

***ISG** Provider Lens™

Intelligent Automation – Solutions & Services

Process Discovery and Mining

U.S. 2021

Quadrant
Report



A research report
comparing provider
strengths, challenges
and competitive
differentiators

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December 2021

About this Report

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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 September 2021, 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.

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ISG Provider Lens™ delivers leading-edge and actionable research studies, reports and consulting services focused on technology and service providers' strengths and weaknesses and how they are positioned relative to their peers in the market. These reports provide influential insights accessed by our large pool of advisors who are actively advising outsourcing deals as well as large numbers of ISG enterprise clients who are potential outsourcers.

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EXECUTIVE SUMMARY

According to the Q3 2021 ISG Index™ report, the global market for technology and business services grew at its fastest pace ever in the third quarter, propelled by surging demand for cloud computing and other digital capabilities. The Americas region grew strongly across the board in the third quarter, both versus the previous year and quarter over quarter, and set annual contract value (ACV) records in all segments. Combined ACV from managed services and as-a-service contracts increased by 37 percent to 11.6 billion, its highest level ever, and the first time the region has surpassed \$10 billion in a quarter. As-a-service ACV increased by 51 percent when compared to the last year, to a record \$6.9 billion, the fastest growth rate for this segment since ISG began tracking it in 2014. Within as-a-service, IaaS increased by 53 percent, to reach \$4.6 billion, and SaaS increased by 48 percent, to reach \$2.4 billion. Managed services increased by 21 percent, to reach \$4.7 billion. Within managed services, ITO increased by 26 percent, to reach \$3.4 billion, and BPO was up by 9 percent, to reach \$1.3 billion.

The COVID-19 pandemic has driven digital transformation initiatives. While large digital programs may be still on hold, automation and other initiatives that can bring immediate benefits are in great demand. ISG, as an advisor that has helped several of the world's leading enterprises navigate their intelligent automation journeys, sees broad-based market support for technology services, including intelligent automation, as enterprises accelerate digital investments coming out of the pandemic. Despite disruptions due to COVID-19, the majority of intelligent automation solutions and services providers reported an average 19 percent annual growth in their top line during FY2020-2021 and expect a minimum of 20 percent growth in FY2022.

The ISG Provider Lens report for Intelligent Automation this year compares service providers and technology vendors for their solutions and services during these difficult times, and positions them based on their current portfolios and outlook. This comparison has been done across five quadrants — Intelligent Business Automation, Artificial Intelligence for IT Operations (AIOps), Conversational AI, Intelligent Document Processing (IDP), and Process Discovery and Mining — that represent the services and products that typical enterprise clients are acquiring in the intelligent automation space.

The world of technology is moving at a rapid pace, and it is difficult to know which emerging technologies to rely on. These five intelligent automation capabilities will help businesses build the proper foundation to make sure their processes help instead of hinder future business planning. These technologies are already becoming a reality in some leading organizations and will become the norm by 2025. Getting on board early will accelerate existing automation efforts and pave the way for a future autonomous enterprise.

Intelligent Business Automation

The market in North America, the U.S. in particular, is the largest in intelligent business process automation solutions and services adoption and has reached a certain maturity of a higher level compared to other geographies with the increase in engagements over the years. Large enterprises in the U.S. are more transformation focused and are increasingly leveraging new-age technologies to accelerate their digital transformation journeys, at scale. However, both small and midsize businesses are gradually making headway with

intelligent automation adoption as more companies are keen to accelerate their digital transformation journeys. From an industry perspective, banking, financial services and insurance (BFSI) is at the forefront for adopting intelligent business automation solutions and services, followed by healthcare and pharmaceutical, retail and telecom.

A collection of automated process discovery technologies is starting to make waves by helping enterprises understand processes in a new perspective. Although not focused solely on automation opportunities, these technologies will provide process-related insight not gained by any other means. Process mining, task mining and the up-and-coming conversation mining are all tools that can improve process discovery and improvement initiatives.

Furthermore, many organizations have not received the return they expected from automation. This is often because the processes are not monitored over a long enough period and are not understood well enough. Process intelligence can add data and intelligence layers to improve the way enterprises monitor the ongoing health of their processes. As workplaces become increasingly hybridized with on-site and remote workers, monitoring processes and staff will become crucial. Process intelligence will gain information and knowledge out of staffing needs, budgeting, SLA projections and more, even when processes are still being completed by people. Intelligent automation will penetrate an organization only so far, at least with the way current processes are designed. Unless enterprises plan on transforming every process in the business to be suitable for automation, process intelligence will become a necessity.

AIOps

With accelerated digital transformation initiatives across businesses as a result the COVID-19 pandemic and the growing convergence of many technologies such as AI, machine learning, big data and analytics, the Americas market has seen an increase in IT spending, as documented above.

ISG sees that commoditization of open-source technologies has lowered the barrier to entry for global system integrators (GSI) in this space, providing many options for data acquisition, storage and visualization tools. The development of domain-agnostic AIOps platforms has been a priority. In the last two to three years, we see that majority of the GSIs, specifically the midsize IT service providers, have invested heavily in specific business units to develop an AI-led IT operation platforms, frameworks and various accelerators to address the needs of enterprises, from complex traditional IT landscape optimization perspective.

We believe the U.S. market to be more mature and have the largest share in the global AIOps market when compared to other regions due to its technologically advanced economy. The AIOps market is expected to grow substantially in the U.S. over the next two to five years. Major factors fueling the AIOps growth in the U.S. are increasing infrastructure complexity and scale with growing data volume, increasing awareness and adoption of AI-based IT solutions, and a structural shift to more cloud adoption and digital transformation coming out of the pandemic. Organizations in the banking and financial services industry are the frontrunners in terms of AIOps adoption and are heavily focused on cybersecurity compliance requirements.

Conversational AI

Conversational AI solutions such as chatbots, virtual agents and voice assistants have become extremely popular over the last few years, especially in the previous year, with accelerated adoption due to COVID-19. The key factor favoring the growth of the market is increasing demand for enhancing the customer support service to strengthen customer retention initiatives. North America accounts for the largest market share of the global conversational AI market in terms of adoption, followed by APAC and Europe. North America has seen rapid technological advancements and is home to several vendors that lead the substantial conversational AI market. Furthermore, increasing governments' investments in AI-based technologies are also responsible for fueling the growth of the conversational AI market in North America. BFSI, healthcare, e-commerce, retail and telecom are some of the key sectors witnessing great demand for conversational AI.

Leading players in this space provide robust integration capabilities, extensive omnichannel access, explainable AI, affinity to low-code conversational AI for citizen developers, out-of-the-box, pre-trained, industry and domain-specific solutions, and support multiple languages. Voice is becoming an increasingly popular deployment model for new clients for supporting customers, and mobile apps are quickly gaining on web/chat apps. Persona-based chatbots and hyper personalization shall drive the next wave of adoption. Public cloud is the most prevalent hosting model, followed by private cloud and on-premises. Heavily regulated industries such as banking and healthcare prefer on-premises implementations. As the level of awareness about chatbots, virtual assistants and digital personal assistants and their benefits increases, and vendors make their solutions more powerful, comprehensive and amenable for wide-scale adoption, the market is expected to surge in the near future.

Intelligent Document Processing

COVID-19 has caused enterprises to rely more on intelligent document processing (IDP) solutions. With many employees working from their homes and having limited or no access to physical documents, digitization and IDP automation are becoming increasingly necessary now and for the future. IDP solutions are growing rapidly due to several factors, including the growing requirement for enterprises to streamline their processes by processing large volumes of documents with accuracy and speed, the increasing investments in digital transformation, and the expanding use of cloud-based document processing solutions.

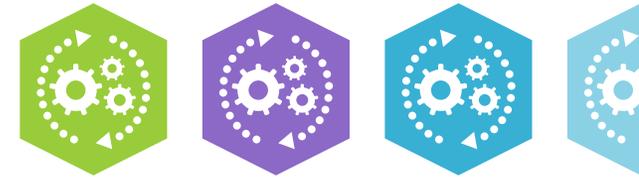
In terms of revenue contribution, North America continues to be the largest market for all major IDP software providers, followed by APAC and continental Europe. Companies in this region are progressive in the case of AI, NLP, machine learning and computer vision adoption, thus propelling the growth of the IDP market. While enterprises of all sizes are the leading users of IDP solutions in the U.S., adoption is growing fastest among small and midsize firms.

Furthermore, there is a shift from standard IDP solutions to pre-built solutions for specific industries and processes such as know your customer (KYC), claims processing and GDPR compliance, resulting in a faster time to value and shorter deployment time. IDP adoption is most prevalent in the banking, financial services, insurance and healthcare industries; however, the demand for intelligent document processing has increased outside such industries such as travel, logistics, telecom and manufacturing to derive actionable insights from unstructured documents. Government and other public sector organizations are also investing in IDP solutions to reduce manual work and improve efficiency and compliance.

Process Discovery and Mining

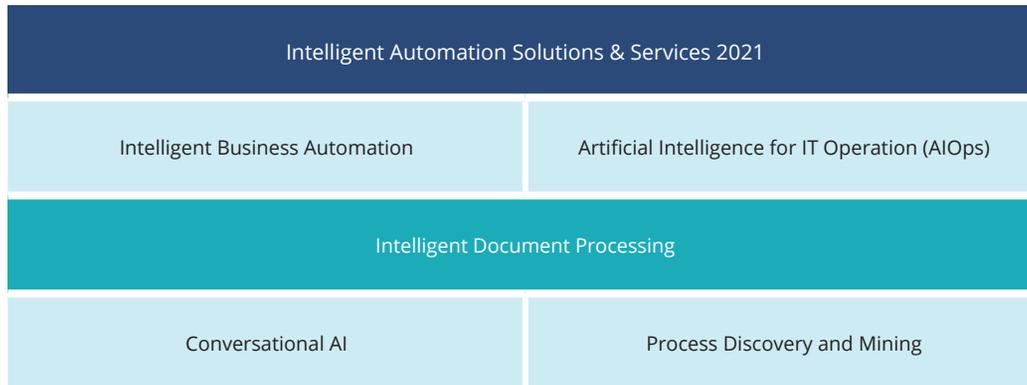
In light of the COVID-19 pandemic, it has become even more important to discover, monitor and optimize processes. As a vital and integral part of the intelligent automation ecosystem, process discovery and mining enable continuous process optimization, accelerating enterprise digital transformation. Over the past two years, the process discovery and mining market has grown at the fastest rates within the intelligent automation space. There have been many established software companies that have entered the market through acquisitions over the past few months, including SAP by acquiring Signavio, IBM through myInvenio, and Appian through Lana Labs. Process discovery and mining are also budget line items in enterprises of all sizes. 2021 marks the year that process discovery and mining “crosses the chasm” from the early adopter stage to the early majority stage.

Despite Europe being the leading market in terms of adoption of process discovery and mining, North America is witnessing the fastest year-over-year growth. It is likely that North America will have the highest adoption rate in one to two years compared to the other continents. Increasing awareness of process discovery and mining technologies is helping countries in this region to realize immense growth potential. The majority of process discovery and mining deployments are in the manufacturing, banking, financial services and insurance (BFSI) and healthcare industries.



Introduction

Simplified illustration



Source: ISG 2021

Definition

According to ISG Research, enterprises are improving their automation capabilities, but many are still in the early stages of their 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 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

Definition (cont.)

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 the following:

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

Scope of the Report

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

The quadrant descriptions are as follows:

Intelligent Business Automaton (IBA)

This quadrant analyzes providers of IT outsourcing or business process outsourcing (BPO) 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 involves 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 computer vision, machine learning, 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.

Definition (cont.)

Artificial Intelligence for IT Operations (AIOps)

This quadrant analyzes IT service providers that offer proprietary AIOps solutions, platforms and frameworks that enable companies with distributed IT infrastructure to gain 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 multi-cloud IT workloads 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 enterprise IT landscape. These are aimed at maximizing the performance of distributed, heterogeneous, multi-cloud IT workloads, reducing costs and ensuring compliance and security.

Conversational AI (ConAI)

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 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.

Definition (cont.)

Intelligent Document Processing (IDP)

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, machine learning, 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 maximize customer satisfaction.

Process Discovery and Mining (PD&M)

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 discovery and mining is the key to proving automation opportunities and benefits. The use of process discovery and 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.

Provider Classifications

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product & Market Challenger and Contender), and the providers are positioned accordingly.

Leader

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.

Product Challenger

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.

Market Challenger

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.

Contender

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 both products and services and a sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

Provider Classifications (cont.)

Each ISG Provider Lens™ quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star. Number of providers in each quadrant: ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).

Rising Star

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

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.

Intelligent Automation - Solutions & Services - Quadrant Provider Listing 1 of 8

	Intelligent Business Automation	Artificial Intelligence for IT Operation (AIOps)	Conversational AI	Intelligent Document Processing	Process Discovery and Mining
[24]7.ai	● Not in	● Not in	● Leader	● Not in	● Not in
ABBYY	● Not in	● Not in	● Not in	● Leader	● Not in
ABBYY Timeline	● Not in	● Not in	● Not in	● Not in	● Leader
Accenture	● Leader	● Leader	● Not in	● Not in	● Not in
Acuvate	● Not in	● Not in	● Product Challenger	● Not in	● Not in
Aivo	● Not in	● Not in	● Contender	● Not in	● Not in
Amelia	● Not in	● Not in	● Leader	● Not in	● Not in
AntWorks	● Not in	● Not in	● Not in	● Leader	● Not in
Appian	● Not in	● Not in	● Not in	● Not in	● Product Challenger
Apromore	● Not in	● Not in	● Not in	● Not in	● Product Challenger
Artificial Solutions	● Not in	● Not in	● Leader	● Not in	● Not in
Atos	● Product Challenger	● Product Challenger	● Not in	● Not in	● Not in

Intelligent Automation - Solutions & Services - Quadrant Provider Listing 2 of 8

	Intelligent Business Automation	Artificial Intelligence for IT Operation (AIOps)	Conversational AI	Intelligent Document Processing	Process Discovery and Mining
Automation Anywhere	● Not in	● Not in	● Not in	● Leader	● Not in
Avaamo	● Not in	● Not in	● Market Challenger	● Not in	● Not in
AWS	● Not in	● Not in	● Product Challenger	● Not in	● Not in
Birlasoft	● Product Challenger	● Not in	● Not in	● Not in	● Not in
BIS (Grooper)	● Not in	● Not in	● Not in	● Market Challenger	● Not in
BusinessOptix	● Not in	● Not in	● Not in	● Not in	● Contender
Capgemini	● Leader	● Leader	● Not in	● Not in	● Not in
Celonis	● Not in	● Not in	● Not in	● Not in	● Leader
Cognigy	● Not in	● Not in	● Leader	● Not in	● Not in
Cognizant	● Leader	● Leader	● Not in	● Not in	● Not in
Creative Virtual	● Not in	● Not in	● Leader	● Not in	● Not in
CSS Corp	● Contender	● Contender	● Not in	● Not in	● Not in

Intelligent Automation - Solutions & Services - Quadrant Provider Listing 3 of 8

	Intelligent Business Automation	Artificial Intelligence for IT Operation (AIOps)	Conversational AI	Intelligent Document Processing	Process Discovery and Mining
Datamatics	● Product Challenger	● Not in	● Not in	● Rising Star	● Not in
Druid	● Not in	● Not in	● Product Challenger	● Not in	● Not in
DXC	● Product Challenger	● Product Challenger	● Not in	● Not in	● Not in
eGain	● Not in	● Not in	● Contender	● Not in	● Not in
Epiance	● Not in	● Not in	● Not in	● Not in	● Product Challenger
Everflow	● Not in	● Not in	● Not in	● Not in	● Contender
Exela	● Contender	● Not in	● Not in	● Not in	● Not in
EXL	● Product Challenger	● Not in	● Not in	● Not in	● Not in
FortressIQ	● Not in	● Not in	● Not in	● Not in	● Rising Star
Fujitsu	● Market Challenger	● Market Challenger	● Not in	● Not in	● Not in
GAVS	● Not in	● Contender	● Not in	● Not in	● Not in
Genpact	● Leader	● Not in	● Not in	● Not in	● Not in

Intelligent Automation - Solutions & Services - Quadrant Provider Listing 4 of 8

	Intelligent Business Automation	Artificial Intelligence for IT Operation (AIOps)	Conversational AI	Intelligent Document Processing	Process Discovery and Mining
Google	● Not in	● Not in	● Product Challenger	● Not in	● Not in
HCL	● Leader	● Leader	● Not in	● Product Challenger	● Not in
Hexaware	● Rising Star	● Rising Star	● Not in	● Not in	● Not in
Hyperscience	● Not in	● Not in	● Not in	● Product Challenger	● Not in
i3systems	● Not in	● Not in	● Not in	● Contender	● Not in
IBM	● Leader	● Leader	● Product Challenger	● Not in	● Not in
IBM myInvenio	● Not in	● Not in	● Not in	● Not in	● Product Challenger
Inbenta	● Not in	● Not in	● Contender	● Not in	● Not in
Infosys	● Leader	● Leader	● Not in	● Not in	● Not in
Infrd	● Not in	● Not in	● Not in	● Leader	● Not in
ITyX	● Not in	● Not in	● Not in	● Contender	● Not in
Kanverse	● Not in	● Not in	● Not in	● Contender	● Not in

Intelligent Automation - Solutions & Services - Quadrant Provider Listing 5 of 8

	Intelligent Business Automation	Artificial Intelligence for IT Operation (AIOps)	Conversational AI	Intelligent Document Processing	Process Discovery and Mining
Kofax	● Not in	● Not in	● Not in	● Leader	● Not in
Kore.ai	● Not in	● Not in	● Leader	● Not in	● Not in
Kryon	● Not in	● Not in	● Not in	● Not in	● Product Challenger
Livejourney	● Not in	● Not in	● Not in	● Not in	● Product Challenger
LivePerson	● Not in	● Not in	● Product Challenger	● Not in	● Not in
Logpickr	● Not in	● Not in	● Not in	● Not in	● Contender
LTI	● Product Challenger	● Leader	● Not in	● Not in	● Not in
LTI Fosfor	● Not in	● Not in	● Not in	● Product Challenger	● Not in
Microland	● Not in	● Product Challenger	● Not in	● Not in	● Not in
Microsoft	● Not in	● Not in	● Leader	● Not in	● Not in
Mindtree	● Not in	● Product Challenger	● Not in	● Not in	● Not in
Minit	● Not in	● Not in	● Not in	● Not in	● Leader

Intelligent Automation - Solutions & Services - Quadrant Provider Listing 6 of 8

	Intelligent Business Automation	Artificial Intelligence for IT Operation (AIOps)	Conversational AI	Intelligent Document Processing	Process Discovery and Mining
Mphasis	● Product Challenger	● Product Challenger	● Not in	● Not in	● Not in
Nividous	● Not in	● Not in	● Not in	● Product Challenger	● Not in
NTT DATA	● Market Challenger	● Market Challenger	● Not in	● Not in	● Not in
OneReach.ai	● Not in	● Not in	● Product Challenger	● Not in	● Not in
Openstream	● Not in	● Not in	● Product Challenger	● Not in	● Not in
PAFnow	● Not in	● Not in	● Not in	● Not in	● Product Challenger
Parascript	● Not in	● Not in	● Not in	● Leader	● Not in
Persistent	● Product Challenger	● Not in	● Not in	● Not in	● Not in
Pypestream	● Not in	● Not in	● Rising Star	● Not in	● Not in
qBotica	● Not in	● Not in	● Not in	● Contender	● Not in
Resolve.ai	● Not in	● Not in	● Product Challenger	● Not in	● Not in
Rossum	● Not in	● Not in	● Not in	● Product Challenger	● Not in

Intelligent Automation - Solutions & Services - Quadrant Provider Listing 7 of 8

	Intelligent Business Automation	Artificial Intelligence for IT Operation (AIOps)	Conversational AI	Intelligent Document Processing	Process Discovery and Mining
SAP Signavio	● Not in	● Not in	● Not in	● Not in	● Leader
Senseforth.ai	● Not in	● Not in	● Product Challenger	● Not in	● Not in
Sinch Chatlayer	● Not in	● Not in	● Product Challenger	● Not in	● Not in
Singularity Systems	● Not in	● Not in	● Not in	● Product Challenger	● Not in
Softtek	● Product Challenger	● Not in	● Not in	● Not in	● Not in
Software AG	● Not in	● Not in	● Not in	● Not in	● Leader
Sonata Software	● Contender	● Contender	● Not in	● Not in	● Not in
Soroco	● Not in	● Not in	● Not in	● Not in	● Product Challenger
Straive	● Not in	● Not in	● Not in	● Contender	● Not in
Sutherland	● Product Challenger	● Not in	● Not in	● Not in	● Not in
TCS	● Leader	● Leader	● Not in	● Not in	● Not in
Tech Mahindra	● Product Challenger	● Product Challenger	● Not in	● Not in	● Not in

Intelligent Automation - Solutions & Services - Quadrant Provider Listing 8 of 8

	Intelligent Business Automation	Artificial Intelligence for IT Operation (AIOps)	Conversational AI	Intelligent Document Processing	Process Discovery and Mining
UiPath	● Not in	● Not in	● Not in	● Leader	● Leader
UpFlux	● Not in	● Not in	● Not in	● Not in	● Product Challenger
UST	● Product Challenger	● Contender	● Not in	● Not in	● Not in
UST SmartOps	● Not in	● Not in	● Not in	● Product Challenger	● Not in
Visualyze.AI	● Not in	● Not in	● Not in	● Contender	● Not in
Wipro	● Leader	● Leader	● Not in	● Not in	● Not in
WNS	● Leader	● Not in	● Not in	● Not in	● Not in
WorkFusion	● Not in	● Not in	● Not in	● Leader	● Not in
Zensar	● Not in	● Contender	● Not in	● Not in	● Not in



Intelligent Automation – Solutions & Services Quadrants

ENTERPRISE CONTEXT

Process Discovery and Mining

The report is relevant to enterprises in the U.S. for evaluating process discovery and mining (PD&M) technology providers.

In this quadrant, ISG highlights the market positioning of PD&M platform providers in the U.S. and how each provider addresses the challenges faced by enterprises. Enterprises can use the report findings to understand the market dynamics and explore new capabilities with incumbent providers. The report can also help them evaluate new providers that can support their PD&M initiatives.

In response to the COVID-19 pandemic, enterprises have increased their technology investment, especially in intelligent automation solutions. Therefore, there is an increased demand for PD&M tools. However, enterprises are facing challenges associated with accessing correct and continuous data, siloed approach, and compliance and IT concerns in a remote work setup.

The U.S. market is witnessing the strongest growth for PD&M solutions as enterprises are looking to streamline business processes to achieve cost savings and enhance business efficiency. The market has transitioned to the early majority, with many enterprises having PD&M as an integral part of their intelligent automation offering. Enterprises in the U.S. are seeking providers that can offer end-to-end process view and intelligence, reduce time for process initiative, and ensure process compliance and security.

Providers are offering comprehensive technology platforms leveraging a combination of process mining, process discovery and task mining to visualize, design and optimize business processes. They are also offering domain-specific modules for quicker deployments and flexible commercial models for low-cost entry.

Who should read this report:

Line of business leaders (LOBs) should read this report to understand the relative positioning and capabilities of technology providers that can deliver PD&M solutions to with higher efficiency and effectiveness.

Digital transformation professionals should read this report to understand how providers of PD&M solutions fit in their digital transformation initiatives and how they compare with one another.

IT and technology leaders should read this report to understand how PD&M technology providers augment their offerings with complementary technologies such as intelligent document processing (IDP), robotic process automation (RPA), natural language processing (NLP), machine learning and business intelligence for end-to-end process automation.

Sourcing, procurement and vendor management professionals should read this report to have a better understanding of the current landscape of PD&M platform providers in the U.S and their suitability for RFPs.

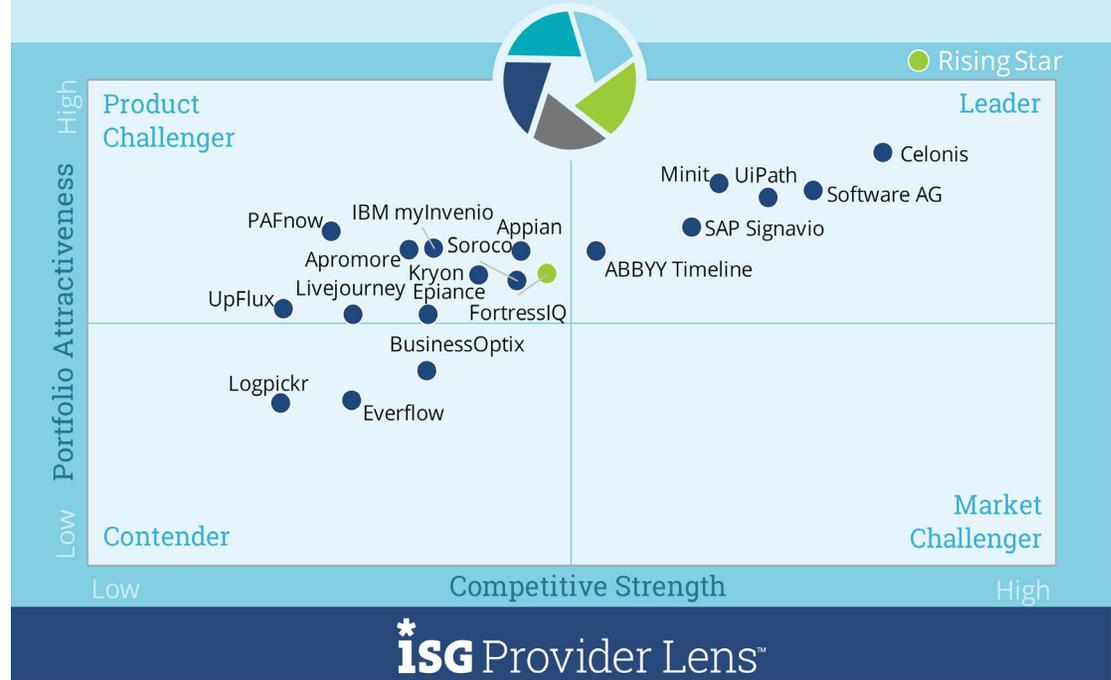
PROCESS DISCOVERY AND MINING

Definition

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 discovery and 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.

Intelligent Automation - Solutions & Services
Process Discovery and Mining

2021
U.S.



Source: ISG Research 2021

PROCESS DISCOVERY AND MINING

Eligibility Criteria

- Offer process discovery and 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 discovery and mining offering.

PROCESS DISCOVERY AND MINING

Observations

- **ABBYY Timeline** is one of the few platforms that provides both process and task mining capabilities natively, with both being well integrated. Task mining capabilities are provided as part of the Timeline platform at no extra charge.
- **Celonis**, the New York- and Munich-based player, is a leader because of its strong platform capabilities and success in the market. The company has more than tripled its customer RFPs over the previous year.
- **Minit** has been experiencing traction in process mining engagements from the U.S.-based customers. Its continuous investments in expanding its market presence and client portfolio help Minit gain a competitive edge in the U.S. process mining market.
- **SAP**, which acquired Signavio in 2021, has a significant market presence, comprehensive business process intelligence portfolio and strong R&D focus, which make it a leader in the process mining market in the U.S.
- **Software AG** has a strong presence in North America, serving several large enterprises customers through numerous offices across the region. The company is constantly investing in R&D to keep up with the enterprises' needs and to strengthen its leadership in the process mining industry.
- **UiPath** witnessed strong year-over-year growth in its process discovery and mining business in 2020. With its process discovery (UiPath Task Mining) and mining (UiPath Process Mining) platforms, the company strongly focuses on taking a holistic approach to automation, helping enterprises scale and accelerate automation journeys, and optimize processes.
- **FortressIQ** (Rising Star) has quickly become one of the eminent players in the process intelligence platform market and is a strategic partner to many of the U.S. Fortune 500 companies. Given the rapid growth in the process discovery and mining market, we expect FortressIQ to continue expanding its growth and influence in the U.S.

MINIT

Overview

Headquartered in Amsterdam, Minit is one of the leading providers of process mining solutions. Minit's research on process mining began in 2013, which led to the release of Minit Analyst 1.0 in 2015. The company operates globally with offices in New York, London, Amsterdam and Bratislava, Slovakia. Approximately 30 percent of its process mining revenue comes from North America. Global venture capital firms such as Salesforce Ventures, Earlybird Venture Capital, Target Global and OTB Venture support Minit.

Strengths

AI-powered root cause analysis: Minit's process mining solution consists of three critical elements: Connectors, Minit Analyst and Minit Dashboards. Minit Analyst is the backbone of its process mining solution, helping enterprises discover, monitor and improve business processes, based on data from IT event logs. Minit Analyst uses machine learning algorithms to uncover hidden connections in process data and investigate where and why problems occur. Clients have benefited significantly from its autonomous root cause analysis capability.

Risk-free model: Minit's process mining solutions enable enterprises to optimize operations without risk and to determine the impact of changes applied to processes or which optimization proposals are most effective before implementing. By utilizing its process simulation feature on an existing process and the custom set of variables affecting it, enterprises can see how changes translate into the process performance, map and statistics. This empowers clients to make an informed and risk-free decision.

Powerful customer references: Minit's process mining enterprise clients have appreciated its platform's intuitive design, agility and user friendliness. Clients also like the company's flexibility, openness to feedback, product training and preemptive customer support.

Caution

Although Minit has key partnerships with the best-of-breed RPA platform vendors, it does not offer a compelling value proposition to enterprises looking for a process mining platform integrated with complementary capabilities such as conversational AI. The company should consider either developing this in-house or form partnerships with third-party conversational AI solution providers.

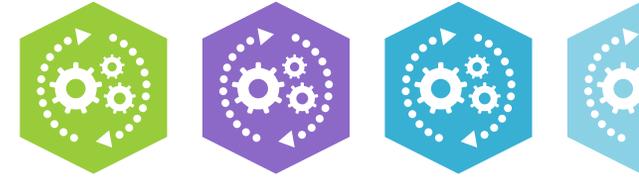


2021 ISG Provider Lens™ Leader

Minit is supported by rapid business growth and increasing presence in the U.S., a strengthening partner ecosystem, flexibility, its user-friendly process mining platform interface, and features such as AI-powered root cause and simulation analysis. This all makes Minit a leader in the process mining market in the U.S.



Methodology



METHODOLOGY

The research study “ISG Provider Lens™ 2021– Intelligent Automation – Solutions and Services” 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.

The study was divided into the following steps:

1. Definition of Intelligent Automation - Solutions and Services U.S. 2021 market.
2. Use of questionnaire-based surveys of service providers/vendor across all trend topics
3. Interactive discussions with service providers/vendors on capabilities and use cases
4. Use of ISG’s internal databases and advisor knowledge and experience (wherever applicable)
5. Detailed analysis and evaluation of services and service documentation based on the facts and figures received from providers and other sources.
6. Use of the following key evaluation criteria:
 - Strategy & vision
 - Innovation
 - Brand awareness and presence in the market
 - Sales and partner landscape
 - Breadth and depth of portfolio of services offered
 - Technology advancements

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