

Everest Group PEAK Matrix[®] for Intelligent Document Processing (IDP) Technology Provider 2022

Focus on Rossum May 2022



Copyright © 2022 Everest Global, Inc.
This document has been licensed to Rossum

Background of the research

Background of the research

Everest Group defines Intelligent Document Processing (IDP) as any software product or solution that uses AI technologies such as computer vision, OCR, Natural Language Processing (NLP), and machine/deep learning to capture, categorize, and extract data from documents (e.g., email, text, PDF, and scanned documents) for further processing. These solutions are typically non-invasive and can be integrated with internal applications, systems, and other automation platforms.

IDP products find a wide variety of use cases from different business functions and verticals. The adoption of IDP solutions can not only help enterprises achieve cost savings, but also improve their workforce productivity and employee & customer experience. These products are also rapidly evolving in the sophistication of their capabilities, features, and functionalities and IDP technology providers are increasingly offering a low-code/no-code platform to enable citizen developers to configure the platform without the need for data scientists.

In this study, we assess IDP software products that leverage Al/cognitive capabilities and are available for independent licensing. They are offered either as platforms that allow enterprises to deploy out-of-the-box solutions using pre-built modules or as custom solutions to buyers with the intent of classifying and extracting data from documents.

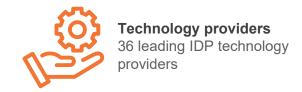
In the full report, we analyze the IDP technology landscape across various dimensions:

- Everest Group's PEAK Matrix® evaluation, a comparative assessment of 36 leading IDP technology providers
- Overview of IDP software products
- Competitive landscape of the IDP technology provider market
- Remarks on key strengths and limitations for each IDP technology provider
- IDP product capability trends and predictions

Scope of this report



Geography Global







IDP products **PEAK** Matrix[®] characteristics

Leaders:

ABBYY, Automation Anywhere, Kofax, and WorkFusion

- Responding to the rising demand for a holistic intelligent automation platform, Leaders are focusing on delivering broader document-centric automation by forging partnerships with or developing in-house capabilities for complementary technologies such as RPA, BPM/process orchestration, process mining, and conversational AI
- They are also focusing on global deployments catering to varying uses cases across different markets. They have expanded support for processing documents in a variety of languages including Asian and Middle Eastern regional languages such as Chinese, Korean, and Arabic

Major Contenders:

Alkymi, AntWorks, Appian, Celaton, Datamatics, EdgeVerve, Eigen Technologies, Ephesoft, Evolution AI, Fosfor by LTI, HCL Technologies, Hyperscience, IBM, Indico Data, Infrrd, JIFFY.ai, KnowledgeLake, Laiye, Microsoft, Nividous, Parascript, Parashift, qBotica, Rossum, Singularity Systems, and UiPath

- A few Major Contenders are differentiating themselves by investing in R&D to enhance their Al capabilities for extraction as well as to reduce the time taken for implementation and training new Al models
- Major Contenders are expanding their support for various data types such as handwritten documents, complex tables, signatures (detection), images, and logos. Some Major Contenders are also focusing on offering capabilities to process complex unstructured documents including contracts, agreements, and emails
- They are also looking to reduce the total cost of ownership for enterprises by introducing a SaaS offering of their platforms

Aspirants:

codemantra, DocVu.AI, KoiReader Technologies, OpenBots, and Straive

- The majority of Aspirants are focusing on particular industries and on providing vertical-specific solutions to cater to enterprise needs. They are developing more specialized point solutions to address specific use cases
- Aspirants are laying greater focus on processing unstructured documents and developing NLP capabilities to differentiate themselves from the leading and established providers in the
 market

Everest Group PEAK Matrix®



Intelligent Document Processing (IDP) Products PEAK Matrix® Assessment 2022 | Rossum positioned as Major Contender

Everest Group Intelligent Document Processing (IDP) Products PEAK Matrix® Assessment 2022



Leaders

Major Contenders

Aspirants

☆ Star Performers

Source: Everest Group (2022)



Rossum | IDP product profile (page 1 of 6)

Overview

Company overview

Founded in 2017, Rossum aims to help companies work better together by removing friction from complex business-to-business communication. It develops AI-based technology to understand semi-structured documents to enable companies to capture data from different documents without any template and with human-level accuracy.

Key leaders

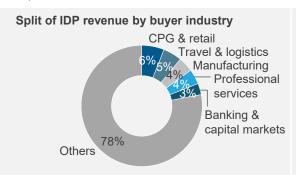
- Tomas Gogar, CEO
- Petr Baudis, CTO & Chief Al Architect
- Tomas Tunys, Chief Scientific Officer

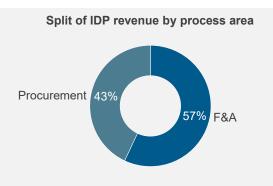
Headquarters: London, UK Website: www.rossum.ai

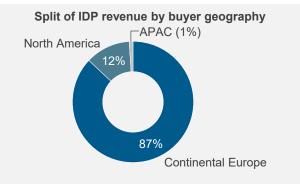
Market adoption and capability overview						
Description	2021 (as of September 2021)	YoY growth				
IDP clients ¹	163	12%				
IDP FTEs	146	143%				
IDP-specific partners/resellers	17	(67%)				
Key service partners/resellers	Atliis360, Axelor, Innovation Path, WFlow, and Yellow Relay					
Key technology partners	Abra, Blue Prism, Box.com, KCT Data, and UiPath					

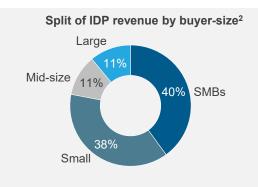
Key clients include:

Beanworks, Bosch, Celonis, Dentsu, Euro W.A.G, Flexport, Kingfisher, Master Trust Bank of Japan, and PepsiCo









- 1 The number of clients is as of December 2021.
- 2 Buyer size is defined as large (>US\$5 billion in revenue), mid-size (US\$1-5 billion in revenue), small (US\$50 million-US\$1 billion in revenue), and SMBs (<US\$50 million in revenue).

Note: Operational and product-/offering-related information as of September 2021, collected as part of the study / based on Everest Group estimates.

Source: Everest Group (2022)

Rossum | IDP product profile (page 2 of 6)

Overview

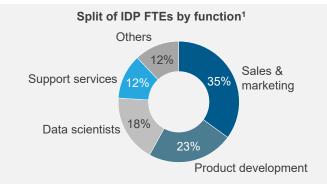
Product overview

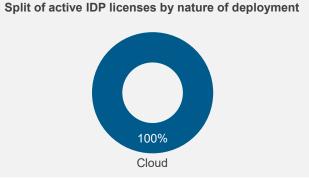
Rossum's IDP platform captures data from semi-structured documents such as invoices, purchase orders, and claims, and automatically learns from the user's feedback without any manual setup of rules or templates. Its cloud-based app provides a verification interface that can run on a browser and makes it easy to deploy. The platform includes an extension environment that allows customers to customize the app behavior and implement rule-based checks. The reporting engine allows enterprises to measure the performance of Al and the overall process efficiency.

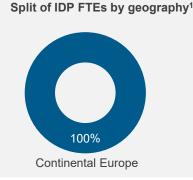
Version number: Not available

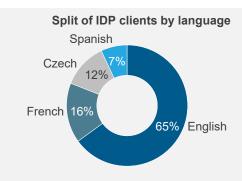
Recent deals and announcements (not exhaustive)

- **December 2021:** launched Automation Intelligence, empowering users to manage their preferred automation type in Rossum's updated UI
- October 2021: raised an investment of US\$100 million from General Catalyst
- October 2021: received an Open Bosch Award for its Al-based software solution that automatically processes e-mail orders into purchase orders
- **September 2020:** launched Custom Functions, a low-code IDP customization capability, and Alpowered splitting of combined documents









1 Includes FTEs in product development, support services (product support, implementation, etc.), and sales & marketing; excludes FTEs in corporate functions such as HR and IT. ote: Operational and product-/offering-related information as of September 2021, collected as part of the study / based on Everest Group estimates.

Source: Everest Group (2022).



Rossum | IDP product profile (page 3 of 6)

Capabilities

Capability & offerings			Available In the roadmap	Available via partner Not available	
Software learning & pre-packaged solutions	Ability to train the OCR	Ability to train the software with past data	Ability to train the software with human-in-the-loop	Pre-learned models	
	Out-of-the-Box (OOTB) packaged solutions	Leverages transfer learning mechanism	Online marketplace for pre-trained models		
Input data types	Handwritten text	Barcode	Logos	Stamps	
	Signature	Borderless tables	Nested tables		
Input file types	Text files	CSV files	PDF files	JPG/JPEG files	
	PNG files	XLS files	MS Word files		
Extraction & classification	Ability to classify documents into different document types	Business user-facing GUI with simple drag- and-drop features to define/edit the process	Ability of business users to add, configure, and manage validation rules from the platform	Ability of business users to configure validation rules using external data	
	Ability to create/modify workflows for approval	Native mobile application	Image/document pre-processing	Ability of software to highlight errors and exceptions (in review GUI)	
	OCR engine	Ability for enterprise user to define, add, and modify fields to be extracted			
Unstructured document processing	NLP capabilities to understand context and intent of free-flowing text	NLG capabilities to summarize texts in documents	Ability to search through a repository of documents based on entity/intent	Sentiment analysis of text	
	Ability to compare differences in meaning between documents	Ability to normalize extracted unstructured information	Ability to identify relationship between extracted entities and values		



Rossum | IDP product profile (page 4 of 6)

Capabilities

Capability & offerings			Available In the roadmap	Available via partner Not available		
Complementary capabilities	RPA capabilities	Process Mining	Task Mining	BPM / Process orchestration		
	Conversational Al					
Security	Ability to auto-redact sensitive information		Availability of audit logs			
	Role-based access to the system		Ability to segregate roles between development, test, and production environments			
Monitoring & analytics	Availability of OOTB analytics dashboards with GUI for end-users	Availability of Al governance/explainability metrics to understand ML model performance	Availability of benchmark metrics for comparison of performance	Pre-built integration / OOTB connectors with third-party BI platform providers		
	Tracking of multiple document processing projects	Tracking of manual worker performance	Tracking of process-level SLAs	Tracking of batch-level STP rates		
	Tracking of field-level accuracy	Ability to build custom reports	Highlight fields based on low confidence level	Highlight fields based on missing information		
	Highlight fields based on violation of business rules					
Hosting options and product architecture	Desktop/laptop	Server/on-premise	Private cloud	Public cloud		
	SaaS offering	Microservices architecture	Multi-tenant deployments			



Rossum | IDP product profile (page 5 of 6)

Capabilities

Capability & offerings			Available In the roadmap	Available via partner Not available	
	Provided by vendor	Provided via partners	Online training courses	Online certifications	
Training and product support	Classroom training	Embedded help tool	24/7 product support to all clients	Active online user community and forum	
	Free community version	Product manual/documentation			
Commercial model	Perpetual licensing	Subscription licensing	Fixed capacity-based	Usage-based (per document)	
	Usage-based (per page)	Usage-based (per process)	Outcome-based		

Key areas of enhancements in the latest product releases (as of September 2021)

Extraction & classification

- Added EDI features that let users receive and process any EDI files with the right extension
- Made the UI completely customizable through multiple channels to streamline data validation and deliver extracted data that is directly used as feedback for the AI engine

Security

• Enhanced security by obtaining ISO-27001 and HIPAA compliance and adding features such as role-based access, SSO, VPN capability, and private cloud infrastructure capability

Product architecture

• Introduced, The Rossum Store, a central hub for ready-made extensions, created both by third-party vendors as well as Rossum's own global services team

Rossum | IDP product profile (page 6 of 6) Everest Group assessment – Major Contender

Measure of capability: Low







Market impact			Vision & capability						
Market adoption	Portfolio mix	Value delivered	Overall	Vision and strategy	Document processing capability	Monitoring and improvement	Implementation and support	Commercial model	Overall
		•			•	•			

Strengths

- Rossum offers an IDP platform that leverages its proprietary OCR and Al/ML to extract information from structured and semi-structured documents. It experienced strong YoY growth in revenue and clients in 2021
- In addition to processing documents such as emails, PDFs, and XMLs, it also supports EDI gateways to facilitate direct B2B communication. It allows additional communication capabilities such as automated email workflows and direct supplier corrections to the system
- The platform allows instant learning and model improvement through human-in-the-loop feedback. Corrections made by human agents are continuously fed into the system to improve model performance
- It offers The Rossum Store, a central hub for pre-built connectors and extensions, where both thirdparty vendors and Rossum's own global services team can create and offer such integrations
- Rossum has formal partnerships with providers of key intelligent automation technologies such as UiPath and Blue Prism for RPA, and Celonis for process mining. This enables enterprises to adopt a best-of-breed approach toward intelligent automation
- Clients have highlighted the ease of use of the platform and the customer support offered by the Rossum team as key strengths

Limitations

- Currently, Rossum's focus is on automating use cases in the F&A and procurement business functions, primarily in Continental Europe and North America. Its ability to automate uses cases for industry-specific processes and serve geographies such as the UK, LATAM, and MEA is untested
- It cannot process complex unstructured documents such as contracts and lacks advanced capabilities such as text summarization, semantic search, and sentiment analysis. The ability to auto-redact or mask sensitive information is currently part of the roadmap
- While pre-built connectors are available for Oracle NetSuite and Workday, connectors for other common enterprise applications such as SAP and Microsoft as well as BI tools are currently in the roadmap
- Certain configurations such as applying business validation rules are currently done through its schema editor, which requires some coding knowledge. The ability to perform these actions through a user-friendly low-code environment is in the roadmap
- While it provides dashboards to review operational metrics, the ability to create custom dashboards is in the roadmap. Clients have also highlighted its dashboards as a limitation and would like to see more insights into worker performance and field-level metrics
- Clients have indicated that while the Al models work well, it requires a large number of sample documents to train the models and reach a reasonable accuracy level



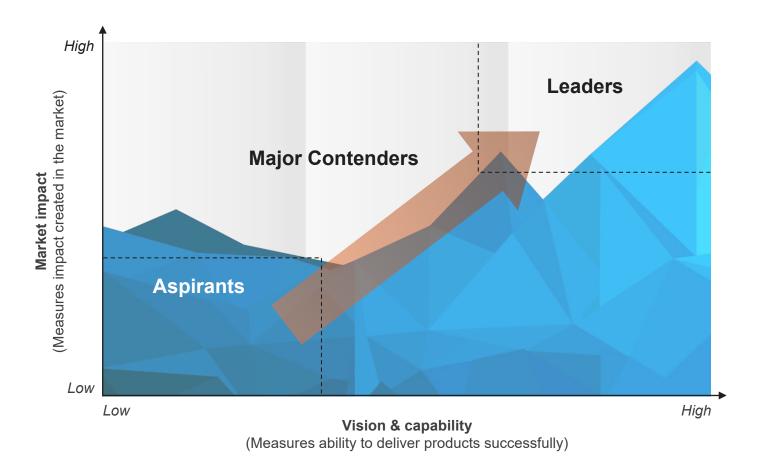
Appendix



Everest Group PEAK Matrix® is a proprietary framework for assessment of market impact and vision & capability



Everest Group PEAK Matrix





IDP Products PEAK Matrix® evaluation dimensions



Measures impact created in the market – captured through three subdimensions

Market adoption

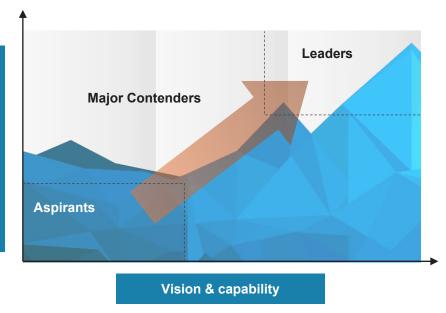
Number of clients, revenue base, and YoY growth

Portfolio mix

Diversity of client base across industries, geographies, business functions, and enterprise size class

Value delivered

Value delivered to the client based on customer feedback and other measures



Measures the ability to deliver products successfully.

This is captured through five subdimensions:

Vision and strategy

Vision for the client and itself; future roadmap and strategy

Document processing capability

Market impact

Software learning, extraction & classification, unstructured document processing, interoperability, and security and compliance

Monitoring and improvement

Performance tracking, operational analytics, reporting, and integration with third-party BI tools

Implementation and support

Hosting options, training, maintenance, partnerships with resellers / system integrators, and complementary technology providers

Commercial model

Progressiveness, flexibility, and client adoption of available commercial models

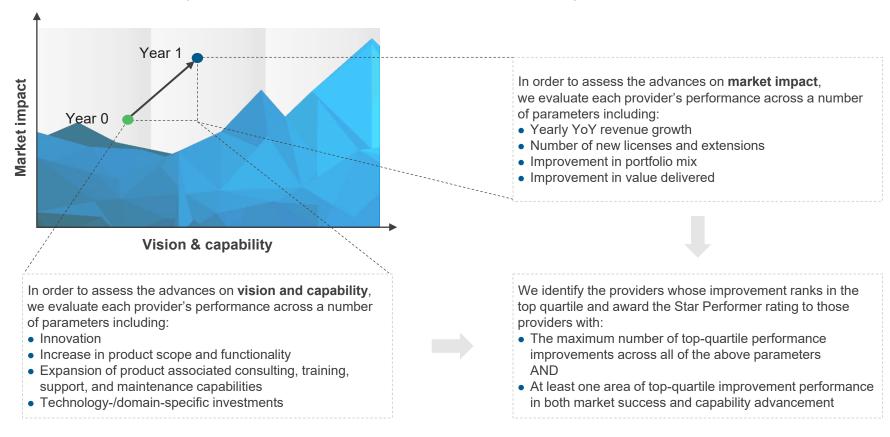


Everest Group confers the Star Performers title on providers that demonstrate the most improvement over time on the PEAK Matrix®



Methodology

Everest Group selects Star Performers based on the relative YoY improvement on the PEAK Matrix®



The Star Performers title relates to YoY performance for a given provider and does not reflect the overall market leadership position, which is identified as Leader, Major Contender, or Aspirant.



FAQs

Does the PEAK Matrix® assessment incorporate any subjective criteria?

Everest Group's PEAK Matrix assessment adopts an unbiased and fact-based approach (leveraging provider / technology vendor RFIs and Everest Group's proprietary databases containing providers' deals and operational capability information). In addition, these results are validated / fine-tuned based on our market experience, buyer interaction, and provider/vendor briefings

Is being a "Major Contender" or "Aspirant" on the PEAK Matrix, an unfavorable outcome?

No. The PEAK Matrix highlights and positions only the best-in-class providers / technology vendors in a particular space. There are a number of providers from the broader universe that are assessed and do not make it to the PEAK Matrix at all. Therefore, being represented on the PEAK Matrix is itself a favorable recognition

What other aspects of PEAK Matrix assessment are relevant to buyers and providers besides the "PEAK Matrix position"?

A PEAK Matrix position is only one aspect of Everest Group's overall assessment. In addition to assigning a "Leader", "Major Contender," or "Aspirant" title, Everest Group highlights the distinctive capabilities and unique attributes of all the PEAK Matrix providers assessed in its report. The detailed metric-level assessment and associated commentary is helpful for buyers in selecting particular providers/vendors for their specific requirements. It also helps providers/vendors showcase their strengths in specific areas

What are the incentives for buyers and providers to participate/provide input to PEAK Matrix research?

- Participation incentives for buyers include a summary of key findings from the PEAK Matrix assessment
- Participation incentives for providers/vendors include adequate representation and recognition of their capabilities/success in the market place, and a copy of their own "profile" that is published by Everest Group as part of the "compendium of PEAK Matrix providers" profiles

What is the process for a provider / technology vendor to leverage their PEAK Matrix positioning and/or "Star Performer" status?

- Providers/vendors can use their PEAK Matrix positioning or "Star Performer" rating in multiple ways including:
- Issue a press release declaring their positioning. See <u>citation policies</u>
- Customized PEAK Matrix profile for circulation (with clients, prospects, etc.)
- Quotes from Everest Group analysts could be disseminated to the media
- Leverage PEAK Matrix branding across communications (e-mail signatures, marketing brochures, credential packs, client presentations, etc.)
- The provider must obtain the requisite licensing and distribution rights for the above activities through an agreement with the designated POC at Everest Group.

Does the PEAK Matrix evaluation criteria change over a period of time?

PEAK Matrix assessments are designed to serve present and future needs of the enterprises. Given the dynamic nature of the global services market and rampant disruption, the assessment criteria are realigned as and when needed to reflect the current market reality as well as serve the future expectations of enterprises







Everest Group is a research firm focused on strategic IT, business services, engineering services, and sourcing. Our research also covers the technologies that power those processes and functions and the related talent trends and strategies. Our clients include leading global companies, service and technology providers, and investors. Clients use our services to guide their journeys to maximize operational and financial performance, transform experiences, and realize high-impact business outcomes. Details and in-depth content are available at **www.everestgrp.com**.

Stay connected

Website

everestgrp.com

Social Media

₩ @EverestGroup

in @Everest Group

@Everest Group

@Everest Group

Blog

everestgrp.com/blog

Dallas (Headquarters)

info@everestgrp.com +1-214-451-3000

Bangalore

india@everestgrp.com +91-80-61463500

Delhi

india@everestgrp.com +91-124-496-1000

London

unitedkingdom@everestgrp.com +44-207-129-1318

Toronto

canada@everestgrp.com +1-647-557-3475

This document is for informational purposes only, and it is being provided "as is" and "as available" without any warranty of any kind, including any warranties of completeness, adequacy, or fitness for a particular purpose. Everest Group is not a legal or investment adviser; the contents of this document should not be construed as legal, tax, or investment advice. This document should not be used as a substitute for consultation with professional advisors, and Everest Group disclaims liability for any actions or decisions not to act that are taken as a result of any material in this publication.