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Intelligent Automation – Solutions & Services

Process Discovery and Mining

U.K. 2021

Quadrant Report

Customized report courtesy of:

SO RO SO CO A research report comparing provider strengths, challenges and competitive differentiators

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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For more information about our studies, please email <u>ISGLens@isg-one.com</u>, call +49 (0) 561-50697537, or visit ISG Provider Lens[™] under <u>ISG Provider Lens</u>[™].



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ISG Provider Lens[™] Quadrant Report | December 2021 EXECUTIVE SUMMARY

Intelligent Automation–Solutions and Services 2021

Recent years have witnessed a revolution in the automation of products, services, IT functions, business processes, and consumer and employee interactions. This revolution is aptly called intelligent automation, because it is based on algorithmic technologies that can replicate aspects of human cognition such as pattern detection, context awareness, adaptability, language understanding, decision-making and action. It draws on a vast range of technologies, principally machine learning and deep learning, but also general AI, computer vision, voice recognition, natural language processing (NLP), Internet of Things devices and sensors and robotic process automation (RPA) to name a few. Intelligent automation is now being applied to areas of business, consumer and employee life never dreamt possible a few years ago—from data-intensive processes such as invoicing and export compliance to managing healthcare records to applying for a mortgage or loan extension.

The COVID-19 pandemic that began in early 2020 has proved to be a watershed moment for the use of intelligent automation in business and industry. Faced with a surge in online working and consumption, many organisations turned to intelligent automation solutions to automate processes such as employee and customer interactions. In doing so organisations have taken a step back and begun to see the potential for completely new ways of working, producing and consuming, all underpinned by intelligent automation technologies.

But challenges abound too. Many organisations, especially small and medium sized enterprises, are new to the world of intelligent automation and face a dizzying array of different solutions, technologies and providers. For some, their views of intelligent automation have been tainted by previous automation experiences that fizzled out, or that disappointed in terms of the results delivered. For large enterprises, many of whom will have adopted some elements of intelligent automation across their organisations, the challenges are legion: moving from piecemeal automation to streamline end-to-end processes, bringing governance to sprawling automation initiatives across different functions and organisational silos, discovering and assessing the right opportunities for process automation, imbuing the workforce with the right skills for human-machine collaboration, and instituting effective change management approaches, to name but a few.

ISG has observed the following trends in the global intelligent business automation space:

Move to hyper-automation: Previous automation initiatives were often episodic, focussed on discrete processes or business problems, and often disconnected from wider process flows and parts of the organisation. Business impact was often minimal. Today enterprises are increasingly looking for hyper-automation, holistic automation solutions that address the complete lifecycle of automation across the organisation, from process discovery and architecture, roadmap creation, robotic process automation, to operating model change and skills for human-machine collaboration. Hyper-automation doesn't take existing processes as given, but considers the opportunities to completely reimagine organisational processes, operating models, and ways of working for improved business outcomes.

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The low-code/citizen developer revolution: A recurring theme in our conversations with providers was the growing importance of the low-code automation and citizen development movement, which enables workers or consumers with few AI skills of their own to develop their own AI-based automation solutions, or variations on existing ones, through "drag-and-drop methods, minimal code changes, or access to libraries of existing user cases, data, and code. Providers are investing in low-code capabilities for several reasons, partly to address the scarcity of "high-code" AI talent, but also as a means to empower the workforce to innovate around existing processes and tailor their own solutions to business challenges.

Acceleration to cloud-based services: With the spread of intelligent automation to the midsized and small enterprise market, there is a growing need for low-cost entry models that simplify the use of automation solutions by enterprises. Of particular importance is the growth of cloud-based, software-as-a-service (SaaS) automation. A growing number of providers are now providing SaaS-style automation offerings—in process mining, conversational AI, or intelligent document processing—on a consumption basis and moving away from previous subscription models.

Plug and play: as part of the simplification and spread of AI-powered intelligent automation, ISG sees a growing use of plug-and-play or out-of-the-box solutions designed to accelerate the adoption of intelligent automation and bring an early return on investment to enterprises. In conversational AI we see increasing use of pre-trained "skills" or "agent personas" tailored to particular uses, as well as extensive use of libraries of reusable assets and databases. One-shot or low-shot AI is also increasingly common—machine-learning solutions that are designed to discover or automate processes with minimal training. **Wanted: new AI skills:** Intelligent automation means new skills and roles for humans. With the growing use of AI-powered automation, human workers will need new ways to interact with and collaborate with machines, whether using low-code techniques to create a business template on the fly, or training a digital colleague to interact with customers. Completely new roles are and will be needed, for example conversational designers in the world of conversational AI.

The ISG Provider Lens report for Intelligent Automation this year compares service providers on their proprietary solutions and services and positions them based on their portfolios and future outlook. This comparison has been done across five quadrants — Intelligent Business Automation, AIOps, Conversational AI, Intelligent Document Processing, and Process Discovery and Mining.

Disclaimer: ISG Automation is a sister division to ISG Research and therefore we have purposely selected quadrants and eligibility criteria that would exclude ISG Automation from being evaluated in order to avoid any appearance of a conflict of interest.

UK Market Overview

Process Discovery and Mining

Enterprises can only effectively automate processes that they can identify and understand. In the past many efforts to automate processes in organisations foundered because they did not fully understand how processes worked in practice, or because they adopted piecemeal automation solutions that failed to appreciate wider process flows and inter-dependencies across organisational processes. This is now changing through

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Executive Summary

advances in process discovery and mining. Task mining drills down into the user actions, either through bots on the desktop or via computer vision cameras. The advantage of task mining is that it can capture the full set of actions that constitute a process, even those that may non-standard or informal (e.g., use of an excel spreadsheet, or emails, to manage exceptions). Process discovery and mining technologies are now being used by many enterprises within the UK, both public and private, either as part of a managed service automation offering or as a standalone solution.





Introduction

	Simplified illustration
Intelligent Automation Solutions & Services 2021	
Intelligent Business Automation	Artificial Intelligence for IT Operation (AlOps)
Intelligent Document Processing	
Conversational Al	Process Discovery and Mining

Source: ISG 2021

Definition

According to ISG Research, enterprises are improving their automation capabilities, but many are still in the early stages of the automation journeys. Only a small proportion 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.



Definition (cont.)

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 Al. Enterprise clients worldwide are focussing on building intelligent automation capabilities into their RPA initiatives, with the growing need to stay pace 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.

Scope of the Report

The ISG Provider Lens[™] study offers IT and business decision makers:

- A differentiated positioning of providers/vendors based on competitive strengths and portfolio attractive-ness
- A perspective on the UK market for intelligent automation services and solutions

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.

For this reason, ISG's report on intelligent automation is composed of multiple quadrants covering the spectrum of solutions and services that an enterprise client requires.

The quadrants descriptions are as follows:

Process Discovery and Mining: This quadrant evaluates 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.

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Provider Classifications

The provider position reflects the suitability of IT providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the IT service requirements from enterprise customers differ and the spectrum of IT providers operating in the local market is sufficiently wide, a further differentiation of the IT providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions IT providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

- Midmarket: Companies with 100 to 4,999 employees or revenues between US\$20 million and US\$999 million with central headquarters in the respective country, usually privately owned.
- Large Accounts: Multinational companies with more than 5,000 employees or revenue above US\$1 billion, with activities worldwide and globally distributed decision-making structures.



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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^M 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 aboveaverage 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.

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Intelligent Automation – Solutions and Services Quadrants

ENTERPRISE CONTEXT

Process Discovery and Mining

The report is relevant to enterprises in the U.K. 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.K. and how each 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 in intelligent automation solutions, driving the demand for PD&M tools. However, enterprises are facing challenges associated with accessing correct and continuous data, siloed approaches, compliance and IT concerns in a remote work setup.

Earlier, the market witnessed a low adoption of process discovery and mining among enterprises due to the piecemeal approach to automation initiatives and lack of organizational understanding of the wider process flows within enterprises. With the dramatic rise in automation spurred by the pandemic, the U.K. enterprises are now looking to PD&M tools to give them a more holistic view of organizational processes and potential opportunities for automation. Enterprises are seeking providers that can offer end-to-end process view and intelligence, reduce time for process initiatives, 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.K. 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 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.

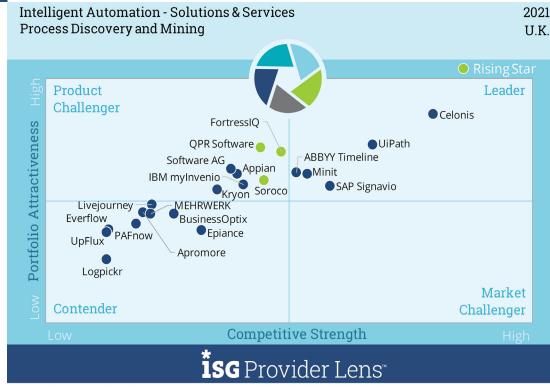
Eligibility Criteria

- 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.

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PROCESS DISCOVERY AND MINING

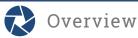


Source: ISG Research 2021





RISING STAR: SOROCO



Soroco is a global process discovery & mining and intelligent process transformation software vendor, with offices in Boston, U.S.; Bangalore, India; and London, U.K. Its process discovery capabilities are delivered primarily through the Scout platform aimed at large-scale data capture of work processes and its associated work graph solutions designed to provide detailed visibility of last-mile end-user processes in organisations. Scout employs approximately 180 employees, and has a significant client footprint in both UK and US. Soroco mainly focuses on the healthcare, insurance, and BFS industries, along with other sectors such as manufacturing, retail, telecom & media, and transport, travel & logistics.



Discovery of end-user processes: Soroco's Scout platform combines task mining and process mining to capture interactions between end-users and their desktops/laptops across all types of teams, applications, documents, tasks, and processes, using a non-obtrusive data agent installed on user devices. Scout uses unsupervised and supervised machine learning on millions of data points to build up a detailed work graph of how activities are executed by users at the last mile and categorizes those into tasks and processes at a granular level within an organisation.

Unified Task Mining & Process Mining: Scout also claims to achieve Unified Task Mining & Process Mining with end-user data only, without the need for log files. Additionally, the micro-view of processes can also be further combined with higher-level system (e.g., from log mining) or business data to establish a complete picture of how work gets done within an enterprise for business KPI analysis.

Fast insights: The fully automated nature of Scout enables it to provide initial process insights within 48 hours, with detailed metrics usually available within a 4–5-week timeframe. Scout provides actionable insights about how to optimize the tasks or processes by way of identifying toil reduction, firstly from a process improvement or excellence perspective, then from an automation perspective.

Privacy safeguards: Along with being fully GDPR-compliant, Scout comes with strong privacy features, including opt-in requirements, individual user non-identification, and redacting and scrubbing of personal data before ingestion. Scout is available both on-prem and in the cloud versions.



Soroco's current pricing model is mainly subscription- or licence-based. As its moves into business process transformation activities, it should consider a broader range of pricing models such as performance-based or risk-sharing approaches.

2021 ISG Provider Lens™ Rising Star

With impressive deep capture abilities focussed on uncovering the last mile of end-user processes, coupled with fast delivery of actionable business and process insights, Soroco is growing significantly in the process discovery and mining market.

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METHODOLOGY

The ISG Provider Lens[™] "Intelligent Automation - Solutions and Services" UK 2021 research study analyses the relevant software vendors/service providers in the UK 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" UK 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)

- 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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Mark Purdy is a Lead Analyst for Europe at ISG Provider Lens[™] and brings over 25 years of experience working on economics and technology research in business and government. Mark has a particular focus on next-generation technologies, including artificial intelligence and intelligent automation, digital twins, digital olfaction, machine learning, virtual reality, and edge computing. He has published widely in tier-1 media and business publications such as Harvard Business Review and Sloan Management Review. He speaks on economics and technology issues at conferences, client workshops and seminars around the world.



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