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# Definition

According to the ISG Research 2019 RPA Deployment & Capability study, organizations are improving their automation capabilities, but many are still in the early stages of the automation journey. Only 7 percent have progressed into enriching their robotic process automation (RPA) with intelligent automation. While RPA can automate simple, rules-based tasks previously performed by humans it needs structured data as input and can perform only standardized processes. Therefore, inability to handle unstructured data, lack of artificial intelligence (AI) capabilities and in-house skills limitations is driving enterprise clients to look for transformational sourcing options, which include intelligent automation.

Intelligent automation enables software bots to interact with unstructured data and generally includes the following capabilities: image recognition, natural language processing (NLP), cognitive reasoning, and conversational AI. Enterprise clients worldwide are focusing on building intelligent automation capabilities into their RPA initiatives with the growing need to stay apace with competition with next-generation technologies. Well-orchestrated intelligent automation technologies are enabling enterprises to automate processes once considered un-automatable, and deliver higher productivity, reduced costs, improved data accuracy and enhanced customer experience.

This study on Intelligent Automation Solutions and Services is aimed at understanding enterprise requirements and provider capabilities in meeting these demands.

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

- A differentiated positioning of providers based on competitive strengths and portfolio attractiveness
- A perspective on different markets, including the U.S., U.K., Nordics and Germany

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

# **Quadrants Research**

As part of this ISG Provider Lens™ quadrant study, we are introducing the following three quadrants on Intelligent Automation Solutions and Services:

Simplified illustration

Intelligent Automation Solutions & Services 2020

Intelligent Business
Automation - Proprietary
Solutions and Services

Artificial Intelligence for IT
Operations

Conversational Artificial
Intelligence

Source: ISG 2020

## Intelligent Business Automation - Proprietary Solutions and Services

This quadrant analyzes information technology outsourcing/business process outsourcing (ITO/BPO) service providers that offer proprietary automation and AI platform, solutions, and frameworks, along with associated services to enable enterprises automate business activities and augment the capabilities of their workforce. These can be implemented in any facet of an enterprise where repetitive and manual processes are in place but are primarily used in finance and accounting (F&A), human resources (HR), procurement and supply chain functions. They supplement automation with advanced analytics and AI technologies such as compute vision, machine/deep learning and NLP to digitally transform enterprise business operations at scale. These are aimed at eliminating inefficiencies in business operations and pave the way for reduced cost, high productivity, improved data accuracy and enhanced customer experience.

#### **Eligibility criteria:**

- ITO-BPO service provider must offer proprietary automation/Al platform and solutions, implement these and provide ongoing support
- Should have the ability to enable end-to-end business transformation of enterprises by leveraging next-gen technologies like automation, Al and advanced analytics
- Have the ability to support integration with various enterprise applications (e.g., customer relationship management (CRM) system for customer data or enterprise resource planning (ERP) systems for finance) and existing IT infrastructure
- Capable of offering out-of-the-box application programming interface (APIs), multitenancy and secured deployment of platform
- Offer solutions that harness and digitize large volumes of structured, semi-structured and unstructured data from multiple sources; provide actionable intelligence and generate insights from business processes data; and have machine learning capabilities embedded within their solutions to learn and improve from the data over time, resulting in increased accuracy and reduced exceptions
- Demonstrate capabilities in process mining, opportunity assessment for facilitating automation and strong business advisory capabilities to help enterprises in internal buy-in and guide them through a business process transformation journey
- Offer industry and/or function-specific (e.g. finance, procurement, HR) automation/Al proprietary solutions

\*Note: associated services include consulting, advisory, implementation and ongoing support for their proprietary offering.

### Artificial Intelligence for IT operations (AIOps)

This quadrant analyzes IT service providers that offer proprietary AlOps solutions, platforms and frameworks, enable companies with distributed IT infrastructure observability, learn IT behavior under dynamic conditions and orchestrate workflow for automated corrections. AlOps is the ability of an automation as a service solution and framework to intellect the state of company's multi-cloud IT workload and analyze the data it senses to facilitate automated operation. AlOps also offer real-time, minimal cost solutions that allow companies to detect issues before they can have an adverse effect on business. Such solutions and frameworks re-define the model of IT operation by combining data patterns and human intelligence to provide full visibility into the IT landscape of an enterprise. These are aimed at maximizing the performance of distributed, heterogenous, multi-cloud IT workloads, reducing costs and ensuring compliance and security.

#### **Eligibility Criteria:**

- IT service provider must have proprietary AIOps platform and framework
- Can enable companies with highly scalable, real-time data, along with prescriptive and proactive analysis that brings visibility to IT landscape
- AlOps platforms must be able to ingest data-at-rest, data-in-motion and create patterns for autoremediation
- Ability to offer data injection through multiple sources, and provide automated pattern discovery and detection through the big data platform
- Ability to improve resilience and reduce mean time to repair (MTTR) through automation services
- Ability to act as a smart orchestration engine in workflow creation for managed companies' IT infrastructure in nearly Zero and One touch approach
- Ability to offer out-of-the box APIs, multitenancy and secured deployment of platform

Note\* This quadrant is catering Automation as a service solutions, platforms / ecosystem/ frameworks, which are developed by IT service providers by investing on AI, ML and bigdata capabilities, helps companies to their multi-cloud workload operation can be support in autonomous way.

## Conversational Artificial Intelligence (Conversational AI)

This quadrant includes providers that offer conversational AI solutions to facilitate a development environment and an API for automated conversational agents. These solutions integrate with chat interfaces like messaging platforms and social media platforms, allowing third-party extensions and customization. Conversational AI solutions interact with users through text or voice akin to what a human would do. These applications run on programmable commands and AI technologies and are commonly classified as chatbots and virtual assistants. They represent an efficient way to handle communication with users using programmable technologies. For example, by automating standard response and keyword search from a database. They use NLP and technologies for sentiment analysis to understand a user's context and mood. These solutions can process increasing volumes of data, including unstructured data, based on search algorithms and data classification approaches.

Within an enterprise's internal environment, conversational AI solutions by way of virtual assistants help employees interact with their digital workplaces. While, in an external customer-facing environment, conversational AI provides chatbots and voice assistants for customer support and marketing initiatives.

#### **Eligibility criteria:**

- Solution designed and deployed by the vendor on-premise or on cloud
- Offers solutions in the following formats: allowing user self-service to create chatbots or virtual assistants
  with the requisite coding skills; as a solution, where the vendor or its partner offers consulting service to
  an enterprise to customize the final product; or offered as a complete managed service where the vendor
  (with or without a partner) provides consulting, customization and maintenance for the chatbot or virtual
  assistant
- Solutions that support creating chatbots and virtual agents for both customer facing services and/or internal IT
- Solutions that have proprietary NLP capabilities or support third-party NLP
- Solutions that provide virtual assistants for both text and audio mode
- Solutions that allow chatbot and virtual assistant development without dependency on/ less reliance on data science skills
- Have minimal 25 active deployments with large enterprises

# Quadrants by Region

Quadrants	Global	USA	Germany	UK	Nordics
Intelligent Business Automation - Proprietary Solutions and Services	Overview	V	√	V	V
Artificial Intelligence for IT operations	Overview	V	√	V	V
Conversational Artificial Intelligence	Overview	V	<b>√</b>	√	V

## Schedule

The research phase falls in the period **July 2020 to January 2021**. During this period, survey, evaluation, analysis and validation will take place. The results will be presented to the media in **January 2021**.

Milestones	Beginning	End
Launch	27 <sup>th</sup> July 2020	
Survey Phase	27 <sup>th</sup> July 2020	27 <sup>th</sup> August 2020
Sneak Preview	December 2020	
Press Release	December 2020/January 2	021

#### **Access to Online Portal**

You can view/download the questionnaire from <a href="here">here</a> using the credentials you have already created or refer to instructions provided in the invitation email to generate a new password. We look forward to your participation!

Please refer to this link to view/download the ISG Provider Lens™ 2020 research agenda.

### **Research Production Disclaimer:**

ISG collects data for the purposes of writing research and creating provider/vendor profiles. The profiles and supporting data are used by ISG advisors to make recommendations and inform their clients of the experience and qualifications of any applicable provider/vendor for outsourcing work identified by the clients. This data is collected as part of the ISG FutureSource™ process and the Candidate Provider Qualification (CPQ) process. ISG may choose to only utilize this collected data pertaining to certain countries or regions for the education and purposes of its advisors and not to produce ISG Provider Lens™ reports. These decisions will be made based on the level and completeness of information received directly from providers/vendors and the availability of experienced analysts for those countries or regions. Submitted information may also be used for individual research projects or for briefing notes that will be written by lead analysts.

# Partial list of companies being invited for the survey

Are you in the list or do you see your company as relevant provider that is missing from the list? Then feel free to contact us to ensure your active participation in the research phase.

Intelligent Business Automation - Proprietary Solutions and Services	AlOps	Conversational Al
Accenture	Accenture	[24]7.ai
Atos Syntel	Atos	Aivo
Capgemini	Capgemini	Amazon
Cognizant	Cognizant	Artificial Solutions
CSS Corp	Computacenter	Avaamo
Datamatics	Fujitsu	Cognigy
DXC Technology	GAVS	Conversable
EXL	HCL	Clinc.Al
Fujitsu	Hexaware Technologies	eGain
Genpact	IBM Watson	Eudata
HCL	Infosys	Google
Hexaware Technologies	IP Soft	IBM Watson
Hinduja Global Solutions	IVER	Inbenta
IBM	KMD	Interactions
Infosys	LTI	Kore.ai
L&T Infotech	Mindtree	LogMeIn
Mindtree	Mphasis	LivePerson
Mphasis	NIIT Technologies	Microsoft
NIIT Technologies	NTT Data	Nuance
NTT Data	NORDLO	NICE Ltd.
Sutherland	Orange Business Services	Omilia
TCS	(Basefarm)	OneReach.ai
Tech Mahindra	TCS	Openstream
TietoEVRY	Tech Mahindra	Oracle
UST Global	TietoEVRY	Rasa
Wipro	Wipro	Rulai
WNS	Zensar	Salesforce
Zensar		SmartBotHub
		SoundHound
		Verint

# Contacts for this study



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### Do you need any further information?

If you have any questions, please contact us at <a href="mailto:isglens@isg-one.com">isglens@isg-one.com</a>.