey to differentiate themselves in the market.

Implementing automation requires careful strategy and an educated approach to control and curtail the impact on human resources. Organizational change management (OCM) is another crucial aspect that should be aligned with intelligent automation programs to continuously manage the outcome by training, educating and consulting with the human resources influenced by automation initiatives. OCM skillfully drives the automation initiative with a high success rate and adoption index.

Automation service providers are extending their consulting services and insights by building an automation center of excellence (CoE) along with practice runbooks to help build competency. These CoEs help and guide the automation delivery teams to follow a standard framework to build bots and sustainable solutions, increasing the operating life of the components created.

The technology space is experiencing a perennial shortfall of talent across all evolving technologies, including automation. Service integrators are devising strategies to onboard these resources and build a continuous flow of trained and certified resources on popular automation platforms.

Technology service providers must connect with educational institutions to create and acquire talent and prepare them for the future. Enterprises should focus on creating a skilled workforce with functional expertise on automation technologies, alongside its implementation and application knowledge. As a result, enterprises are adopting intelligent automation solutions, and global service integrators are ramping up the competency and capability of technical and functional services to meet the demand.

Businesses are ready to invest in and adopt next-generation automation technologies, and automation providers have adopted different inorganic and organic growth strategies to achieve sustainable automation. Additionally, there are many startups and SMEs that have innovative and out-of-the-box automation offerings that cater to a larger audience. Therefore, the trend is expected to rise exponentially in the future, with the increasing availability of customized and tailored automation solutions for enterprise needs.

> Automation service providers are focusing on growth strategies to achieve sustainable automation.

Provider Positioning

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	Intelligent Enterprise Automation	Artificial Intelligence for IT Operations (AIOps)	Next-Gen Automation
Accenture	Leader	Leader	Leader
Atos	Product Challenger	Product Challenger	Product Challenger
Birlasoft	Product Challenger	Not In	Contender
Capgemini	Leader	Leader	Leader
Cognizant	Leader	Leader	Leader
Datamatics	Product Challenger	Not In	Not In
Deloitte	Not In	Not In	Leader
DXC	Product Challenger	Product Challenger	Market Challenger
EXL	Product Challenger	Not In	Product Challenger
EY	Not In	Not In	Product Challenger

Provider Positioning

Page 2 of 4

	Intelligent Enterprise Automation	Artificial Intelligence for IT Operations (AIOps)	Next-Gen Automation
Fujitsu	Market Challenger	Market Challenger	Not In
GAVS	Not In	Contender	Not In
Genpact	Leader	Not In	Product Challenger
HCLTech	Leader	Leader	Leader
Hexaware	Leader	Leader	Not In
IBM	Leader	Leader	Market Challenger
Infosys	Leader	Leader	Leader
KPMG	Not In	Not In	Product Challenger
LTI	Leader	Leader	Leader
Marlabs	Contender	Not In	Contender

Provider Positioning

Page 3 of 4

	Intelligent Enterprise Automation	Artificial Intelligence for IT Operations (AIOps)	Next-Gen Automation
Microland	Not In	Product Challenger	Not In
Mindtree	Product Challenger	Product Challenger	Product Challenger
Movate	Contender	Product Challenger	Not In
Mphasis	Product Challenger	Rising Star ★	Product Challenger
NTT DATA	Market Challenger	Market Challenger	Market Challenger
Persistent	Product Challenger	Product Challenger	Product Challenger
PwC	Rising Star ★	Not In	Rising Star ★
Softtek	Product Challenger	Not In	Not In
Sonata Software	Contender	Contender	Not In
Sutherland	Contender	Not In	Not In

Provider Positioning

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	Intelligent Enterprise Automation	Artificial Intelligence for IT Operations (AIOps)	Next-Gen Automation
TCS	Leader	Leader	Leader
Tech Mahindra	Rising Star ★	Rising Star ★	Product Challenger
UST	Product Challenger	Contender	Contender
Wipro	Leader	Leader	Leader
WNS Vuram	Leader	Not In	Not In
Zensar	Not In	Product Challenger	Not In

This study focuses on what ISG perceives as most critical in 2022 for **Intelligent Automation Services and Solutions.**

Simplified Illustration Source: ISG 2022

Intelligent Enterprise Automation

Artificial Intelligence for IT Operations (AIOps)

Next-gen Automation

Definition

Intelligent automation is now a mainstream strategy, leading to digital business transformation. Process modernization and workflow optimization are the primary objectives of automation initiatives. With the aim of doing away with siloes, enterprises are focusing on scaling capabilities across technology, business and corporate portfolios. Automation is now the customer- and employee-focused business strategy, helping enterprises to enhance the ability to process and deliver outcomes. Emerging technology service teams and functions are gaining prominence to drive productivity and efficiency. These teams are building deep connections with industry verticals and service lines to support business processes and workflows.

Business leaders and emerging technology heads face the dilemma of choosing the perfect service partner to support and drive intelligent automation

initiatives. This involves faculties such as data analytics, machine learning techniques, business process acumen and the ability to innovate on solutions to build sustainable digital assets.

The Intelligent Automation Services study focuses on the capabilities of automation service providers and global system integrators (GSIs) offering consulting, implementation and support capabilities across enterprise portfolios. The evaluation covers the GSI/service provider's ability to harness automation to transform business services, corporate functions, and the IT landscape, with proprietary solutions and accelerators and by utilizing the lifecycle management approach.

Automation platform vendors are expanding their portfolios and enhancing product performance to deliver the desired outcomes for enterprises. Agile application design and solutions on cloud platforms is the latest area of interest

for OEMs, which, in turn, is driving GSIs and service providers to simultaneously develop the competency to complement the new capabilities by aligning resources and the workforce accordingly.

Experience and expertise in assembling automation centers of excellence for incumbent clients and operationalizing control objectives is noted as a rising trend. These centers are the nucleus for controlling and guiding strategic initiatives, including developing innovative and futuristic solutions, with a focus on sustainability for seamless operations. Organizational change management and GRC compliance by function and domain are gaining traction at scale. The prioritization of environmental, social and governance issues (ESG) is leading to the development of focused solutions. GSIs are investing in building proprietary platforms that connect and converge automation and emerging technologies components, solutions and products to

design a custom business solution for enterprise clients. It will be interesting to observe the emerging technology services market and its growth trajectory in 2022.

This study on intelligent automation services is aimed at understanding enterprise requirements and provider capabilities in meeting these demands.

Scope of the Report

In this ISG Provider Lens™ quadrant study, ISG includes the following three quadrants: Intelligent Enterprise Automation, Artificial Intelligence for IT Operations (AIOps), and Next-gen Automation.

This ISG Provider Lens™ study offers IT decision-makers:

- Transparency on the strengths and weaknesses of relevant providers

- A differentiated positioning of providers by segments

- Focus on the U.S. market

Our study serves as the basis for important decision-making in terms of positioning, key relationships and go-to-market considerations. ISG advisors and enterprise clients also use information from these reports to evaluate their existing vendor relationships and potential engagements.

Provider Classifications

The provider position reflects the suitability of service 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 $20 million and $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 $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) that 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.
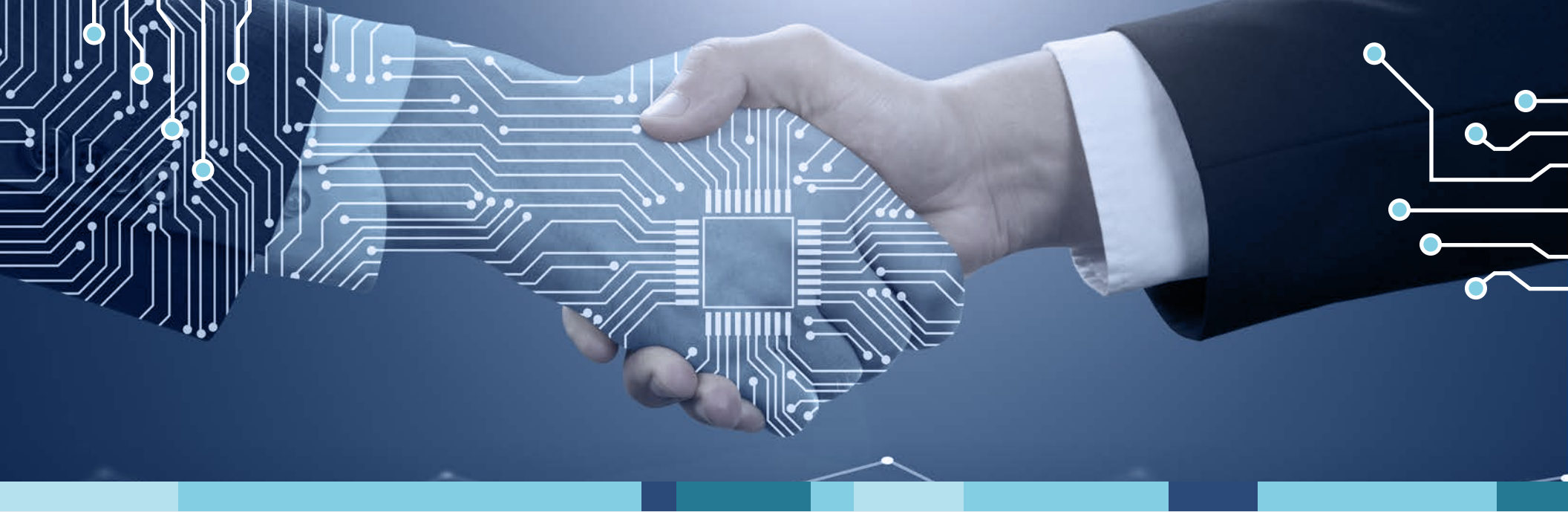
Leaders have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

★ **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.

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.

Intelligent Enterprise Automation - U.S.

Intelligent Enterprise Automation

Who Should Read This

This quadrant report is relevant to U.S.-based enterprises for evaluating service providers that offer intelligent enterprise automation (IEA) solutions. In this report, ISG highlights the market positioning of IEA providers in the U.S. and shows how each provider addresses the challenges faced by enterprises. The enterprises can use the report findings to understand market dynamics and explore new capabilities with incumbent providers. The report can also aid in evaluating new service providers that can support their digital transformation initiatives.

The U.S. is the largest market for IEA solutions, with most enterprises already implementing some form of automation. They are no longer limiting their focus to just RPA, but are exploring end-to-end automation, with enterprise automation cutting across both corporate functions and business portfolios.

However, they face challenges such as disparity in data, process, and technology initiatives; identifying the right automation candidates; and scaling automation. They also face a skill shortage and budgetary constraints.

The IEA market in the U.S. is primarily driven by factors such as demand for enterprise-wide automation, advances in AI and machine learning and a need for scaling existing automation. Enterprises also want to establish centers of excellence for governance and meet sustainability requirements.

Service providers are looking to mitigate clients' challenges and fulfill their needs by offering end-to-end, scalable and sustainable IEA solutions. They are rying to narrow the gap between their offerings and enterprise readiness by reducing onboarding cost, providing industrialized solutions and adopting a low-code/no-code and platform-based approach.

Strategy professionals should read this report to understand the relative positioning and capabilities of providers that can assist with end-to-end IEA solutions to deliver the required benefits with high efficiency and effectiveness.

Digital professionals should read this report to understand how IEA solutions fit their digital transformation initiatives and how providers can be compared with each other.
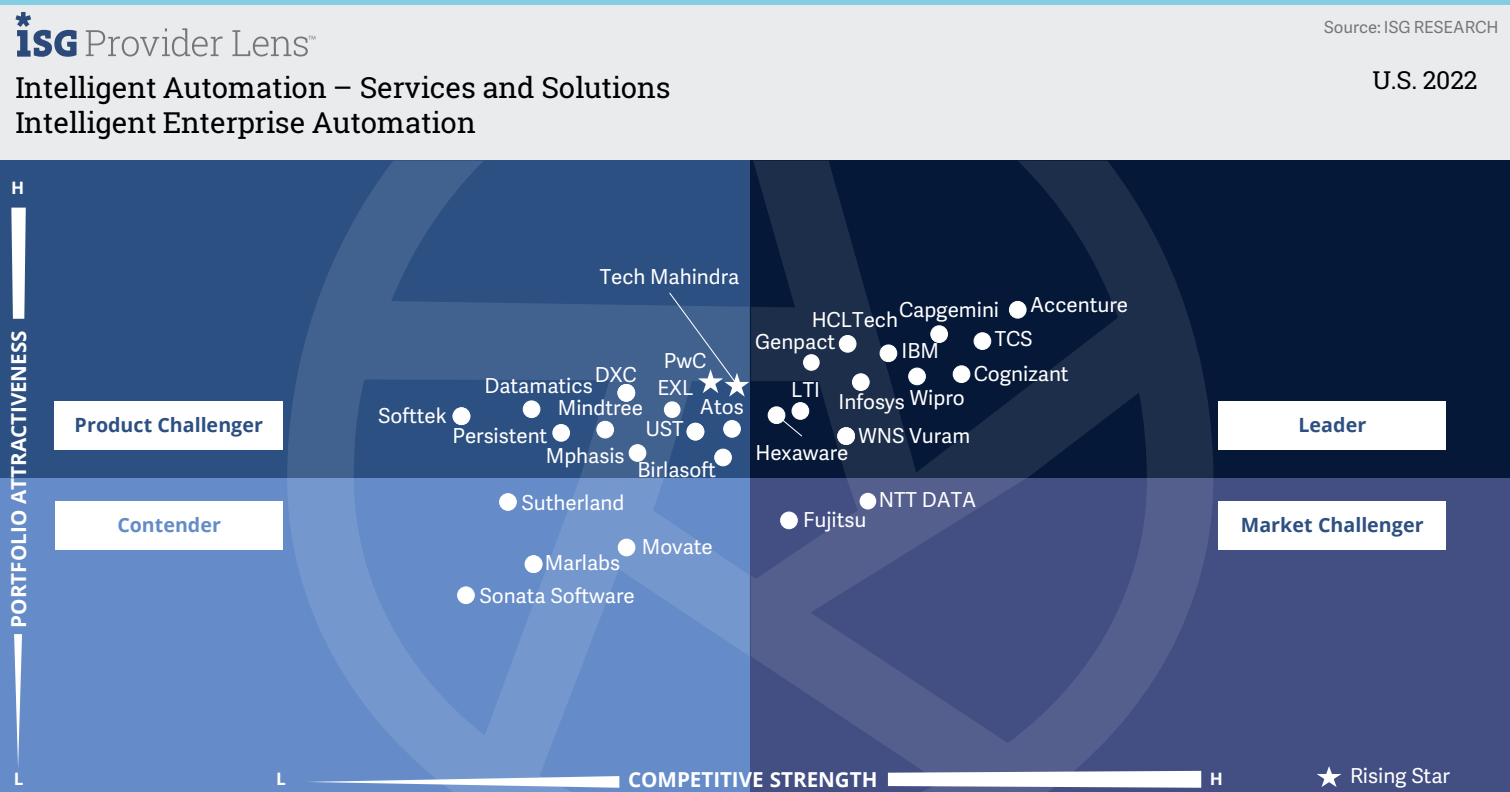
Technology professionals should read this report to understand how IEA service providers integrate the latest technologies and capabilities into their proprietary offerings to gain a competitive edge.

Procurement professionals should read this report to have a better understanding of the current landscape of IEA service providers in the U.S.

ISG Provider Lens™

Intelligent Automation – Services and Solutions
Intelligent Enterprise Automation

Source: ISG RESEARCH

U.S. 2022

H

PORTFOLIO ATTRACTIVENESS

Product Challenger

Tech Mahindra

HCLTech   Capgemini   ● Accenture
Genpact   ●   ●   ● TCS
         IBM
                              Cognizant
Datamatics DXC PwC LTI
         EXL   Infosys Wipro
Softtek   Mindtree ★ ★ Atos
     Persistent   UST
                    WNS Vuram
     Mphasis   Birlasoft
              Hexaware

Leader

Contender

● Sutherland
● Fujitsu   ● NTT DATA

Market Challenger

● Movate
● Marlabs
● Sonata Software

L

L   COMPETITIVE STRENGTH   H

★ Rising Star

This quadrant assesses automation service providers' capability, experience and maturity to **deploy automation solutions** across enterprise-wide portfolios. The service providers use **proprietary accelerators and platforms** to design the offerings across business and corporate portfolios.

Ashwin Gaidhani

Intelligent Enterprise Automation

Definition

This quadrant analyzes providers that offer services across business process outsourcing (BPO) and corporate functions, with the use of automation and proprietary AI platforms, solutions and frameworks, along with associated services to enable enterprises to augment the capabilities of their workforce. These can be implemented in any area of an enterprise, thus expanding the scope of automation from business services to internal corporate functions that involve repetitive and manual processes. They are primarily used in finance and accounting (F&A), HR, procurement, and supply chain functions.

The solutions supplement automation with advanced analytics and AI technologies such as compute vision, machine or deep learning, and natural language processing (NLP) to digitally transform the business operations of an enterprise at scale. They are aimed at eliminating inefficiencies and paving the way for reduced cost, high productivity, improved data accuracy, and enhanced employee and customer experience.

Eligibility Criteria

1. **Proprietary automation AI platform:** Must offer a proprietary automation AI platform and solutions, alongside packages specific to industries and functions and then provide ongoing support

2. **End-to-end business and corporate function transformation:** Capability to design, develop and deploy solutions using next-gen technologies such as automation, AI and advanced analytics

3. **Data visualization and projection capabilities:** Must have the competency to support integration with various enterprise applications, for example, CRM systems for customer data or ERP systems for various portfolios, industries and functions (finance and existing IT infrastructure)

4. **Customization and personalization of solutions:** Capable of offering out-of-the-box APIs, multi-tenancy and secure deployment of the platform

5. **Breadth and depth of industry verticals and functions:** Must have business process knowledge, service lines and corporate functions to build and deliver industry-focused solution packages

6. **Automation opportunity assessment capabilities:** Must have the capability to facilitate automation with strong business advisory abilities to support enterprises in internal buy-in and guide them through a business process transformation journey. This demonstrates how advisory expertise (business case, blueprints and KPIs) and assets (pretrained models and connectors) translate to a positive business outcome

7. **Industry- or function-specific solutions and packages:** Must have experience in advising, developing and deploying automation/AI proprietary solutions that are industry-focused and function-specific (for example, finance, procurement and HR)

Observations

Enterprises are adapting to the continuous changes resulting from the acceleration in digitalization. Businesses are moving beyond the typical cost and efficiency benefits of simple task automation and are now converging multiple tasks to achieve end-to-end automation. The most critical aspects of intelligent enterprise automation (IEA) are optimized operations cost and faster time to value, along with high service availability and improved performance across technologies, corporate functions and business portfolios.

A significant advantage of intelligent enterprise automation is hyper-personalization of enterprise services for all stakeholders (employees and customers) through custom and targeted experiences. Furthermore, leading service providers in this space help clients go beyond siloed implementations by automating the complete lifecycle of processes, thus eliminating risks and transforming them into agile enterprises with 360-degree visibility, integration and control.

Some of the other key trends in the intelligent enterprise automation space are:

- The rising automation trends are attributed to clients moving from basic RPA to an infusion of advanced technologies such as AI, analytics, deep learning and visualization products to automate processes that aid in digitally augmenting humans.

- Other key trends include data-driven opportunity discovery, advanced predictive process intelligence, low-code adoption for applications and AI-assisted self-service resolution.

- The transition of enterprises to hyperconverged infrastructure for virtualizing services enhances efficiency, availability and productivity. They are leveraging intelligent automation for cloud services.

- Enterprises across industries are adopting low-code/no-code BPM tools such as Unqork as well as low-code integration tools such as Workato that are paving the way for true hyper-automation. Likewise, there is a palpable demand for open source BPM tools such as Camunda and Flowable.

From the 56 companies assessed for this study, 30 have qualified for this quadrant, with 12 being identified as Leaders and two as Rising Stars.

accenture >

Accenture SynOps drives digital transformation at speed and scale and helps enterprises achieve desired business outcomes. It has a repository of more than 3,000 automation solutions deployed across 20,000 clients. The data-led automation approach, supported by a vast pool of specialized talents and skilled resources, is a key differentiator.

Capgemini

Capgemini Enterprise Automation Fabric is a proprietary IEA offering that is supported by more than 200 accelerators to build automation solutions quickly and scale. The platform leverages Capgemini's Digital Global Enterprise Model (D-GEM) and FastTrack Hub libraries that contain ready-to-use components to speed up automation projects.

Intelligent Enterprise Automation

Cognizant brings a client-focused approach with an end-to-end AI automation stack. The company uses its innovation fabric (Cognizant Neuro®) to provide enterprise clients with a modular offering covering a range of requirements spanning from advisory to implementation and support services. The plug-and-play capabilities allow Neuro to connect and integrate with all industry-leading platforms.

Genpact Cora provides an intelligent enterprise automation offering with a core focus on the BFSI industry vertical. Genpact has enhanced the offering by creating domain-specific solutions and building strong talent capabilities, leading to several client wins.

HCLTech's hyperintelligent platform is a one-stop-shop solution for all enterprise automation needs. Through the DRYiCE platform, HCLTech provides cognitive technology solutions such as invoice processing, document processing and process mining. The AI CoE-as-a-Service is another offering that uniquely positions HCLTech in the market.

Hexaware's Tensai™ for Operations provides consulting, development, deployment and support services. The platform supports IT and business automation throughout the automation lifecycle and operates a unique factory bot model for execution. It is an open source platform that can work with any other platform and integrate third-party solutions to offer added value to customers.

IBM offers a comprehensive suite of automation solutions covering strategy consulting, implementation and support services. The platform can handle large-scale and complex business scenarios supported by IBM process mining, Cloud Pak for business automation and Watson Assistant. IBM's integration solutions allow for increased availability, governance and security.

Infosys has an enterprise-wide automation platform to support clients of all sizes. Under the One Infosys approach, it combines all the capabilities with home-grown solutions, a large and skilled talent pool, and AI and automation-led CoEs and incubation labs to create value for clients.

LTI has an end-to-end implementation service backed by a strong advisory service offering. Its IEA solutions seamlessly combine different cognitive technologies including RPA, AI, machine learning, OCR and workflow orchestration. The availability of home-grown accelerators and plug-and-play bots allows for choosing and aligning the right automation candidate.

TCS leverages the Machine First Delivery Model (MFDM™) framework to deliver digital transformation in a structured manner. Its Cognix platform offers a wide range of prebuilt, configurable and reusable solutions with actionable insights. Industry-specific solutions such as Algo Retail, Neural Manufacturing, Cognitive Telco and Optunique showcase extensive industry knowledge and experience.

Intelligent Enterprise Automation

Wipro HOLMES™ offers end-to-end, scalable intelligent enterprise automation solutions. It also provides several industry-specific solutions such as TaloSafe for pharma, CnNXT for procure to pay, and NetOxygen for loans. It comes with more than 100 connectors that can be integrated with third-party tools.

WNS Vuram

WNS Vuram was formed following the acquisition of Vuram in July 2022. It enhanced the WNS intelligent enterprise automation offering with its rich experience in OCR, machine learning and process engines. It provides WNS with the required capabilities to deliver a holistic automation offering to clients looking for fast and scalable enterprise automation.

PwC

PwC (Rising Star) offers a robust set of process discovery and mining, OCR, RPA and conversational intelligence solutions through its technology partners. Along with strong consulting expertise, it also converges digital adoption platforms and analytics and insights platforms to support intelligent enterprise automation.

Tech Mahindra (Rising Star) is gaining prominence for its innovative delivery model and aligning its automation GTM strategy and offerings to current enterprise requirements. The company is also focused on developing future sustainable solutions and nurturing and upskilling talent for future needs.

Capgemini

Leader

"Capgemini brings in best-of-breed innovation and industry experience for a sustainable IEA offering."

Ashwin Gaidhani

Overview

Capgemini is headquartered in Paris and operates in 50 countries. It has over 340,700 employees in over 300 global offices. In FY21, the company generated $21.9 billion (+14.6 percent YoY) in revenue, with applications and technology as its largest segment. It offers intelligent automation solutions through Enterprise Automation Fabric. Capgemini has more than 600 clients globally, supported by over 30,000 resources and automation experts.

Strengths

Enterprise Automation Fabric capabilities: Enterprise Automation Fabric is a unified intelligent automation as a service (IAaaS) platform that offers real-time bot deployment, monitoring, integration, analytics and controls. The enterprise-wide platform provides end-to-end intelligent automation for applications, business and IT operations. The Enterprise Automation Fabric offering enhanced Capgemini's intelligent automation development and management features such as out-of-the-box integrations, proactive and preventive analytics, and MLOps capabilities.
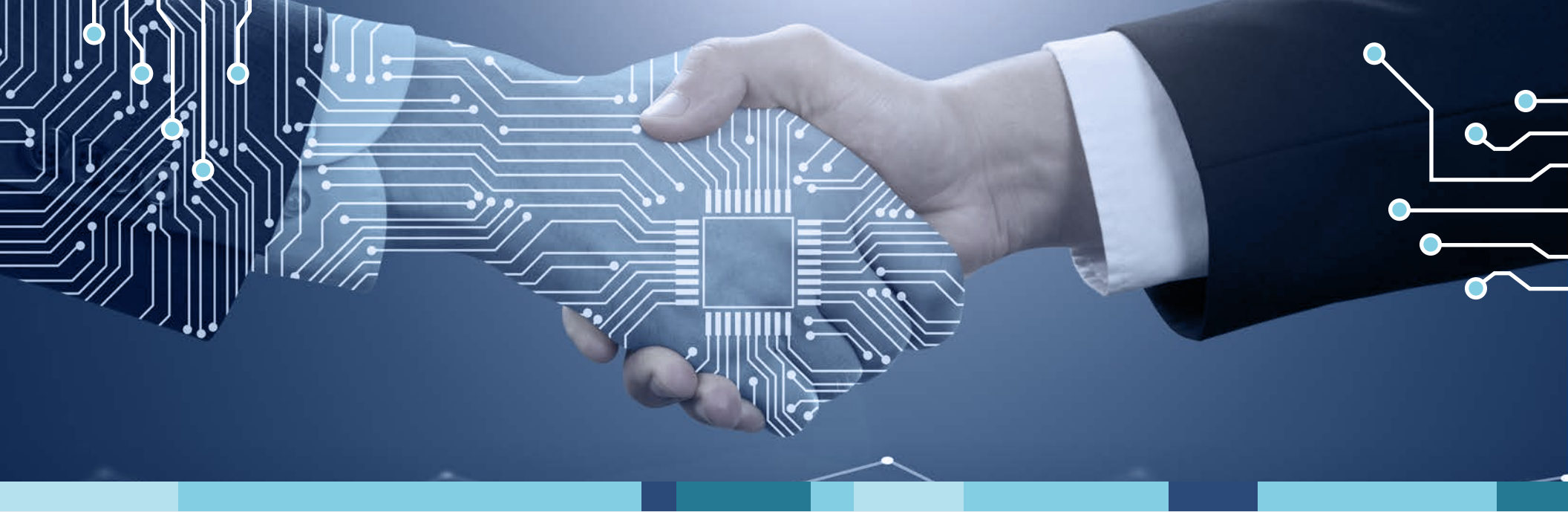
Domain and sector focus: Capgemini has significant knowledge across business process, platform, security and legal aspects in certain sectors along and an industry-leading toolkit for each domain. This is a strong value proposition of the IEA offering.

Unified architecture and reusable components and tools: Capgemini has a rich repository of reusable components. It offers reusable paths between tools for automation platforms and low-code development. It also provides platformed component hubs such as FastTrack Hub, D-GEM, 890 by Capgemini and other external component libraries.

Caution

In the U.S., Capgemini's resources for IEA are relatively low compared to other leaders in this space. Given the expanding client base, the company should focus on strengthening its onshore resource pool to remain competitive in the region. Also, with the growing adoption of automation, Capgemini can target midmarket enterprises to increase its market share.

Intelligent Enterprise Automation - U.K.

Intelligent Enterprise Automation

Who Should Read This

The report is relevant to enterprises in the U.K. for evaluating IT and BPO service providers that offer proprietary intelligent enterprise automation (IEA) solutions and services, together with related implementation, consulting, and support services. ISG highlights the market positioning of IEA service providers in the U.K. and shows how each provider addresses the challenges faced by enterprises. The report can also help enterprises evaluate new providers to support their intelligent business process automation initiatives.

Intelligent automation is an amalgamation of aspects such as RPA tools, process discovery, business process management, and AI, enabling predictive action and leading to the efficient functioning of business processes. Globally, enterprises are looking for ways to accelerate their digital transformation journeys.

IEA is not limited to business functions such as financial services, contact center outsourcing, BPO, HR outsourcing, and procurement outsourcing, all of which are witnessing a rapid digital transformation. Regulated industries such as banking and healthcare too are witnessing rapid digital transformation by automating continuous and repetitive tasks. Other industries such as manufacturing, supply chain services, and automotive are following the lead.

Service providers operating in the U.K. have been noting that there is an increasing demand for cloud-based automation solutions instead of on-premise solutions. Enterprises are also looking for solutions that can be consumed in the SaaS model and can reduce total cost of ownership (TCO) with outcome-based pricing.

Strategy professionals should read this report to understand the relative positioning and capabilities of providers that can deliver end-to-end IEA solutions that are both efficient and effective.

Technology professionals should read this report to understand how IEA providers integrate the latest technologies and capabilities into their proprietary offerings to gain a competitive edge.

Digital professionals should read this report to understand how providers of IEA solutions and services fit in with their digital transformation initiatives. The report shows how they can use IEA to ensure future-proof strategies and can use cognitive tools that include advanced technologies such as AI, machine learning, and natural language processing.
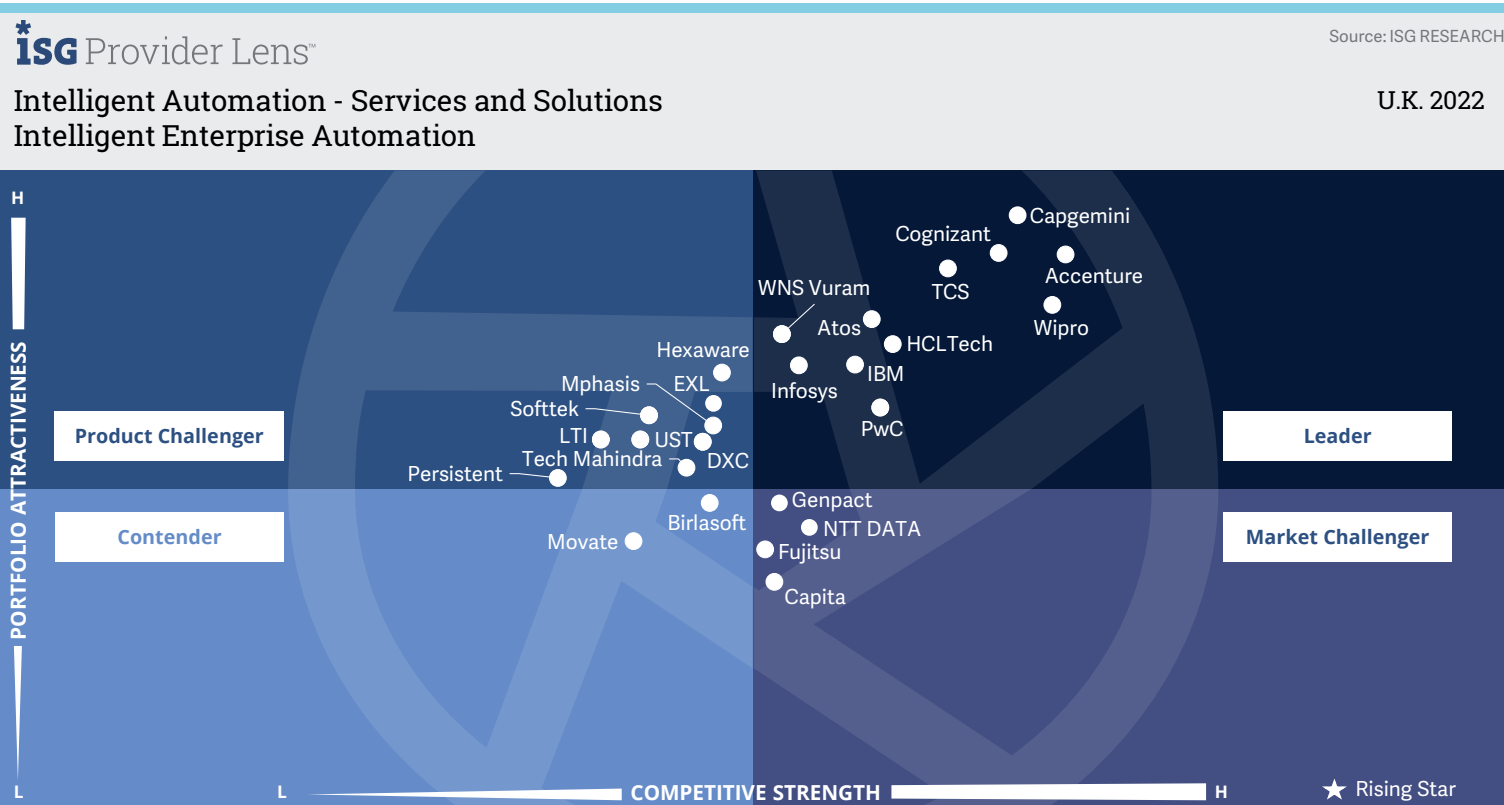
Procurement professionals should read this report to better understand the current landscape of IEA service providers in the U.K.

ISG Provider Lens™

Intelligent Automation - Services and Solutions
Intelligent Enterprise Automation

U.K. 2022

PORTFOLIO ATTRACTIVENESS

H

Capgemini

Cognizant

Accenture

WNS Vuram
TCS

Atos
HCLTech
Wipro

Infosys
IBM

Hexaware

EXL

Mphasis

Softtek
PwC

LTI
UST

Tech Mahindra
DXC

Persistent

Product Challenger

Contender

Leader

Genpact

Market Challenger

NTT DATA

Movate
Birlasoft
Fujitsu

Capita

L

L

COMPETITIVE STRENGTH

H

★ Rising Star

This quadrant assesses service providers that offer intelligent enterprise automation services and solutions. **Service providers are emphasizing their ability to combine industry and domain expertise** with end-to-end automation capabilities.

Mark Purdy

Intelligent Enterprise Automation

Definition

This quadrant analyses providers offering services across business process outsourcing and corporate functions, with the use of automation and proprietary AI platforms, solutions and frameworks, along with associated services to enable enterprises to augment the capabilities of their respective workforce. These can be implemented on any area of an enterprise, thus expanding the scope of automation from business services to internal corporate functions that involve repetitive and manual processes but are primarily used in finance and accounting (F&A), HR, procurement and supply chain functions. The solutions supplement automation with advanced analytics and AI technologies such as computer vision, machine or deep learning and natural language processing to digitally transform the business operations of an enterprise, at scale. They are aimed at eliminating inefficiencies and paving the way for reduced cost, high productivity, improved data accuracy and enhanced employee and customer experience.

Eligibility Criteria

1. **Proprietary automation AI platform:** Must offer a proprietary automation AI platform and solutions, alongside packages specific to industries and functions and then provide ongoing support

2. **End-to-end business and corporate function transformation:** Capability to design, develop and deploy solutions using next-gen technologies such as automation, AI and advanced analytics

3. **Data visualization and projection capabilities:** Must have the competency to support integration with various enterprise applications, for example, CRM systems for customer data or ERP systems for various portfolios, industries, and functions (finance and existing IT infrastructure)

4. **Customization and personalization of solutions:** Capable of offering out-of-the-box APIs, multi-tenancy, and secure deployment of platform

5. **Breadth and depth of industry verticals and functions:** Must have business process knowledge, service lines and corporate functions to build and deliver industry-focused solution packages

6. **Automation opportunity assessment capabilities:** Must have the capability to facilitate automation with strong business advisory abilities to support enterprises in internal buy-in and guide them through a business process transformation journey. This demonstrates how advisory expertise (business case, blueprints and KPIs) and assets (pre-trained models and connectors) translate to a positive business outcome

7. **Industry or function-specific solutions and packages:** Must have experience in advising, developing and deploying industry focused and function specific (for example, finance, procurement and HR) automation/AI proprietary solutions

Observations

Within the intelligent enterprise automation quadrant, ISG sees several pronounced trends. First, there is an increasingly sharp focus amongst enterprises and providers on linking intelligent automation solutions to business outcomes—for example, reduced costs of operation, improved customer experiences, or faster innovation—as well as to strategic business transformation. Second, hyper-automation capabilities are now a must-have for all leading providers, with enterprises looking to move beyond disconnected or discrete automation initiatives towards end-to-end automation solutions that bring in the full panoply of automation capabilities—RPA, NLU, NLP, task capture and mining, low-code, big data and predictive analytics, and even emerging technologies such as digital twins. Third, the low-code/citizen developer movement is now firmly entrenched in provider offerings, with

enterprises seeing low-code technologies as a way to improve employee education in relation to automation while also empowering workers to innovate around business processes and problems. Fourth, enterprises are increasingly looking to outsource some elements of intelligent automation processes, either via managed service models (e.g., automated invoice processing), or automation-as-a-service platforms. Fifth, we see a pronounced shift towards industry-inflected and domain-centric intelligent automation solutions, in sectors such as banking, financial services and insurance (BFSI), life sciences, and the public sector. Sixth, intelligent automation solutions are increasingly being integrated with a variety of back-end technologies and systems of record, for example CRM and ERP systems. Seventh, providers continue to invest in a dazzling variety of accelerators and use cases, to help clients scale their automation efforts faster.

From the 56 companies assessed for this study, 26 have qualified for this quadrant with 11 being Leaders.

accenture

Accenture offers intelligent automation services to enterprises primarily through its SynOps platform, with additional support for orchestration through its myConcerto platform. Accenture has a track record of delivering automation projects for large, blue-chip clients across the world.

AtoS

Atos continues to invest in expanding its automation capabilities by strongly focussing on its ability to combine deep industry and domain expertise with end-to-end automation capabilities. It has a large library of use case and pre-trained models, and continues to invest in citizen developer tools and capabilities.

Capgemini

Capgemini has invested significantly in developing a comprehensive suite of intelligent automation services with a distinct cross-cutting sustainability theme. Its offering is based on its strong background in business process optimisation and change management. It has carried out intelligent automation projects for a multitude of global, blue-chip clients.

cognizant

Cognizant is expanding its intelligent automation capabilities and services, principally through its Neuro® automation platform, launched in September 2021. It is also investing in a global innovation ecosystem, and developing deep industry solutions for the public sector, BFSI and life sciences.

HCLTech

HCLTech offers intelligent automation services through its DigitalCOLLEAGUE platform and its ADvantage Suite automation framework. It has developed numerous industry-aligned intelligent automation solutions and engaged in a number of recent acquisitions in related areas such as Industry 4.0, IoT, and data engineering.

IBM

IBM deploys its intelligent automation services and capabilities largely through its Cloud Pak for Business Automation platform — a modular set of automation capabilities that can be deployed across hybrid cloud. It has invested significantly in process mining capabilities, developing a set of functional use cases for areas such as procure-to-pay.

Infosys

Infosys has developed its 3D framework for intelligent automation, based on its three elements of Discover, Democratize, and Derisk. The company has many specialised industry and domain use cases for intelligent automation. In September 2022, it acquired BASE life science, a digital technology and consulting firm based in Denmark.

PwC

PwC has built a comprehensive portfolio of intelligent enterprise automation services, based on citizen-led automation, accelerators, and deep process expertise. Its extensive background in business processes and consulting means that its intelligent automation services are closely tied to broader business value goals of enterprises.

TCS

TCS takes a flexible, multi-horizon approach to its intelligent automation services for clients, with significant emphasis on industry and functional solutions. It is also investing in expanding its capabilities in complementary technologies related to security, metaverse, edge computing and sustainability.

Wipro

Wipro offers Holmes, an enterprise-wide platform for intelligent automation, It has invested in domain-specific solutions such as anomaly prevention and automation of know-your-customer (KYC) processes.

WNS Vuram

WNS Vuram offers a portfolio of intelligent enterprise solutions with a strong industry and domain flavour. It recently acquired Vuram, a specialist in low-code automation solutions with a long history of collaboration with Appian.

Capgemini

Leader

"Capgemini is notable for its business process expertise and intelligent automation capabilities."

Mark Purdy

Overview

Capgemini is headquartered in Paris and operates in 50 countries. It has over 340,700 employees across more than 300 global offices. In FY21, the company generated $21.9 billion in revenue (+14.6 percent YoY), with Applications and Technology as its largest segment. The company has a large market for its intelligent enterprise automation services in the UK, and a substantial base of dedicated professionals in the region.

Strengths

Business process expertise: Capgemini is able to bring together its strong automation credentials and long-established expertise in business processes and business integration to foster frictionless enterprises. It has four key process domains: intelligent finance and accounting operations, intelligent people operations, intelligent customers operations, and intelligent supply chain operations.

Strong sustainability focus: Capgemini offers a range of tools to help enterprises achieve their net-zero carbon emission targets, for example, through inventory optimisation, route optimisation, carbon reporting, intelligent supply chains, etc. It also focusses on sustainable automation, for example, through green infrastructure, carbon measurement of automated processes, reuse of components, and optimal design.

Compelling credentials: Capgemini has carried out hyperautomation projects for multiple blue-chip clients both in the UK and globally, including a large UK government agency and a major water and waste management services provider.

Caution

Capgemini has a comprehensive and mature approach to intelligent enterprise automation. Sustainability-themed automation is its strong suit, and it should endeavour to bring its capabilities in this area to a wider audience of UK decision makers in business and the public sector.

Intelligent Enterprise Automation - Nordics

Who Should Read This

The report is relevant to enterprises in the Nordics for evaluating IT and BPO service providers that offer proprietary intelligent enterprise automation (IEA) solutions and services together with related implementation, consulting, and support services. ISG highlights the market positioning of IEA service providers in the Nordics and shows how each provider addresses the challenges faced by enterprises in the region. The report can also help them evaluate new providers to support their intelligent business process automation initiatives.

Intelligent automation is an amalgamation of aspects such as RPA tools, process discovery, business process management, and AI, enabling predictive action and leading to the efficient functioning of business processes. Globally, enterprises are looking for ways to accelerate their digital transformation journeys. IEA is not limited to business functions such

as financial services, contact center outsourcing, BPO, HR outsourcing, and procurement outsourcing, all of which are witnessing a rapid digital transformation. Regulated industries such as banking and healthcare, too, are witnessing rapid digital transformation by automating continuous and repetitive tasks. Other industries such as manufacturing, supply chain services, and automotive are following the lead.

Enterprises in the Nordics are looking for end-to-end business automation. They want to ensure a seamless experience for their employees and customers. One example is when a user initiates a chat with a bot using conversational AI, with RPA bots then coming into play and doing the processing in the backend and responding to the query in real-time, or through other modes such as emails. Some service providers have also developed toolkits to help enterprises select the best set of technologies suitable for their needs.

Strategy professionals should read this report to understand the relative positioning and capabilities of providers that can deliver end-to-end IEA solutions that are both efficient and effective.
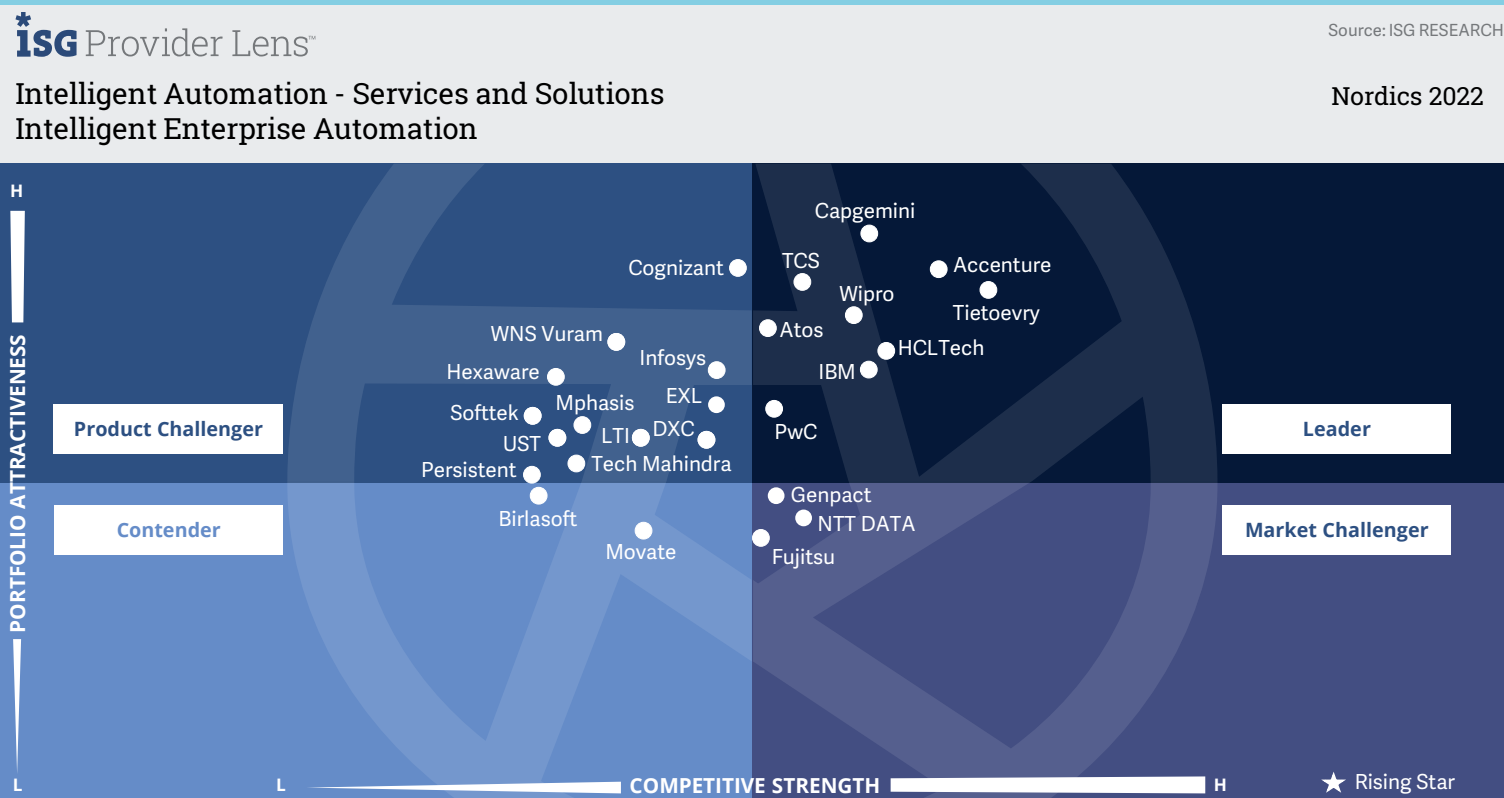
Technology professionals should read this report to understand how IEA providers integrate the latest technologies and capabilities into their proprietary offerings to gain a competitive edge.

Digital professionals should read this report to understand how providers of IEA solutions and services fit in with their digital transformation initiatives. The report shows how they can use IEA to ensure future-proof strategies and to use cognitive tools that include advanced technologies such as AI, machine learning, and natural language processing.

Procurement professionals should read this report to better understand the current landscape of IEA service providers in the Nordics.

This quadrant assesses service providers that offer intelligent enterprise automation services and solutions. **Service providers are emphasizing their ability to combine industry and domain expertise** with end-to-end automation capabilities.

Mark Purdy

Intelligent Enterprise Automation

Definition

This quadrant analyzes providers for services offered across business process outsourcing and corporate functions, with the use of automation and proprietary AI platforms, solutions and frameworks, along with associated services to enable enterprises to augment the capabilities of their respective workforces. These can be implemented on any area of an enterprise, thus expanding the scope of automation from business services to internal corporate functions that involve repetitive and manual processes but are primarily used in finance and accounting (F&A), HR, procurement and supply chain functions. The solutions supplement automation with advanced analytics and AI technologies such as compute vision, machine or deep learning and NLP to digitally transform the business operations of an enterprise at scale. They are aimed at eliminating inefficiencies and paving the way for reduced cost, high productivity, improved data accuracy and enhanced employee and customer experience.

Eligibility Criteria

1. **Proprietary automation AI platform:** Must offer a proprietary automation AI platform and solutions, alongside packages specific to industries and functions and then provide ongoing support

2. **End-to-end business and corporate function transformation:** Capability to design, develop and deploy solutions using next-gen technologies such as automation, AI and advanced analytics

3. **Data visualization and projection capabilities:** Must have the competency to support integration with various enterprise applications, for example, CRM systems for customer data or ERP systems for various portfolios, industries and functions (finance and existing IT infrastructure)

4. **Customization and personalization of solutions:** Capable of offering out-of-the-box APIs, multi-tenancy and secure deployment of platform

5. **Breadth and depth of industry verticals and functions:** Must have business process knowledge, service lines and corporate functions to build and deliver industry focused solution packages

6. **Automation opportunity assessment capabilities:** Must have the capability to facilitate automation with strong business advisory abilities to support enterprises in internal buy-in and guide them through a business process transformation journey. This demonstrates how advisory expertise (business case, blueprints and KPIs) and assets (pre-trained models and connectors) translate to a positive business outcome

7. **Industry or function-specific solutions and packages:** Must have experience in advising, developing and deploying industry focused and function specific (for example, finance, procurement and HR) automation/ AI proprietary solutions

Observations

Within the Intelligent Enterprise Automation quadrant, ISG sees several pronounced trends. First, there is an increasingly sharp focus among enterprises and providers on linking intelligent automation solutions to business outcomes—for example, reduced costs of operation, improved customer experiences, or faster innovation—and to strategic business transformation. Second, hyper-automation capabilities are now a must-have for all leading providers, with enterprises looking to move beyond disconnected or discrete automation initiatives towards end-to-end automation solutions that bring in the full panoply of automation capabilities—RPA, NLU, NLP, task capture and mining, low-code, big data and predictive analytics, and even emerging technologies such as digital twins. Third, the low-code/citizen developer movement is now firmly

entrenched in provider offerings, with enterprises seeing low-code technologies as a way to improve employee education in relation to automation while also empowering workers to innovate around business processes and problems. Fourth, enterprises are increasingly looking to outsource some elements of intelligent automation processes, either via managed service models (e.g. automated invoice processing), or automation-as-a-service platforms. Fifth, we see a pronounced shift towards industry-inflected and domain-centric intelligent automation solutions, in sectors such as banking, financial services and insurance (BFSI), life sciences and the public sector. Sixth, intelligent automation solutions are increasingly being integrated with a variety of back-end technologies and systems of record, for example CRM and ERP systems. Seventh, providers continue to invest in a dazzling variety of accelerators and use cases, to help clients scale their automation efforts faster.

From the 56 companies assessed for this study, 26 have qualified for this quadrant with nine being Leaders.

accenture

Accenture offers its intelligent enterprise automation services primarily through its SynOps platform, with additional support for orchestration through its myConcerto platform. Accenture has an extensive track record of delivering automation projects for large, blue-chip clients across the world.

AtoS

Atos invests in expanding its automation capabilities, strongly focusing on its ability to combine deep industry and domain expertise with end-to-end automation capabilities. It has a large library of use cases and pre-trained models and continues to invest in its citizen developer tools and capabilities.

Capgemini

Capgemini has invested significantly in developing a comprehensive suite of intelligent automation services, with a distinct cross-cutting sustainability theme. Its offering draws on its strong background in business process optimization and change management. It has carried out intelligent automation projects for a multitude of global, blue-chip clients.

HCLTech

HCLTech offers its intelligent automation services through its DigitalCOLLEAGUE platform and its ADvantage Suite automation framework. It has developed numerous industry-aligned intelligent automation solutions, and made several recent acquisitions in related areas, such as Industry 4.0, IoT and data engineering.

Intelligent Enterprise Automation

IBM deploys its intelligent automation services and functionality largely through its Cloud Pak for Business Automation platform, a modular set of automation capabilities that can be deployed across hybrid cloud. It has invested significantly in process mining capabilities and in developing a set of functional use cases for areas such as procure-to-pay.

PwC

PwC has built a comprehensive portfolio of intelligent enterprise automation services based on citizen-led automation, accelerators and deep process expertise. Its extensive background in business processes and consulting means that its intelligent automation services are closely tied to broader business value goals for enterprises.

TCS takes a flexible, multi-horizon approach to its intelligent automation services for clients, with a heavy emphasis on industry and functional solutions. It is also investing in expanding its capabilities in complementary technologies related to security, metaverses, edge computing and sustainability.

Tietoevry continues to see rapid growth in demand for its intelligent automation services integrating digiOps, AIOps and BizOps to drive business outcomes. It has invested significantly in new intelligent automation capabilities, for example, machine learning algorithm enhancements, multi-cloud automation solutions and sovereign clouds.

Wipro offers an enterprise-wide platform for intelligent automation known as Holmes. It has invested in domain solutions such as anomaly prevention and automation of know-your-customer processes. In June 2022, Wipro announced plans to more than quadruple its workforce in Norway from 85 to 350 employees over the next two years.

Capgemini

Leader

"Capgemini is notable for its business process expertise and intelligent automation capabilities."

Mark Purdy

Overview

Capgemini is headquartered in Paris, and operates in 50 countries. It has over 340,700 employees in more than 300 global offices. In FY21, the company generated $21.9 billion in revenue (+14.6 percent YoY), with applications & technology as its largest segment. The company has a large market for its intelligent enterprise automation services in the Nordics, and a significant number of intelligent automation professionals in the region.

Strengths

Organizational change management: Capgemini has digital adoption and organizational change management offerings that provide a tailored roadmap for many of the common organizational challenges associated with automation, such as process traps, isolated strategies, unclear use cases and human impact.

Business process expertise: Capgemini can couple its strong automation credentials with its long-established expertise in business processes and business integration.
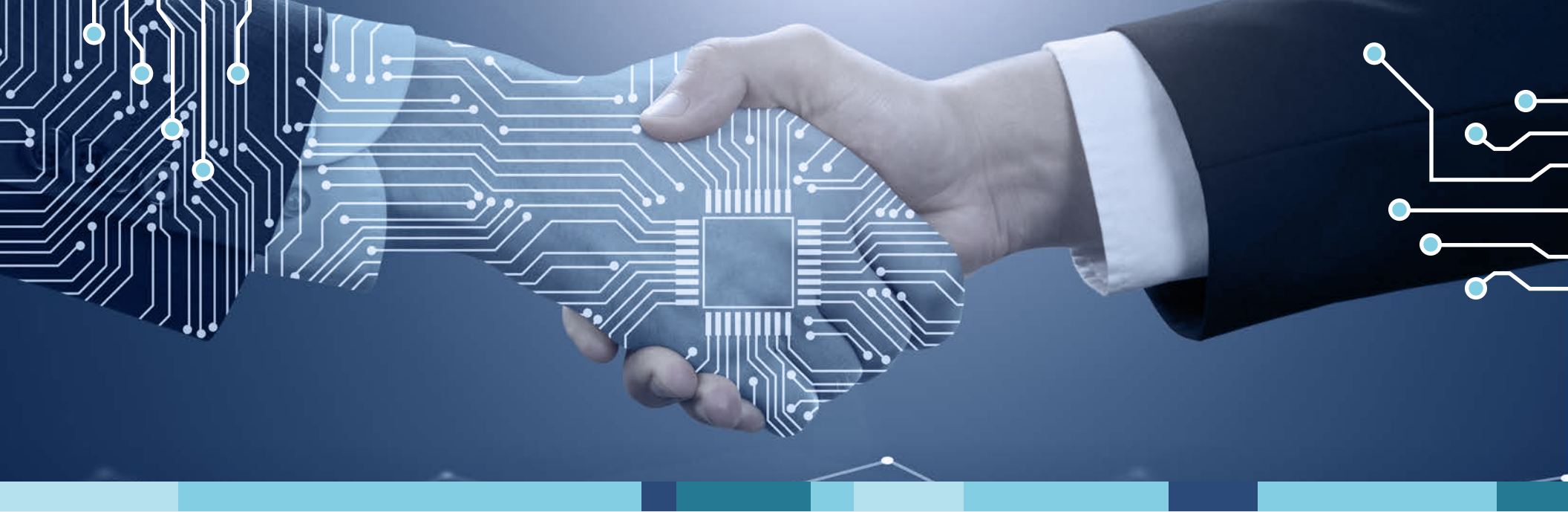
Related acquisitions: In recent years, Capgemini has made several important acquisitions in the experience and design space relating to intelligent automation. These include Fahrenheit 212, a strategy, design and research company based in New York and London that it acquired in 2016, and Frog, a global creative consultancy that forms part of Capgemini Invent.

Compelling credentials: Capgemini has carried out automation projects for multiple blue-chip clients. This includes a virtual agent solution to handle car registration queries for a Swedish agency and intelligent automation projects for a Swedish public sector unit.

Caution

Capgemini has a comprehensive and mature approach to intelligent enterprise automation. Its sustainability-themed automation is a strong suit, and the company should endeavor to bring its capabilities in these areas to a wider audience of Nordic decision-makers in the business and public sectors. In the Nordics, Capgemini should continue to expand its workforce and capabilities within the intelligent automation sphere.

Intelligent Enterprise Automation - Brazil

Who Should Read This

The report is relevant to enterprises in Brazil for evaluating IT and BPO service providers that offer proprietary intelligent enterprise automation (IEA) solutions and services together with related implementation, consulting, and support services. ISG highlights the market positioning of IEA service providers in Brazil and shows how each provider addresses the challenges faced by enterprises. The report can also help enterprises evaluate new providers to support their intelligent business process and automation initiatives.

Intelligent automation is an amalgamation of aspects such as RPA tools, process discovery, business process management, and AI, enabling predictive action and leading to the efficient functioning of business processes. Globally, enterprises are looking for ways to accelerate their digital transformation journeys. IEA is

not limited to business functions such as financial services, contact center outsourcing, BPO, HR outsourcing, and procurement outsourcing, all of which are witnessing a rapid digital transformation. Regulated industries such as banking and healthcare, too, are witnessing rapid digital transformation by automating continuous and repetitive tasks. Other industries such as manufacturing, supply chain services, and automotive are following the lead.

Brazil is one of the largest automation markets in South America. Enterprises are focused on identifying inefficient processes by using a combination of automation technologies. They intend to reduce human error, bring about cost efficiencies and free up time for important tasks, where employees can engage and grow. Brazilian enterprises are looking for domain-based automation solutions and bots that can self-heal to avoid data challenges during the use of automation tools and solutions.

Strategy professionals should read this report to understand the relative positioning and capabilities of providers that can deliver end-to-end IEA solutions that are both efficient and effective.

Technology professionals should read this report to understand how IEA providers integrate the latest technologies and capabilities into their proprietary offerings to gain a competitive edge.

Digital professionals should read this report to understand how providers of IEA solutions and services fit in with their digital transformation initiatives. The report shows how they can use IEA to ensure future-proof strategies and can use cognitive tools that include advanced technologies such as AI, machine learning, and natural language processing.

Procurement professionals should read this report to better understand the current landscape of IEA service providers in Brazil.

ISG Provider Lens™

Source: ISG RESEARCH

Intelligent Automation – Services and Solutions
Intelligent Enterprise Automation

Brazil 2022

PORTFOLIO ATTRACTIVENESS

H

Product Challenger

Contender

Wipro
Infosys
TCS
Genpact
Tech Mahindra
Atos
Softtek
HCLTech
NTT DATA
Algar Tech
Mphasis
Marlabs
Indra
Arvato
Birlasoft

Capgemini
Accenture
DXC Technology
Stefanini
PwC
Stoque
AeC

Leader

Market Challenger

L

L   COMPETITIVE STRENGTH   H   ★ Rising Star

This quadrant analyzes providers that offer automation and **proprietary AI** platforms, solutions and frameworks, along with **associated services**, to enable enterprises to augment the **capabilities** of their **respective workforces**.

David de Paulo Pereira

Intelligent Enterprise Automation

Definition

This quadrant analyzes providers for services offered across business process outsourcing and corporate functions, with the use of automation and proprietary AI platforms, solutions and frameworks, along with associated services to enable enterprises to augment the capabilities of their respective workforces. These can be implemented on any area of an enterprise, thus expanding the scope of automation from business services to internal corporate functions that involve repetitive and manual processes but are primarily used in finance and accounting (F&A), HR, procurement and supply chain functions. The solutions supplement automation with advanced analytics and AI technologies such as computer vision, machine or deep learning and natural language processing (NLP) to digitally transform the business operations of an enterprise. They are aimed at eliminating inefficiencies and paving the way for reduced costs, high productivity, improved data accuracy and enhanced employee and customer experiences.

Eligibility Criteria

1. **Proprietary automation AI platform:** Must offer a proprietary automation AI platform and solutions, alongside packages specific to industries and functions and then provide ongoing support;

2. **End-to-end business and corporate function transformation:** Capability to design, develop and deploy solutions using next-gen technologies such as automation, AI and advanced analytics;

3. **Data visualization and projection capabilities:** Must have the competency to support integration with various enterprise applications for various industries and functions;

4. **Customization and personalization of solutions:** Capable of offering out-of-the-box APIs, multi-tenancy and secure deployment of platform;

5. **Breadth and depth of industry verticals and functions:** Must have business process knowledge, service lines and corporate functions to build and deliver industry-focused solution packages;

6. **Automation opportunity assessment capabilities:** Must have strong business advisory abilities to support enterprises in internal buy-in and guide them through a business process transformation journey;

7. **Industry or function-specific solutions and packages:** Must have experience in advising, developing and deploying industry-focused and function specific automation/AI proprietary solutions.

Observations

The intelligent enterprise automation (IEA) solutions market in Brazil is smaller when compared to other regions. However, recent advances in robotic process automation (RPA) and AI, along with the changing business needs of the last two years, have accelerated the adoption of intelligent automation, thereby increasing the demand for these solutions. Financial services, banking and insurance, supply chain, logistics, retail, healthcare, and telecommunications are the largest end users of IEA.

Besides the challenges related to agility, business efficiency, cost management and process compliance, organizations in Brazil face obstacles such as complexities in business processes, a lack of knowledge regarding local regulations, difficulties in finding appropriate use cases, measuring benefits, and complications in automation at scale. Companies are looking for

providers that deliver a modular, yet integrated set of solutions and services that are easy to implement and scale.

Providers are offering complete automation solutions to meet the automation requirements of enterprises and focus on a few domains to accelerate ROI, with some optimizing tools for comprehensive process evaluation and incorporating them into their IBA offerings. Providers are also offering innovative automation business models such as cloud-based services to reduce the cost of entry for mid-sized to small companies.

Of the 34 companies assessed for this study, 24 qualified for this quadrant, with six being identified as Leaders and one as a Rising Star:

accenture

Accenture offers its intelligent enterprise automation services through its SynOps platform, with additional support for orchestration through its myConcerto platform. Accenture has an extensive track record of delivering automation projects for large, top-tier customers around the world.

Capgemini

Capgemini invests significantly in developing a comprehensive suite of intelligent automation services, with a distinct cross-discipline theme of sustainability. Its offering is based on strong experience in business process optimization and change management. It has completed intelligent automation projects for a multitude of top-tier global customers.

DXC Technology

DXC Technology is a Fortune 500 global leader in IT services. With over 130,000 employees in more than 70 countries, it has its intelligent automation services based on the data-driven DXC Platform X™ solution, enabling customers to accelerate their journeys to resilient IT, as well as predict and prevent problems in advance.

PwC

PwC has built a comprehensive portfolio of intelligent enterprise automation services based on accelerators, citizen-led automation and deep process knowledge. Its expertise in business processes and consulting indicates that its services are closely linked to broader business value goals for enterprises.

Intelligent Enterprise Automation

Stefanini

Stefanini, a Brazilian multinational, offers specialized solutions for intelligent automation using AI algorithms. Constantly improving, the platform can be used in several business segments with high user satisfaction.

Stoque

Stoque develops intelligent enterprise automation solutions for various sectors, with emphasis on the financial market. It offers a comprehensive solution to support various processes, including the analysis and formalization of consigned credit and real estate.

Wipro (Rising Star) offers an enterprise platform for intelligent automation, namely Holmes. It has invested in domain solutions such as anomaly prevention and know-your-customer process automation.

Capgemini

Leader

"Capgemini is one of the Leaders with its expertise in business processes and intelligent automation capabilities."

David de Paulo Pereira

Overview

Capgemini is headquartered in Paris. Operating in 50 countries, it has around 340,700 employees in more than 300 global offices. In FY21, the company generated $21.9 billion (+14.6 percent YoY) in revenue, with applications and technology as its largest segment. In Brazil, it has a large market for its IEA services, as well as a robust team of professionals in the region.

Strengths

Business processes and segment expertise: Capgemini combines strong automation credentials with its long-standing expertise in business processes and integration. It also focuses on intelligent finance and accounting operations, intelligent people operations, intelligent customer operations and intelligent supply chain operations.
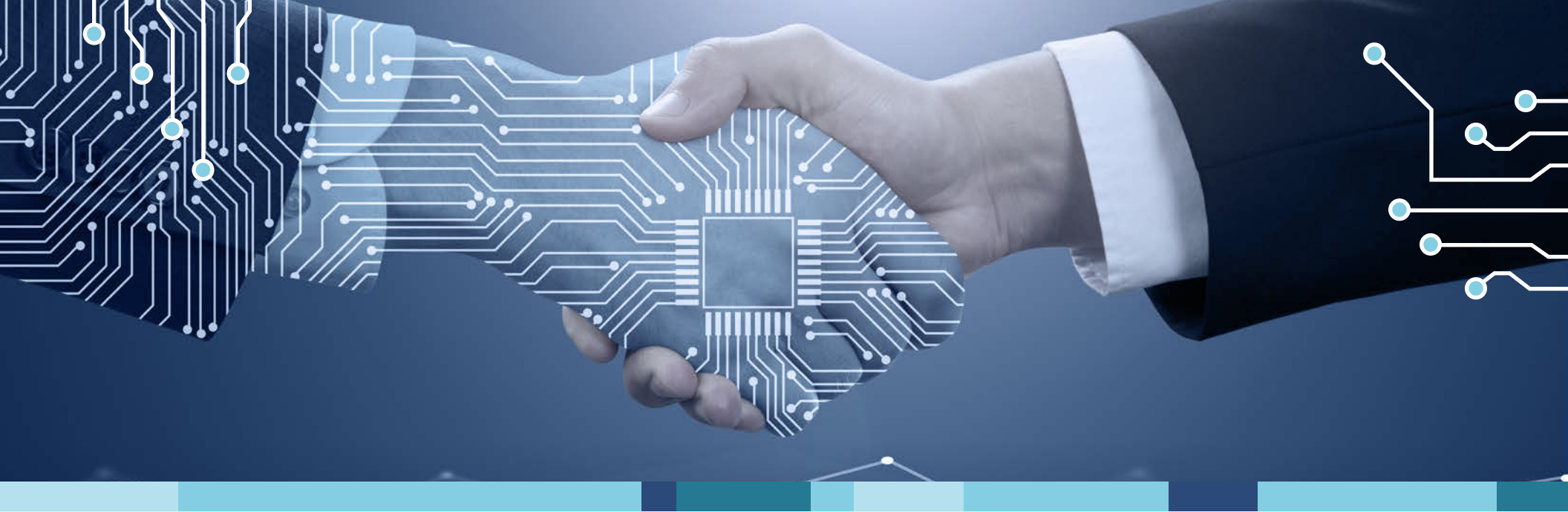
Strong focus on sustainability: Capgemini offers a variety of tools to help companies achieve their net-zero carbon goals, with success stories in inventory and route optimization, carbon reporting, intelligent supply chains, and more. It also emphasizes the need to automate in a sustainable way; for example, through green infrastructure, carbon measurement of automated processes, reuse of components and optimal design.

Caution

Capgemini has a consistent intelligent automation portfolio, and sustainability is a key strength. The company should strive to bring its capabilities in such areas to a broader audience of decision-makers at local companies, multinationals and the public sector. Proper promotion of its combined portfolio, originating from its various acquisitions, to its clients in the region can help leverage the opportunities and consolidate the company's leadership in this area in Brazil.

Intelligent Enterprise Automation - Germany

Who Should Read This

This quadrant report is relevant to Germany-based enterprises for evaluating service providers that offer intelligent enterprise automation (IEA) solutions. In this report, ISG highlights the market positioning of IEA providers in Germany and shows how each provider addresses the challenges faced by enterprises. The enterprises can use the report findings to understand market dynamics and explore new capabilities with incumbent providers. The report can also aid to evaluate new service providers to support their digital transformation initiatives.

Apart from North America, Europe is the largest adopter of digital transformation, with Germany being the largest market in the region. The demand for IEA solutions is growing in Germany, but recent geopolitical events and economic uncertainties have made some enterprises

rethink their spending. They are looking to go beyond RPA and work with providers that can offer end-to-end automation that can scale quickly. However, some of the key challenges that remain are dealing with a disparity in data, process, and technology initiatives; identifying the right automation candidates; and scaling automation. German enterprises also face skill shortage; and budgetary constraints.

The IEA market in Germany is primarily driven by factors such as the growing adoption of automation across industries, advances in AI and machine learning and rise in low-code/no-code adoption.

Service providers are looking to mitigate clients' challenges and meet their requirements by offering end-to-end, scalable, and sustainable IEA solutions. They are also adopting a low-code/no-code and platform-based approach and building industrialized solutions.

Strategy professionals should read this report to understand the relative positioning and capabilities of providers that can assist with end-to-end IEA solutions to deliver the required benefits with high efficiency and effectiveness.

Digital professionals should read this report to understand how IEA solutions fit their digital transformation initiatives and how providers can be compared with each other.
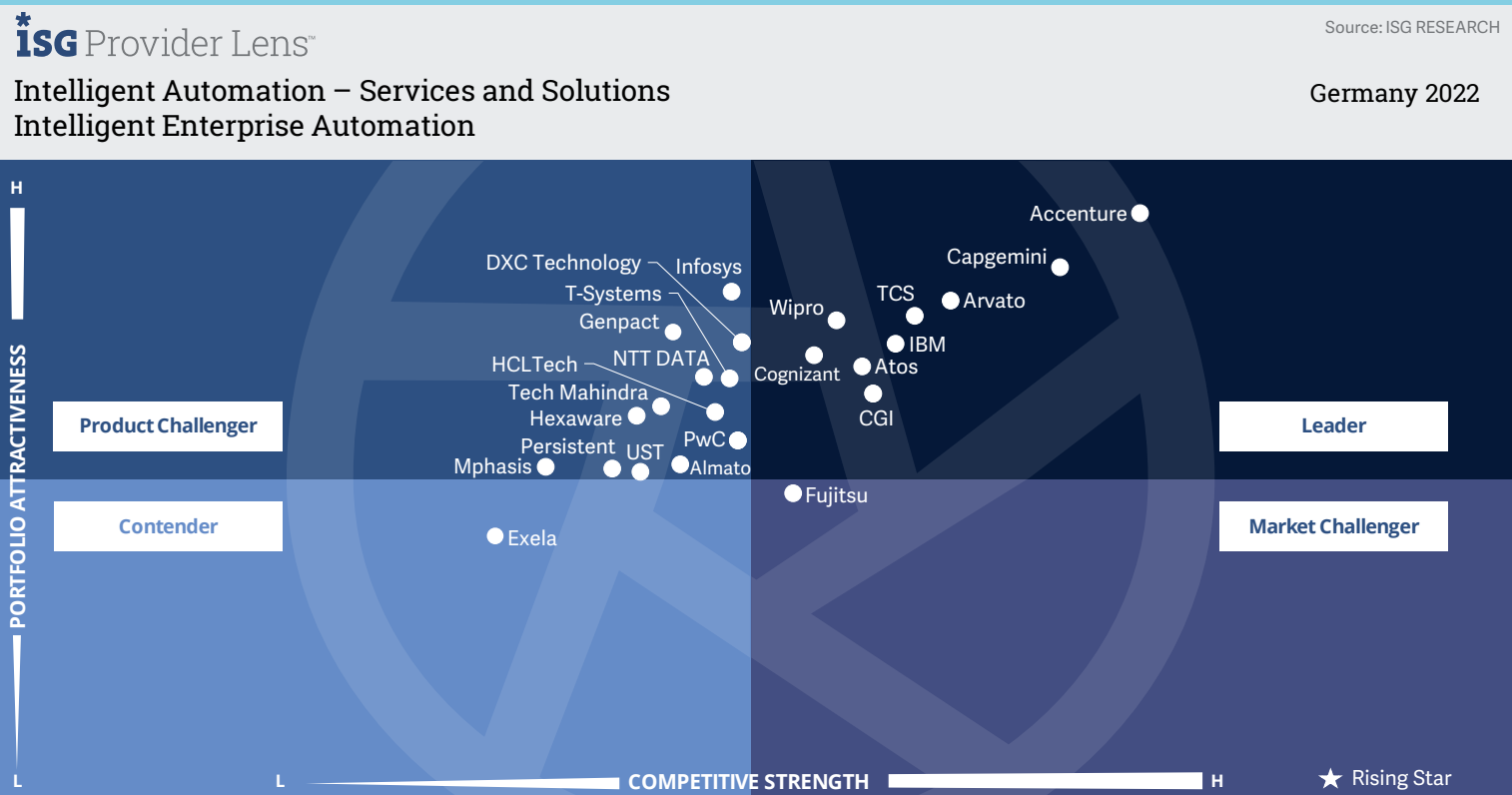
Technology professionals should read this report to understand how IEA service providers integrate the latest technologies and capabilities into their proprietary offerings to gain a competitive edge.

Procurement professionals should read this report to have a better understanding of the current landscape of IEA service providers in Germany.

ISG Provider Lens™

Intelligent Automation – Services and Solutions
Intelligent Enterprise Automation

Source: ISG RESEARCH

Germany 2022

H

PORTFOLIO ATTRACTIVENESS

Product Challenger

DXC Technology
Infosys
T-Systems
Genpact
Wipro
NTT DATA
HCLTech
Tech Mahindra
Cognizant
Hexaware
Persistent
UST
Mphasis
PwC
Almato

TCS
Arvato
IBM
Atos
CGI

Accenture
Capgemini

Leader

Contender

Exela

Fujitsu

Market Challenger

L

L
COMPETITIVE STRENGTH
H

★ Rising Star

Intelligent Enterprise
Automation
quadrant evaluates
a service provider's
performance and
the **maturity** of its
BizOps and **corporate
automation
solutions portfolio**.

Florian Scheibmayr

Intelligent Enterprise Automation

Definition

This quadrant analyzes providers for services offered across business process outsourcing and corporate functions, with the use of automation and proprietary AI platforms, solutions and frameworks, along with associated services to enable enterprises to augment the capabilities of their respective workforce. These can be implemented on any area of an enterprise, thus expanding the scope of automation from business services to internal corporate functions that involve repetitive and manual processes but are primarily used in finance and accounting (F&A), HR, procurement and supply chain functions. The solutions supplement automation with advanced analytics and AI technologies such as compute vision, machine or deep learning and natural language processing (NLP) to digitally transform the business operations of an enterprise, at scale. They are aimed at eliminating inefficiencies and paving the way for reduced cost, high productivity, improved data accuracy and enhanced employee and customer experience.

Eligibility Criteria

1. **Proprietary automation AI platform:** Must offer a proprietary automation AI platform and solutions, alongside packages specific to industries and functions and then provide ongoing support.

2. **End-to-end business and corporate function transformation:** Capability to design, develop and deploy solutions using next-gen technologies such as automation, AI and advanced analytics

3. **Data visualization and projection capabilities:** Must have the competency to support integration with various enterprise applications, for example, CRM systems for customer data or ERP systems for various portfolios, industries and functions (finance and existing IT infrastructure)

4. **Customization and personalization of solutions:** Capable of offering out-of-the-box APIs, multi-tenancy and secure deployment of platform

5. **Breadth and depth of industry verticals and functions:** Must have business process knowledge, service lines and corporate functions to build and deliver industry focused solution packages

6. **Automation opportunity assessment capabilities:** Must have the capability to facilitate automation with strong business advisory abilities to support enterprises in internal buy-in and guide them through a business process transformation journey. This demonstrates how advisory expertise (business case, blueprints and KPIs) and assets (pre-trained models and connectors) translate to a positive business outcome

7. **Industry or function-specific solutions and packages:** Must have experience in advising, developing and deploying industry focused and function specific (for example, finance, procurement and HR) automation/AI proprietary solutions

*Note 1: Associated services include consulting, advisory, implementation, and ongoing support for proprietary offerings.

*Note 2: By "proprietary solution" we mean a solution built or grown under own effort, assembled of products and services, that might be open source, or under commercial license but not predominantly tied to a specific vendor.

DISCLAIMER: ISG Automation and other standalone intelligent automation players are not considered in this quadrant.

Observations

End-to-end processing of long process chains has been correctly identified as the means to unlock the real value of automation and its promised magnitude. For frictionless working, enterprise platforms that assemble different functionalities such as conversational AI, document processing, and process discovery are becoming increasingly relevant.

Akin to what was seen in the areas of smartphones, that nowadays assembles functionalities of separate devices like radios, cameras, and voice recorders, modern automation platforms, too, unify several features, and push the specialized solutions into the field of more specialized, and often niche applications. However, there will be a fierce competition between products and platform vendors, service providers, and Integration Platform as a Service (iPaaS) providers.

The success of intelligent automation depends on the underlying thought process, which should not only measure the number of deployed bots or automated processes, but also focus on outcomes, have an understanding of throughput, ensure optimal local use and acknowledge the associated challenges. Such process-orientated thinking has always been a tradition with German enterprises but given the lag in needed automation and digital transformation, there are chances of incorrect use.

From the 56 companies assessed for this study, 24 have qualified for this quadrant with nine Leaders.

accenture

Accenture continues its M/A journey, acquiring several companies. Notable for the German market was the acquisition of Umlaut, an engineering company, with extensive automation capabilities.

Accenture's IPs and platforms are robust and well-proven, together with an extensive talent pool building a sound solution.

arvato
BERTELSMANN

Arvato has extensive experience in the management of business processes, especially in Finance and Supply Chain. Through its Arvato systems unit, and several acquisitions and investments, the conglomerate also covers intelligent automation, the key that makes efficient processing possible.

AtoS

Atos surprised the market with the departure of the CEO and the decision to split into two companies. While the market and customers await what it means in practical terms, its intelligent automation portfolio is growing and bringing robust and well-thought solutions to its clients.

Capgemini

Capgemini is on an impressive successful journey through all key markets. The company solidifies its business automation solutions, with its experience from a massive number of client engagements and its BPO experience. Through Capgemini Invent the consultancy practice and thought leadership is becoming more evident.

CGI

CGI, maintains a wide network of offices throughout Germany to ensure client intimacy and tied contact. The company assembles client references from the private and public sectors, especially in the last scores with ground-building frameworks for the use of automation.

Intelligent Enterprise Automation

Cognizant makes notable progress to grow outside the US. Already strong in the U.K. and Nordics, the company is investing heavily in the DACH market. Its Neuro platform is a key element of its intelligent automation strategy.

IBM offers business automation platforms through its Cloud Paks and the Red Hat product family. The market also still needs to digest the Kyndryl spin-off, even when more than a year both are operating separately, generates some confusion in the perception of clients and market.

TCS The Indian-heritage IT services heavyweight continuously expands its footprint in Germany. The company developed sector-specific business automation solutions, for example for Retail, most based on its Cognix® Platform.

Wipro is a leader in the German market, the company sees its automation offerings with Holmes as a key piece as a key element to attract a broader client base.

Capgemini

Leader

> "Known as the largest European IT service provider, Capgemini provides automation as a core offering."
>
> *Florian Scheibmayr*

Overview

Capgemini is headquartered in Paris, and operates in 50 countries. It has over 340,700 employees across 300+ global offices. In FY21, the company generated $21.9 billion (+14.6 percent YoY) in revenue, with applications & technology as its largest segment. It offers intelligent automation solutions through a proprietary platform called Enterprise Automation Fabric. It has more than 600 clients globally supported by over 30,000 employees and many automation experts. In Germany, Capgemini has 14 offices across major cities.

Strengths

Operating model IPA-TOM: Capgemini has developed IPA-TOM as a modern framework for effective digital enablement and opportunity shaping mechanisms to enhance the business outcomes of enterprise automation. Consistent solutioning and development practices built on industry gold standards focused on re-usability and interconnectivity.

IDEA framework: With Industrialized Data and AI Engineering Acceleration (IDEA), Capgemini has created a suite of accelerators, frameworks, methodologies, best practices, and implementation capabilities to help organizations modernize, democratize, and industrialize their data estate. The framework guides consistently from the discovery and assessment phases to the operate and run phase.

Innovation lab: Capgemini´s IPA innovation labs provides process design thinking services, enabling clients to reimagine their processes and test technologies in a safe environment, supported by Capgemini´s subject matter experts.

Caution

Given its global size, and in comparison with some of its peers, Capgemini´s local workforce in automation and related technologies is not as big as needed to tap all opportunities in the market. Right-shoring can be an option, but it does not work for all clients. In the public sector in particular, which is one of Capgemini's strong areas in other regions, the company may face challenges when applying a strong rightshore approach.

Appendix

Methodology & Team

The ISG Provider Lens™ 2022 – Intelligent Automation – Services and Solutions analyzes the relevant software vendors/ service providers in the U.S. 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 November 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 Intelligent Automation – Products and Platforms 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 Author

Ashwin Gaidhani,
Research Partner

Ashwin Gaidhani has a comprehensive view of IT shared-managed services portfolio and digital business transformation initiatives with approximately two decades of experience. As an ISG Research Partner and subject matter expert in the field of enterprise services and digital technologies, he is presently contributing as a Lead Author with the ISG Provider Lens™ team. Ashwin comes to this work with business and technology experience revolving around service management, digital governance, emerging capabilities (artificial intelligence and intelligent automation), work design methodologies and implementation frameworks. He is a highly qualified and experienced ITIL expert with lifecycle experience in operations, delivery, consulting and advisory for large corporations, including end-user, ITSP, and technology product companies. He effectively partners with C-level executives and tactical leaders to institutionalize digital business transformation and strategic initiatives.

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Enterprise Context and Global Overview

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IPL Product Owner

Jan Erik Aase
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Jan Erik Aase brings extensive experience in implementation and research for service integration and management of both IT and business processes. He has more than 35 years of experience, is highly skilled at analyzing vendor governance trends and methodologies, adept at identifying inefficiencies in current processes, and capable of advising the industry. Jan Erik has experience in all four sides of the sourcing and vendor governance lifecycle — as a client, an industry analyst, a service provider and an advisor.

Now as the Research Director, Principal Analyst and Global Head of ISG Provider Lens™, he is well positioned to assess and report on the state of the industry and make recommendations to both enterprises and service provider clients.

About Our Company & Research

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.

ISG Research™

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ISG

ISG (Information Services Group) (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 800 clients, including more than 75 of the world's top 100 enterprises, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; strategy and operations design; change management; market intelligence and technology research and analysis.

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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