ISG Provider Lens™

Intelligent Automation – Platforms and Products

Evaluating the capabilities of platform providers, their go-to-market strategies and differentiators

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With recent dramatic advances in ML technologies, intelligent automation platforms and products have become increasingly important for the business transformation of enterprises of all sizes. Three key technologies dominate the enterprise landscape. *Conversational AI (ConAI) platforms* facilitate automated and human-like dialogs between firms and their customers or employees across a range of channels; *intelligent document processing* (IDP) involves the automated extraction and analysis of key information from business documents at scale; and *process discovery and mining* analyzes logs and/or user actions to identify key business processes within organizations and highlight areas for improved efficiency or automation.

Various market dynamics drive functional architecture design, including intelligent capabilities and human augmentation to amplify performance. Introducing emerging technologies has made human-machine augmentation more seamless than ever, even for complex activities. The performance component has expanded at speed and

QUADRANTS

Conversational AI Platforms (ConAI)

Intelligent Document Processing (IDP)

Process Discovery and Mining (PD&M)

AREAS COVERED

Communication Management
(Verticalized solutions – Function – Tools)

Interactions (Voice - Text)	**Experience** (CX and EX Engagements - Enhancements)

Information Management
(Capture - Classify - Curate - Create)

Rule-based (Structured)	**ML-based** (Unstructured & Dynamic)

Business and Technology Process Engineering

Extrinsic Action driven (Discovery) Computer Vision & OCR	**System Intrinsic** Data-driven (Mining) Data Analytics

Language Generators
(Text - Voice)

Code Generators
(Programs - Scripts)

Visual Generators
(Video - Image)

Generative AI
Foundational Techniques and Pre-curated LLMs

CAPABILITY & FUNCTIONALITY

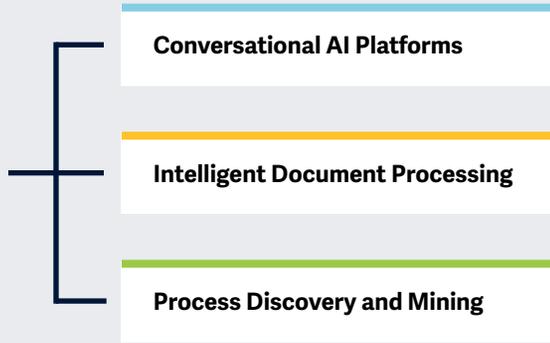*Intelligent Automation Platforms and Products Blueprint*

incorporates efficiency, experience and economics—directly impacting all value chain stakeholders. Independent software vendor (ISV) markets are evolving with platforms that connect and integrate solutions, capabilities and products to develop focused offerings for an industry, persona and function. ISVs are rapidly converting solutions to platforms to deliver customized industry-specific solutions. They are also focusing on conversational AI, IDP and process discovery and mining to navigate the deeper contexts of process and task attributes.

With the advent of generative AI, the conversational AI space is bound to see disruption. Rapid advances in large language models (LLMs) have burgeoned generative AI's capabilities to create multimodal content, including texts, images, graphics and codes in the intelligent automation space. Generative AI is part of every conversation, but providers are yet to develop scalable enterprise-grade solutions that focus on specific business use cases and that can handle enterprise data securely and safely.

IDP's scope is expanding to cover various complex files, and many new possibilities regarding noise reduction, document regeneration and text conditioning are yet to be explored. Process discovery and mining are still being segmented, but the overall value is enhanced when user actions and logs are considered together.

The primary **capabilities** to **automate conversations, processes, tasks, and documents** are covered in the three quadrants.

Simplified Illustration Source: ISG 2023

Conversational AI Platforms

Intelligent Document Processing

Process Discovery and Mining

The ISG Provider Lens™ Intelligent Automation Platforms and Products study offers the following to business and IT decision-makers:

- Transparency on the strengths and weaknesses of relevant providers.
- A differentiated positioning of providers by segments on their competitive strengths and portfolio attractiveness.
- Focus on different markets, including the U.S. and Europe.

For providers, our study serves as an important decision-making basis for positioning, key relationships, and go-to-market considerations.

ISG advisors and their enterprise clients also use information from these reports to evaluate their current vendor relationships and potential engagements.

Conversational AI Platforms

Definition

This quadrant assesses providers that offer conversational AI solutions for enterprises. These solutions integrate with chat interfaces such as messaging 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 can automate standard responses and keyword searches from a database. They use NLP and ML technologies for sentiment analysis, i.e., to understand the 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, through virtual assistants, help employees interact with their digital workplaces. In an external customer-facing environment, conversational AI provides customer support and marketing initiatives through chatbots and voice assistants. Generative AI, in the form of text, image and code generation, is potentially relevant to every level of customer touchpoint. When merged with conversational AI assistants, the infused learning component of generative AI masters the human language without additional training. Software applications integrate with LLMs via an API. Voice synthesis, impersonation of voices, text generation and summarization are a few generative AI capabilities offered by conversational AI vendors. The use cases for generative AI-infused chatbots span omnichannel marketing, content management and customer lifecycle management.

Eligibility Criteria

1. **Multienvironment deployment capabilities:** Solutions designed and deployed by the vendor on-premises or on the cloud. Provide virtual assistants for both text and audio modes

2. **Offer solutions in the following formats:** User self-service to create virtual assistants with the requisite coding skills, or as a solution where the vendor or its partners offer consulting service to an enterprise to customize the final product

3. **NLP capabilities:** Solutions that have proprietary NLP capabilities or support third-party NLP

4. **Standalone products or solutions:** Solutions must be available for purchase or use on a standalone basis and not be tied to a wider managed service offering

5. **Generative AI capabilities:** Providers should demonstrate a clear strategy toward generative AI, a future roadmap and evidence of beta versions or R&D investments in this space

Intelligent Document Processing

Definition

This quadrant focuses on providers that offer proprietary software products or solutions for the automated discovery, analysis and processing of documents across an organization. Going beyond traditional optical character recognition (OCR), IDP software uses AI technologies such as NLP, ML, computer vision and deep learning to filter and analyze large volumes of structured and unstructured data from multiple formats, such as email, PDFs, Excel, Word documents 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.

Generative AI can fine-tune IDP capabilities, especially for unstructured datasets and complex documents. Image and video generators are trained on multimodal data sets to generate content through user prompts. The texts extracted by OCRs from images aid in training LLMs. Integrating generative

AI capabilities with IDP solutions can simplify search, analysis and document enhancement using text, image and code generation. Such IDP solutions enable companies to reduce costs, increase workforce productivity, improve accuracy, ensure compliance and enhance customer satisfaction.

IDP technologies are being increasingly integrated with other emerging AI and automation technologies, with IDP providers forging emerging partnerships with providers of complementary technologies such as conversational AI, RPA, IDP and business intelligence.

Eligibility Criteria

1. **Standalone products/solutions:** Standalone products/solutions for independent licensing to customers, either on-premises or on the cloud

2. **Design and development of product/solutions:** An out-of-the-box solution with pre-built modules or as a custom solution based on client requirements

3. **Advanced analytics:** Must offer detailed document analytics, consolidated and secure document gateways and robust audit and compliance trails

4. **Customization:** Out-of-the-box APIs, multitenancy and secure deployment of platforms

5. **Demonstrate comprehensive integration capabilities:** With internal enterprise applications, existing IT infrastructure and third-party automation platforms

6. **Generative AI capabilities:** Must demonstrate a clear strategy toward generative AI, a future roadmap and evidence of beta versions or R&D investments in this space

Process Discovery and Mining

Definition

This quadrant focuses on providers offering proprietary software platforms, tools and associated services to help clients automatically discover, monitor and improve real-time processes from event logs (usually called process discovery) and user actions to carry out specific tasks (referred to as task mining). One of the key reasons preventing companies from realizing 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 by enterprises or their providers through multiple lenses with the help of process discovery and task mining technologies. Process discovery is the key to providing automation opportunities and benefits. Generative AI in the form of text, image and code generation augments process mining capabilities by allowing natural language prompts to extract process mining insights. The use of process mining solutions is aimed at not only eliminating inefficiencies in business operations and paving the way for reduced costs but also improving workforce productivity and enhancing CX.

However, use cases for process discovery and mining (PDM) now extend far beyond simply identifying candidates for automation. PDM is now being used to help enterprises better understand variation in work processes, provide guidelines for digital transformation, and help with business-process engineering and standardization. Related to this, there is much greater use of predictive analytics, for example, to model complex processes and simulate the impact of key process or business changes.

Eligibility Criteria

1. **Standalone products/solutions:** Offers either process discovery or task mining solutions, or both, as standalone products or solutions for independent licensing to customers in the assessed regions

2. **Multienvironment deployment capabilities:** On-premises or on the cloud

3. **Automation opportunity assessment capabilities:** Demonstrate capabilities in opportunity assessment for facilitating automation and strong advisory capabilities

4. **Customization:** Out-of-the-box APIs, multitenancy and secure deployment of platforms

5. **Demonstrate comprehensive integration capabilities:** With internal enterprise applications, existing IT infrastructure and third-party automation platforms

6. **Generative AI capabilities:** Providers should demonstrate a clear strategy toward generative AI, a future roadmap, and evidence of beta versions or R&D investments in this space

Quadrants by Region

As a part of this ISG Provider Lens™ quadrant study, we are covering the following three quadrants on Intelligent Automation Platforms and Products 2023 – across U.S. and Europe.

Quadrant	U.S.	Europe
Conversational AI Platforms	✔	✔
Intelligent Document Processing	✔	✔
Process Discovery and Mining	✔	✔

The research phase falls in the period between July and August 2023, during which survey, evaluation, analysis and validation will take place. The results will be presented to the media in November 2023.

Milestones	Beginning	End
Survey Launch	July 3, 2023	
Survey Phase	July 3, 2023	August 4, 2023
Sneak Preview	October 2023	
Press Release & Publication	November 2023	

Please refer to the link to view/download the ISG Provider Lens™ 2023 research agenda.

Access to Online Portal

You can view/download the questionnaire from here 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!

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 the work identified by 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 produce ISG Provider Lens™ reports. These decisions will be made based on the level and completeness of the 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.

Client Feedback Nominations

ISG Star of Excellence™ – 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

ISG Star of Excellence

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ISG Provider Lens™ Advisors Involvement Program

ISG Provider Lens offers market assessments incorporating practitioner insights, reflecting regional focus and independent research. ISG ensures advisor involvement in each study to cover the appropriate market details aligned to the respective service lines/technology trends, service provider presence and enterprise context.

In each region, ISG has expert thought leaders and respected advisors who know the provider portfolios and offerings as well as enterprise requirements and market trends. On average, three consultant advisors participate as part of each study's quality and consistency review process.

The consultant advisors ensure each study reflects ISG advisors' experience in the field, which complements the primary and secondary research the analysts conduct. ISG advisors participate in each study as part of the consultant advisors' group and contribute at different levels depending on their availability and expertise.

The consultant advisors:

- Help define and validate quadrants and questionnaires,

- Advise on service provider inclusion, participate in briefing calls,

- Give their perspectives on service provider ratings and review report drafts.

ISG Advisors to this study

Wayne Butterfield

Partner, ISG Automation

Jeff Augustin

Partner, ISG Automation

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Partner, ISG Automation

If your company is listed on this page or you feel your company should be listed, please contact ISG to ensure we have the correct contact person(s) to actively participate in this research.

* Rated in previous iteration

[24]7.ai*	AutomationEdge*	Druid*	IBM*
ABBYY*	Avaamo*	EdgeVerve	Inbenta*
Acodis*	AWS*	eGain*	Indico*
Acuvate*	BIS (Grooper)*	Engati	Infinia ML
Aisera	Boost.ai*	Ephesoft*	Infrrd*
Aivo*	Botminds AI*	Epiance*	ITyX*
Alkymi	BusinessOptix*	Fluxicon	JobRouter*
Amelia*	Celaton*	FortressIQ*	Kanverse.ai*
AntWorks*	Celonis*	Fosfor*	Klippa
Appian*	codemantra	Google Dialogflow*	KnowledgeLake
Apromore*	Cognigy*	HCLTech Software*	Kofax Insight*
Artificial Solutions*	Cortical.io*	Hyland*	Kofax*
Auto Labs*	Creative Virtual*	Hypatos*	Konica Minolta*
Automation Anywhere*	Datamatics*	Hyperscience*	Kore.ai*
Automation Hero	DocVu.AI	i3systems*	Livejourney*

Invited Companies

If your company is listed on this page or you feel your company should be listed, please contact ISG to ensure we have the correct contact person(s) to actively participate in this research.

* Rated in previous iteration

LivePerson*	Pegasystems	StereoLOGIC*
Logpickr (iGrafx)*	Pypestream*	Straive*
Mavim	qBotica*	UiPath*
MEHRWERK*	QPR Software*	Uniphore
Microsoft*	Rasa	UST SmartOps*
Minit*	Rezolve.ai*	Visualyze.AI*
Nanonets*	Ripcord	WorkFusion*
Nintex*	Rossum*	Worksoft*
Nividous*	SAP Signavio*	Yellow.ai
Omilia*	Senseforth.ai*	
OneReach.ai*	Sinch Chatlayer*	
Openstream*	Singularity Systems*	
OpenText*	Software AG*	
PAFnow*	Soroco*	
Parascript*	Sprinklr	

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™

ISG Research™ provides subscription research, advisory consulting and executive event services focused on market trends and disruptive technologies driving change in business computing. ISG Research™ delivers guidance that helps businesses accelerate growth and create more value.

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Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,600 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 isg-one.com.

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