



***ISG** Provider Lens™

2021

Intelligent Automation -
Solutions & Services 2021

imagine your future®

ISG (Information Services Group) (NASDAQ: III) is a leading global technology research and advisory firm. A trusted business partner to more than 700 clients, including 75 of the top 100 enterprises in the world, 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; technology strategy and operations design; change management; market intelligence and technology research and analysis. Founded in 2006, and based in Stamford, Connecticut, ISG employs more than 1,300 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.



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Definition

According to ISG Research, enterprises are improving their automation capabilities, but many are still in the early stages of the automation journeys. 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, the inability to handle unstructured data, a lack of artificial intelligence (AI) capabilities and inadequate in-house skills are 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, combined with rapid improvements in task discovery and process mining technologies, are enabling enterprises to automate processes once considered un-automatable, and deliver higher productivity, reduced costs, improved data accuracy and enhanced customer experiences.

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 and business decision makers:

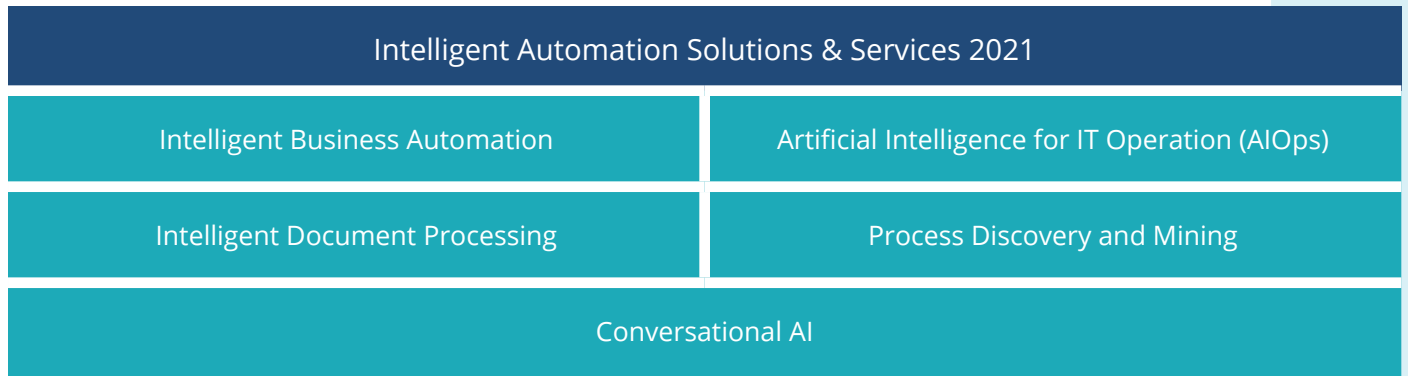
- A differentiated positioning of providers/vendors based on competitive strengths and portfolio attractiveness
- A perspective on different markets, including the U.S., U.K., Nordics, Brazil and Germany

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.

Quadrant Research

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

Simplified illustration



Source: ISG 2021

DISCLAIMER: ISG Automation is a sister division to ISG Research and therefore we have deliberately selected quadrants and eligibility criteria that would exclude ISG Automation to avoid any conflict of interest.

Intelligent Business Automation

This quadrant analyzes providers of information technology outsourcing or business process outsourcing services that offer proprietary automation and AI platforms, solutions and frameworks, along with associated services to enable enterprises to automate business activities and augment the capabilities of their respective workforce. These can be implemented in any facet of an enterprise that involve repetitive and manual processes, but are primarily used in finance and accounting, human resources, procurement and supply chain functions. The solutions 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. They are aimed at eliminating inefficiencies in business operations and pave the way for reduced cost, high productivity, improved data accuracy and enhanced employee and customer experience.

Eligibility criteria:

- Must offer proprietary automation/AI platform and solutions, implement these and provide ongoing support
- Have the ability to foster end-to-end business transformation of enterprises by leveraging next-gen technologies such as automation, AI and advanced analytics
- Have the ability to support integration with various enterprise applications, for example, customer relationship management systems for customer data or enterprise resource planning systems for finance, and existing IT infrastructure
- Capable of offering out-of-the-box application programming interfaces (APIs), multi-tenancy and secure deployment of platform
- Demonstrate capabilities in opportunity assessment for facilitating automation with strong business advisory capabilities to help enterprises in internal buy-in and guide them through a business process transformation journey
- Offer industry or 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.

Artificial Intelligence for IT Operations (AIOps)

This quadrant analyzes IT service providers that offer proprietary AIOps solutions, platforms and frameworks that enable companies etc with distributed IT infrastructure observability; learn IT behavior under dynamic conditions; and orchestrate workflows for automated corrections. AIOps is the ability of an Automation-as-a-Service solution and framework to identify the state of a company's multicloud IT workload and analyze the data gathered to facilitate automated operations. AIOps 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 redefine 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, heterogeneous, multicloud IT workloads, reducing costs and ensuring compliance and security.

Eligibility criteria:

- Must have proprietary AIOps platform and framework
- Enable companies with highly scalable, real-time data, along with prescriptive and proactive analysis to bring visibility to IT landscape
- Must offer AIOps platforms that are able to ingest data-at-rest and data-in-motion, and create patterns for auto-remediation
- 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 with nearly zero- and one-touch approach
- Ability to offer out-of-the box APIs, multi-tenancy and secure deployment of platform

*Note 1 This quadrant encompasses Automation-as-a-Service solutions, platforms/ecosystem/frameworks developed by IT service providers by investing in AI, ML and bigdata capabilities to help companies ensure that their multicloud workload operation can be supported in autonomous way.

*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.

Conversational AI

This quadrant includes providers that offer conversational AI solutions to foster a development environment and an API for automated conversational agents. These solutions integrate with chat interfaces such as messaging platforms and social media platforms, allowing third-party extensions and customizations. Conversational AI solutions interact with users through text or voice akin to humans. These applications run on programmable commands and AI technologies and are commonly classified as chatbots and virtual assistants. They represent an efficient way of handling communication with users using programmable technologies. For example, they do this by automating standard response and keyword search from a database. They use NLP and machine learning (ML) technologies for sentiment analysis — to understand a user's mood, emotions or attitude. 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. 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-premises or in the cloud
- Offers solutions in the following formats: 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 the creation of chatbots and virtual agents for both customer-facing services 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 or less reliance on data science skills
- Referenceable case studies

Intelligent Document Processing

This quadrant focuses on providers that offer proprietary software products or solutions for the automated discovery, analysis and processing of documents across an organization. More than 80 percent of companies have realized that they cannot unlock the true value of intelligent automation without a strong data foundation. Going beyond traditional optical character recognition, intelligent document processing (IDP) software uses AI technologies such as NLP, ML, computer vision and deep learning to filter and analyze large volumes of unstructured data from multiple formats such as email, PDFs, Excel, Word or images for further processing, storage and use in other applications. These tools support the digitalization of the entire document processing workflow across business processes by eliminating the touchpoints that require manual intervention. Such IDP solutions are not only aimed at enabling companies to reduce costs, but also increase workforce productivity, improve accuracy, ensure compliance and enhance maximize customer satisfaction.

Eligibility criteria:

- Offer IDP solutions as stand-alone product/solution for independent licensing to customers in the assessed country
- Offered as either an out-of-the-box solution with pre-built modules or as a custom solution based on client requirements
- Product designed and deployed by the vendor on-premises or in the cloud
- Ability to offer detailed document analytics for business decision-making, consolidated and secure document gateways, and robust audit and compliance trails
- Capable of offering out-of-the-box APIs, multi-tenancy and secure deployment of platform
- Ability to support integration with internal enterprise applications, existing IT infrastructure and third-party automation platforms
- Established or emerging partnerships with providers of complementary technologies such as conversational AI, RPA, process mining and business intelligence
- Offer vertical and/or function specific IDP solutions

- Referenceable case studies

*Note: Associated services include advisory, implementation and ongoing support for their IDP offering.

Process Discovery and Mining

This quadrant focuses on providers that offer proprietary software platforms, tools and associated services to help clients automatically discover, monitor and improve real-time processes from event logs and user interactions. One of the key reasons preventing companies from realizing return on investment (ROI) on automation is the poor identification of use cases and the inclination to automate processes as is. To gain the benefits of automation, processes must be assessed through multiple lenses with the help of process and task mining technologies. Process mining is the key to proving automation opportunities and benefits. Use of processing mining solutions is not only aimed at eliminating inefficiencies in business operations and paving the way for reduced cost, but also improving workforce productivity and enhancing customer experience.

Eligibility criteria:

- Offer process mining solution as stand-alone product or solution for independent licensing to customers in the assessed country
- Product designed and deployed by the vendor on-premises or in the cloud
- Capable of offering out-of-the-box APIs, multi-tenancy and secured deployment of platform
- Ability to support integration with various enterprise applications (for example, CRM system for customer data or ERP systems for finance), existing IT infrastructure and complementary technologies such conversational AI, IDP and RPA
- Ability to offer consulting on operating model design and ML models to enhance process design and efficiency
- Demonstrate capabilities in process and task mining, opportunity assessment for facilitating automation and strong advisory capabilities to help enterprises in internal buy-in and guide them through a process automation journey
- Offer industry best practice process templates
- Established or emerging partnerships with providers of complementary technologies such as conversational AI, RPA, IDP and business intelligence
- Referenceable case studies

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

Quadrants by Region

Quadrant	Global	U.S.	Germany	U.K.	Nordics	Brazil
Intelligent Business Automation	Overview	√	√	√	√	√
Artificial Intelligence for IT operations (AIOps)	Overview	√	√	√	√	√
Conversational AI	Overview	√	√	√	√	√
Intelligent Document Processing	Overview	√	√	√	√	√
Process Discovery and Mining	Overview	√	√	√	√	√

Schedule

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

Milestones	Beginning	End
Launch	12 th July 2021	12 th July 2021
Survey Phase	12 th July 2021	13 th August 2021
Sneak Preview	1 October 2021	1 November 2021
Press release	November 2021	

Please refer to the [link](#) to view/download the ISG Provider Lens™ 2021 research agenda:

Access to Online Portal

Your participation is just a click away. Please use our [IPL Portal](#) for submitting information. Use the credentials that you have already created. If you have not created them yet, please use your email ID as UserName and generate your individual password by clicking "forgot password" option.

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 the lead analysts.

Partial list of companies being invited for the survey

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

[24]7.ai	Axians	Concentrix
3StepIT	Birlasoft	Creative Virtual
ABBYY	BIS	CSG
Accenture	Biswise	CSS Corp
Accubits	Bitbot Studios	CX Company
Acodis	Bizagi	DATAGROUP
Active.Ai	Bizcon	Datamatics
ActiveBatch	Blue Prism	DXC
AeC	Boost.ai	Ebbot
Aivo	BusinessOptix	EdgeVerve
All for One Group	CANCOM	eGain
Almato	Capgemini	Enate
Alteryx	Capita	Ephesoft
Amelia (IPSoft)	Celaton	Ericsson
AntWorks	Celonis	Eudata
Appian	CGI Group	Everflow
Apromore	Clare.AI	Evolution AI
Artificial Solutions	ClearDATA	Exela Technologies
Arvato Systems	CloudFabrix	EXL
Aspire Systems	Cloudstorm	Fluxicon
Atos	COCUS	Front AI
Automation	Coforge	Fujitsu
Anywhere	Cognigy	GAVS
Avaamo	Cognizant	Genpact
AWS	Computacenter	German Autolabs

Google	LivePerson	Pypestream
GP Chat	Logpickr	qBotica
GuardX	LTI	Qlytics
HCL	Magnitude	QPR Software
Hexaware	MEHRWERK GmbH	Resolve.ai
Heyday AI	Microland	Rossum
Hypatos	Microsoft	Sainapse
Hyperscience	MindMeld (Cisco)	Savio
i3systems	Mindtree	Signavio (acquired by SAP)
IBM	Minit	Silo AI
Inbenta	MonkeyMining	Simplifai
Indico	Mphasis	Singularity Systems
Infinite Computer Solutions	myInvenio (acquired by IBM)	Skan
Infosys	NICE	Softtek
Infrd	Nividous	Software AG
Inovia AI	NTT DATA	SoftwareOne
Integris	Nuance	Sonata Software
Interfile (Atento)	OmniBot	Sopra Steria
ITyX	OneReach.ai	Soroco (SCOUT Enterprise)
JIFFY.ai	Openstream.ai	SortSpoke
Kanverse	Outreach	SPi Global
Kofax	PAFnow	Stefanini
Konica Minolta	Parascript	Sutherland
Kore.ai	Persistent	Syntax
Kryon	Personetics	TAIGER
Lana Labs	Procensol	Talkdesk
Live Objects (Orange)	Process Diamond	Tavant
Livejourney	Puzzel	Tech Mahindra

The Bot Forge

TietoEVERY

TIVIT

Turbotic

ubisend

UiPath

Ultimate.ai

UpFlux

UST

ValueLabs

Verint

Vidado (SS&C)

Virtusa

Voximplant

VuNet Systems

Vuram

Wipro

WorkFusion

Zensar

Zowie



ISG Star of Excellence Awards™ – Call for nominations

The Star of Excellence is an independent recognition of excellent service delivery based on the concept of “Voice of the Customer.” The Star of Excellence is a program, designed by ISG, to collect client feedback about service providers’ success in demonstrating the highest standards of client service excellence and customer centricity.

The global survey is all about services that are associated with IPL studies. In consequence, all ISG Analysts will be continuously provided with information on the customer experience of all relevant service providers. This information comes on top of existing first-hand advisor feedback that IPL leverages in context of its practitioner-led consulting approach.

Providers are invited to [nominate](#) their clients to participate. Once the nomination has been submitted, ISG sends out a mail confirmation to both sides. It is self-evident that ISG anonymizes all customer data and does not share it with third parties.

It is our vision that the Star of Excellence will be recognized as the leading industry recognition for client service excellence and serve as the benchmark for measuring client sentiments.

To ensure your selected clients complete the feedback for your nominated engagement please use the Client nomination section on the Star of Excellence [website](#).

We have set up an email where you can direct any questions or provide comments. This email will be checked daily, please allow up to 24 hours for a reply. Here is the email address: ISG.star@isg-one.com

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Do you need any further information?

If you have any questions, please do not hesitate to contact us at isglens@isg-one.com.