

— Knowledge Brief —
Quadrant Knowledge Solutions

**Parascript is Leader in
SPARK Matrix: Intelligent
Document Processing (IDP), 2020**



**2020
SPARK MATRIX
LEADER**

Intelligent Document
Processing (IDP) Market

An Excerpt from Quadrant Knowledge Solutions
“SPARK Matrix: Intelligent Document Processing (IDP), 2020”

Parascript is Leader in SPARK Matrix: Intelligent Document Processing (IDP), 2020

Intelligent Document Processing (IDP) is a process of automatically capturing structured, semi-structured, and unstructured data from various types of documents, including word files, emails, PDFs, scanned documents, and such others to streamline document processing workflows within organizations. An IDP solution classifies the document type, extracts relevant information from the documents, and then exports this data to the business workflows that can be leveraged by teams to achieve their organizational goals. An IDP platform utilizes technologies, such as AI, deep learning, computer vision, and Natural Language Processing (NLP) for capturing, classifying, and extracting data. IDP solutions help organizations automate business processes and improve overall operational efficiency and productivity.

Organizations have been using traditional technologies, such as optical character recognition (OCR), for document processing. The OCR technology recognizes characters and symbols on various docs to interpret the data. However, driven by digital transformation trends, organization's data assets and sources are growing in volume and complexities requiring the need for advanced document processing solutions. While OCR continues to be a part of the document processing ecosystem, IDP serves as an intelligent and advanced document processing solution for complex data formats, as it can deliver higher document processing accuracy for complex data formats. Several emerging vendors offer key IDP capabilities, such as data capture, recognition, classification, validation, verification, and integration. However, the length and the breadth of the technologies vary by different vendors' offerings. Users need to evaluate IDP solutions from their organization's specific and use case-specific perspective. IDP solutions can be highly beneficial for organizations that want to automate the processing of paper documents. It can also cater to a wide range of industry-specific use cases that help organizations to streamline their operational processes and customer-centric workflows.

Quadrant Knowledge Solutions research "[SPARK Matrix: Intelligent Document Processing \(IDP\), 2020](#)" includes a detailed analysis of the global market regarding short-term and long-term growth opportunities, emerging technology trends, market trends, and future market outlook. The study provides a comprehensive market forecast analysis of the global market in various geographical regions and the overall market adoption. This research

provides strategic information for technology vendors to better understand the market supporting their growth strategies and for users to evaluate different vendors' capabilities, competitive differentiation, and market position.

The research includes detailed competition analysis and vendor evaluation with the proprietary SPARK Matrix analysis. SPARK Matrix includes ranking and positioning of leading IDP vendors with a global impact. The SPARK Matrix includes analysis of the leading vendors, including ABBYY, AntWorks, Automation Anywhere, Datamatics, Ephesoft, Evolution AI, Grooper, HCL Technologies, Hyperscience, Infrd, Kofax, OpenText, Parascript, Rossum, UST SmartOps, and WorkFusion.

Market Dynamics and Trends

The following are the key research findings of Quadrant's intelligent document processing research:

- ◆ The intelligent document processing platform market has grown by 67% in 2019 and is expected to grow at a CAGR of 54.6% from 2021-2025. Despite the majority of the technology market witnessing negative growth due to the ongoing pandemic situation, the market for document processing platforms has witnessed a positive growth of around 24% in the year 2020. The intelligent document processing market is expected to grow from an estimated market size of \$443.3 million in 2020 to reach over \$3.92 billion by 2025.
- ◆ Leading IDP vendors are increasingly focusing on offering pre-packaged IDP solutions with pre-trained machine learning models for a variety of use cases, including customer onboarding, invoice processing, insurance claims, mortgage document processing, shipping document processing for logistics and transportation, and such others. With pre-packaged IDP solution, organizations gain faster time to value with reduced overall costs.
- ◆ Driven by the growing maturity and advancements in artificial intelligence technologies, including intelligent OCR, natural language processing (NLP), and deep learning, leading IDP vendors are continuously making significant investments in improving document processing accuracy and straight-through processing (STP). The global market dynamics and vendor's competitive positioning is expected to undergo a major change in the next two to three years.

- ◆ The key competitive and technology differentiators for evaluating IDP solutions include data extraction accuracy and straight-through processing, support for a wide range of unstructured and complex data types, template-based versus template-free data extraction, ability to support a wide range of pre-packaged use cases, ability to support multiple languages, integration & interoperability, and vendor's product strategy and roadmap.

SPARK Matrix Analysis of the Digital Experience Platform Market

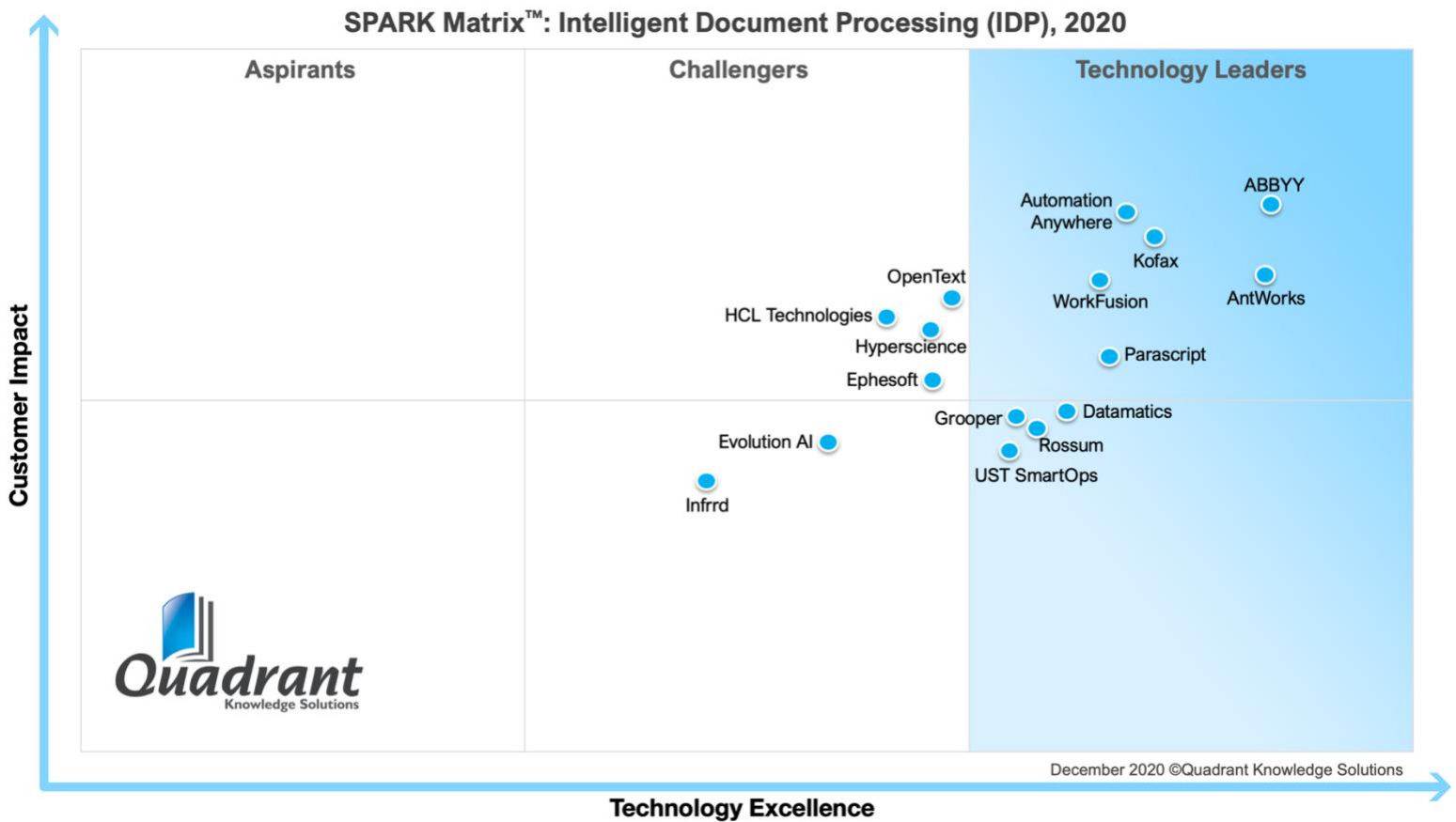
Quadrant Knowledge Solutions conducted an in-depth analysis of the major IDP vendors by evaluating their product portfolio, market presence, and customer value proposition. The digital experience platform market outlook provides competitive analysis and a ranking of the leading vendors in the form of a proprietary SPARK Matrix.

SPARK Matrix analysis provides a snapshot of key market participants and a visual representation of market participants. It provides strategic insights on how each vendor ranks related to their competitors, concerning various performance parameters based on the category of technology excellence and customer impact. The evaluation is based on the primary research with expert interviews, analysis of use cases, and Quadrant's internal analysis of the overall IDP market.

Technology Excellence	Weightage
Sophistication of Technology	20%
Competitive Differentiation Strategy	20%
Application Diversity	15%
Scalability	15%
Integration & Interoperability	15%
Vision & Roadmap	15%

Customer Impact	Weightage
Product Strategy & Performance	20%
Market Presence	20%
Proven Record	15%
Ease of Deployment & Use	15%
Customer Service Excellence	15%
Unique Value Proposition	15%

Figure: 2020 SPARK Matrix
 (Strategic Performance Assessment and Ranking)
 Intelligent Document Processing (IDP) Market



Parascript Capabilities in the Global Intelligent Document Processing Market

Founded in 1996 and headquartered in Longmont, Colorado, US, [Parascript](#) is one of the leading Intelligent Document Processing (IDP) platform providers. Parascript software automates the interpretation of contextual information from image and document-based data. The company offers a document processing application FormXtra.AI. The key functionalities and features offered by the Parascript platform include smart learning, handwriting recognition, signature verification, portable machine learning models, automated straight-through processing, and no code.

The Parascript IDP platform offers FormXtra.AI Capture application. This is easy-to-use document classification, data location, extraction, and validation solution. The application determines document types dynamically without the need for rules, barcodes, or separator pages. It uses Smart Learning feature, which combines human knowledge and machine learning, to sharply reduce the time taken for configuration by eliminating the necessity of manual efforts to configure and optimize the system. It can manage configurations for structured, semi-structured, and unstructured documents, including both classification and data extraction.

The FormXtra.AI application is powered by an inbuilt core document automation engine. It supports a wide range of document and data types, including structured forms to unstructured documents that include text, handwriting, cursive and signatures. It automatically classifies and separates documents. It can also locate, extract, and validate any type of information from documents. This includes machine print, table data, images (logos and signatures) and all forms of handwriting. The platform can locate signatures anywhere on a page and compare them with reference signatures. The platform is supported with its in-house proprietary OCR technology.

The platform offers portable machine learning models that can be shared or reused in other deployments of document automation. The platform offers automated Straight-through processing (STP) for automating complex document processing, as organizations cannot completely rely on machine learning results for accuracy. The system automatically generates the confidence score and eliminates the need for manual review of documents.

Parascript IDP platform does not require any type of special coding or scripting language for document automation. Smart learning eliminates the

need for GUI widgets configuration. Parascript's IDP platform works on machine learning algorithms that focus on input data or ground truth data or sample data provided to the system. The system automatically trains itself with various types of sample sets. For instance, extracting data like invoice number, date, and total amount from various types of invoices does not require any configuration, user can just import samples of invoices to get the result.

Analyst Perspective

Following is the analysis of the Parascript capabilities in the global IDP market:

- ◆ Parascript's IDP platform helps organizations to reduce the complexity and costs involved with document classification and data extraction. The company offers a product FormXtra.AI Capture that automatically configures image perfection, classification, and data extraction rules. The platform leverages its smart learning capability for document classification, data location, extraction, and validation solution that help organizations to significantly reduce the time of the ongoing configurations. Smart learning assists users to execute tasks such as image clean-up and pre-processing, often referred to as image perfection in documents when collecting data.
- ◆ The Parascript platform's technological differentiators include smart learning capability, multiple data support, reliable confidence scores and automated optimization, automated data curation and cascade classifier. While many systems create rules based upon specific user input, Parascript's IDP platform only requires output and automatically collects and curates this data as a background production process to analyze and identify opportunities for improvement. The platform provides multiple classifiers and analyzers, which automate the process of optimization of both document classification and document separation. This eliminates the need for manual adjustments when new documents are added to training sets. This saves several hours of manual effort and improves accuracy and throughput.
- ◆ The Parascript platform also has an invoice processing feature that automatically extracts header, footer data, and line item data with greater accuracy. The platform supports a wide range of use cases such as transaction (payment) processing, mail and mailroom automation, application/onboarding, claims adjudication and more.

- ◆ Parascript has a significant geographical presence in North America, particularly the US, followed by Europe, Latin America, Asia Pacific, Middle East, and Africa regions. The company holds a strong customer base, including some of the leading brands across industry verticals such as banking & financial services, insurance, government & public sectors.
- ◆ Parascript's primary challenges include the growing competition from well-established and emerging vendors offering integrated or complementary RPA capabilities. The company may focus on catering to mid-market to small enterprise needs and supporting more use cases to accelerate its growth beyond the North American and European Union region. With its sophisticated technology platform and comprehensive functional capabilities, Parascript is poised to expand its market share in the global IDP market.
- ◆ The company will continue to develop its platform's Smart Learning capability to support a greater number of use cases and improve performance. It plans on adding NLP capabilities that will enable parsing of complex unstructured text such as agreements and policies. Parascript would also be investing in R&D activities to provide more vertically oriented specialization within the lending and insurance-related processes.