

IDC MarketScape

IDC MarketScape: Worldwide Intelligent Document Processing Software 2023-2024 Vendor Assessment

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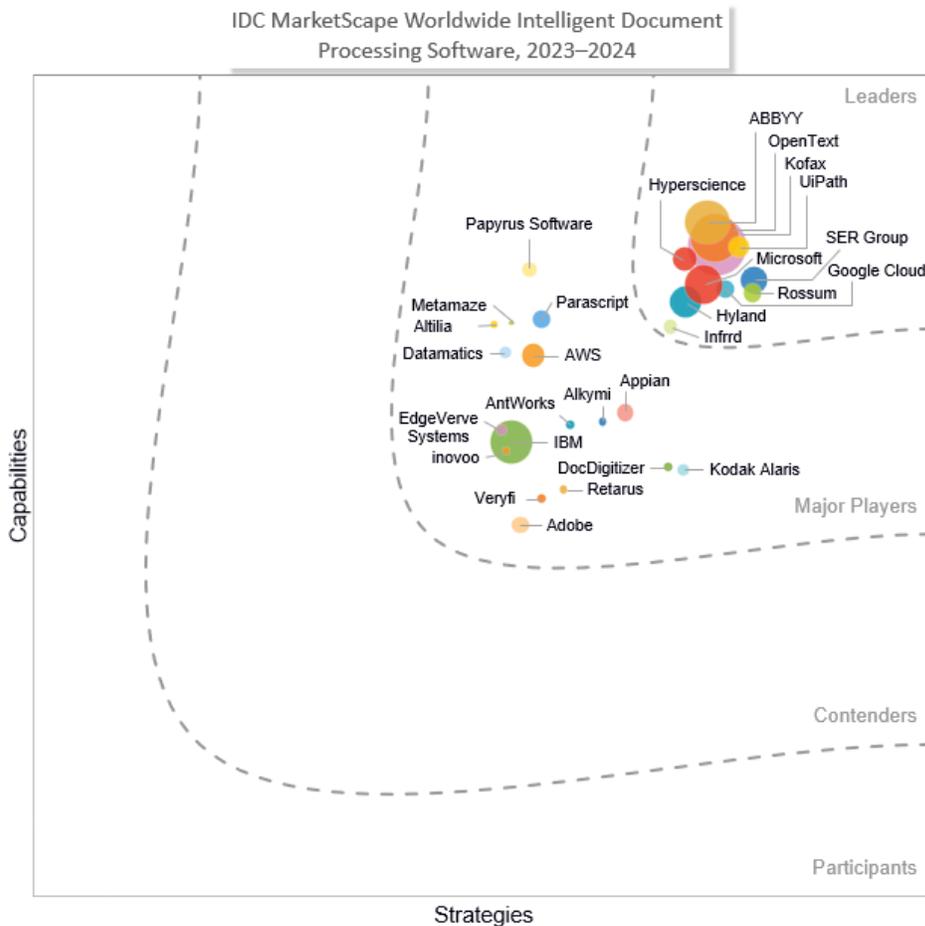
Amy Machado

THIS IDC MARKETSCAPE EXCERPT FEATURES UIPATH

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Intelligent Document Processing Software Vendor Assessment



Source: IDC, 2023

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Intelligent Document Processing Software 2023-2024 Vendor Assessment (Doc # US49988723). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

Intelligent document processing (IDP) technologies leverage a combination of tools including AI, advanced analytics technologies, and business rules to support and enable the orchestration and decision making of content and documents. IDC's research and taxonomy investigates the IDP market as the combination of two technology submarkets:

- **Capture applications** convert unstructured data to structured information that can be passed to another enterprise application and/or consumed by a downstream task or process. These applications may increasingly use embedded AI software services, such as entity recognition/extraction and image recognition.
- **Document understanding AI** software uses embedded technologies from the conversational AI and computer vision (CV) AI tools submarkets such as computer vision, natural language processing (NLP), ontologies, and language analysis for harvesting intelligence from scanned documents and/or images of documents. Documents are often unstructured, which means the content's location or format may vary between two otherwise similar forms. Vendors deploying document understanding AI technologies are increasingly investigating and integrating generative AI (GenAI) and large language models (LLMs) to help deliver additional software features and capabilities including semantic understanding, document querying, and advanced entity extraction.

Vendors building and deploying IDP software strive to drive the automation of document classification, extraction, analysis, and validation, and the greater understanding of qualitative and quantitative documents, regardless of their format (i.e., structured, semistructured, unstructured). IDP vendors leverage a combination of algorithmic, hard coding, AI/ML and deep learning, and workflow building capabilities, as well as intuitive low- and no-code UI/UX experiences to engage nontechnical lines-of-business users, IT and developers, and data scientists. Although standalone/pure-play IDP software provides considerable value to technology buyer organizations, IDP software vendors often pair it with adjacent technologies (e.g., IPA, RPA, process mining) to deliver a more comprehensive workflow efficiency and automation suite of capabilities.

In addition to an extensive set of information requested and provided by the included vendors, IDC incorporated the feedback and perspectives of more than 60 end-user organization references, all of whom have invested in deploying IDP software with at least one included vendor. These reference organizations, which represent a range of business sizes, industry verticals, geographic footprints, and IDP use cases, reinforce the breadth and depth of today's IDP software vendor environment and solution capabilities. Organizations are increasingly looking to IDP to deliver tangible improvements in efficiencies, cost savings, customer satisfaction, employee prioritization, and competitive differentiation.

In this assessment, IDC evaluated worldwide IDP software vendors across the included strategy and capability criteria measured (see Tables 1 and 2).

IDP Trends

The advancement and expansion of digital transformation (DX) initiatives overall and the pursuit of technology improvement within the IPA and RPA markets are important facilitators for IDP's robust current (and future) revenue growth trajectory. Leading technology-buying organizations have sought out digital-first solutions to resolve the process and resource roadblocks of their current labor-intensive analog practices. These organizations are leveraging IDP's advancements and evolution to raise the priority of converting business-critical unstructured documents into structured, centralized data resources, whose insights are tied directly into downstream systems and processes/workflows. Further, these organizations understand that high levels of IDP accuracy and precision are critical to driving hands-off, scalable, and effective automation (and straight-through processing [STP] rates), as well as more effective stakeholder communications. As one customer stated, any IDP process or workflow that requires a human-in-the-loop (HITL) step, for whatever reason, greatly impacts any potential ROI or business value gains.

In addition, IDC has selectively included the key trends that we believe are critical for technology suppliers and buyers as the IDP market continues to evolve. They include:

- **Increasingly crowded vendor landscape with potential for consolidation.** The IDP software market is crowded. It comprises the more mature, established market segment (capture applications) and an emerging technology market segment (document understanding AI). This range of potential technology entry points and business models allow for creative disruption, including deployment flexibility and diversity, managed service offerings, pricing schema, SLAs, and solution design. Legacy capture vendors; AI-first, cloud service providers/hyperscalers; and automation-focused vendors are all competing against each other for IDP software market share, and it was not unusual for IDC to speak with reference customers that were using more than one vendor to address their IDP needs – use case depending.
- **Incorporation of powerful third-party tools and capabilities to aid decision making, including GenAI and LLMs.** IDP vendors are building, partnering, and/or integrating the offerings of complementary, third-party vendors with advanced AI functionality across CV, NLP, LLMs, and GenAI to all stages of the IDP life cycle. IDP software vendors are increasingly utilizing this added functionality to promote and deliver data-driven decision-making initiatives, perform document classification extraction, and extend the impact of document-derived insights (e.g., sentiment analysis, summarization, document querying) across more and more document types and use cases. Further, this technology is playing a key role to help simplify the interfaces and engagement for users, greatly impacting the learning curve for basic and advanced IDP functions and tasks.
- **Pursuit of innovative approaches to expand, develop, and deliver to customers.** Customers are increasingly requesting and seeking capability enhancements and innovative solution bundles that can be more easily deployed and integrated within their existing technology environment. Although some customers want to consume IDP solely within a given technology supplier's platform or tooling, the predominant customer view is that a supplier's IDP software needs to support the customer's greater, existing technology environment, workflows, and data architecture. Along these lines, IDC sees customers want greater, cross-IDP use case

standardization and support to reduce the complexity of multiple vendors and/or solutions for their variety of departments, use cases, and geographies.

- **Integration of IDP into automation workflows.** IDP remains a critical origination point for increasingly complex document workflows, using intelligent capture paired with automation (e.g., RPA, and IPA) on documents – many of which are unstructured and had previously required manual interventions. To enable automation, IDP software vendors understand that organizations need a high level of accuracy, usability, and flexibility to support their diversity of documents and custom business requirements.
- **Targeting the C-suite and line-of-business (LOB) buyer personas.** In our conversations with end users, we find that companies typically discover and pursue IDP software from very different organizational pathways. Some companies' pursuit comes from their greater digital transformation journey – led by the C-suite – using digital technologies like IDP to transform their internal and external processes and increase automation. On the other hand, some IDP projects begin from the pursuit of a specific – many times, siloed – use case, where the LOB user or functional organization is empowered to make their own budget decisions (along with IT). IDP software providers need to recognize that each sales pathway requires very different requirements for communication, product positioning, support, and timelines.
- **Addressing the growth, complexity, and dynamism of privacy regulation and compliance.** As the impacts of initiatives such as GDPR and CCPA continue to expand and propagate, organizations are forced to take stock of how they capture, store, maintain, and delete personally identifiable information (PII). IDP solutions that convert physical and digital documents into structured data and insights can help organizations detect PII requirements as well as ensure that the proper procedures and actions are in place for compliance and auditing.
- **Architecture influences and requirements derived via cloud service provider (SP) platforms.** The role of the cloud SP ecosystem will continue to impact the approaches and offerings of current and future IDP vendors. The need to integrate as well as support a mix and match or best-of-breed microservice-based architecture will force current and future IDP vendors to constantly iterate and evolve. Technology buyers are increasingly prioritizing extensibility and ecosystem access and support as part of their IDP vendor selection process.

IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

This research includes the analysis of IDP software providers with a global scale and broad, horizontal portfolios spanning IDC's research coverage. This assessment is designed to evaluate the characteristics of each firm – as opposed to its size or only the breadth of its services. In determining the group of vendors for analysis in this IDC MarketScape, IDC considered the following set of inclusion criteria:

- Vendors must provide IDP software that meets IDC's definition.
- Vendor's IDP software must be primarily based on its intellectual property (IP).
- Vendor's IDP software must have been made commercially available to customers for purchase no later than January 1, 2022.
- Vendor's IDP software must be available for purchase and use by customers globally.
- Vendor's IDP software must support the ingestion and processing of document types that are defined by IDC as structured and semistructured. (Support for unstructured document types is not required but was included as part of the evaluation.)

- Vendor’s IDP software must be sold to customers for “horizontal” deployment or support use cases within at least three verticals as defined by IDC.
- Vendor’s IDP software must have 20 or more active, paying, and in-production customers by December 31, 2022.
- Vendor’s IDP software must have active, paying, and in-production customers utilizing their software in more than one geographic region. Geographic regions include Africa and the Middle East, Asia/Pacific and Australia (not including China), China, Europe, North America, and South America.
- Vendors must have internal, IDP-focused employees represented in more than one geographic region. Geographic regions include Africa and the Middle East, Asia/Pacific and Australia (not including China), China, Europe, North America, and South America.

This IDC MarketScape also includes four non-evaluated IDP suppliers in the Vendors to Watch section.

ADVICE FOR TECHNOLOGY BUYERS

IDC offers the following advice to technology buyers researching, experimenting, deploying, or expanding their use of IDP software:

- **Consider workflow complexities and integration requirements.** Several customer reference organizations that IDC spoke with indicated that they did not truly understand their own complete workflow, integrations, or employee processes before their IDP solution went into production. Although these complexities can reveal themselves during the initial experimentation or deployment phases, technology buyers should perform this internal due diligence well before choosing their IDP vendor. This will reduce any potential future headaches, cost overruns, and wasted revision cycles. Most importantly, this should allow a technology buyer to qualify an IDP technology supplier’s technology and environment support.
- **Pursue IDP software with easy-to-use interfaces.** Embrace low-code/no-code user interface/user experience (UI/UX). IDC views a streamlined, easy-to-use UI/UX as critical to embrace and interface with nontechnical, part-time developers and line-of-business knowledge workers. In fact, technology buyers tell IDC that well-designed IDP software tooling and processes can improve the employee experience and can actually *prevent* churn. Although the low-code/no-code development approach leverages technology abstraction for feature and capability delivery, IDC reinforces the need to find software that allows less technical-savvy users to establish and build trust.
- **Empower your employees.** One customer reference that IDC spoke with told us that they empowered their employees to work directly with the IDP solution providers during the proof-of-concept (POC) phase. These employees detailed their own individual processes for how they worked and what pain points they wanted to be solved using IDP/technology. This focus on employee empowerment helped build trust and ensured that their workforce would be comfortable and buy into the automation initiatives they were pursuing.
- **Position IDP as an upskilling tool.** IDP can empower employees and help them contribute to higher-value tasks for the company. Ensure your employees have the right resources or support to advance their careers and skills. Embracing IDP can create new roles, and in turn, organizations must have a plan in place to fully understand this shift. IDC’s research has shown that organizations struggling with employee buy-in (after deploying IDP software) often did not have a clear idea or plan for impacts beyond measuring and maximizing current

employee and related task productivity. This lack of foresight into the downstream effects of IDP on a user's role and day-to-day function created distrust and reduced the solution's positive impact.

- **Establish performance KPIs for the revenue team, including how they are to be defined and measured.** Quick time-to-value use cases remain a critical catalyst for increased funding and departmental expansion and use. Establishing improvements – especially around satisfaction and experience – can be difficult to measure compared with metrics like productivity, so asking for qualitative feedback is key as IDP changes the way that people work. Top business benefits that most companies experience from adopting IDP are optimizing the supply chain, increasing customer satisfaction, increasing employee satisfaction, eliminating data silos for all stakeholders, and creating greater access to documents across the business (source: IDC's *State of Content Services Survey*, June 2023).
- **Promote the comfort that comes with the human-in-the-loop.** While many companies would like to implement STP for all IDP use cases, it is not always realistic (or practical). For instance, IDP extraction can deliver high accuracy levels, but for certain documents, including those that are unstructured or contain handwriting, obtaining 100% accuracy may not be achievable. Even this small bit of uncertainty in an IDP workflow can create fear in employees downstream, as they worry about “garbage in, garbage out.” Make sure to communicate accurate KPIs with stakeholders throughout the *entire* workflow, to boost trust. And remember, automation is not always the driver for IDP use cases. One company we spoke with requires very high data accuracy for internal compliance, and they are using IDP as a first triage and data validation step and then a permanent human-in-the-loop for authentication and assurance.
- **Establish an open dialogue with your IDP technology supplier.** Many of the newer “AI-first” companies solicit customer feedback and directly incorporate it into their product development road map. Although this may not always be the case, the constant iteration and communication feedback loop between customer and supplier may lead to the delivery of your custom requirements and feedback into the provider's next or future commercialized, *off-the-shelf* product release/update.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

UiPath

After a thorough evaluation of UiPath's strategies and capabilities, IDC has positioned the company in the Leaders category in this 2023-2024 IDC MarketScape for worldwide intelligent document processing software. Quick facts:

- **Year first commercial IDP software product was launched:** 2018
- **Total number of global employees:** 4,000
- **Vendor categorization/grouping:** IDP with adjacent capabilities (e.g., RPA/IPA)
- **Geographic market focus and traction:** Asia/Pacific and Australia (excluding China), China Europe, North America

- **Vertical industry focus and traction:** Financial services (including banking, insurance, investment), government and higher education, healthcare and life sciences, manufacturing, professional services, retail, telecommunications
- **Customer segmentation focus and traction:** Medium-sized business, large business, enterprise
- **Primary customer user personas targeted:** Nontechnical resources (e.g., line of business), technical users (e.g., data scientists, computer scientists), IT
- **Primary IDP products evaluated in this IDC MarketScape:** UiPath Document Understanding, UiPath Communications Mining
- **Relevant/adjacent products of interest:** UiPath Business Automation Platform
- **Estimated number of worldwide paying customers as of 2Q23:** 1,000+
- **Deployment environments supported across all IDP products:** Public cloud, private cloud, on premises, hybrid
- **Targeted customer document types:** Structured, semistructured, unstructured
- **Primary/general pricing approaches:** Consumption
- **Price flexibility and options supported:**
 - **Multiyear contracts:** Yes
 - **Annual contracts:** Yes
 - **Month-to-month contracts:** Yes
 - **Volume discounting:** Yes
 - **Ramp deals (customer commits to higher volumes at a later date):** Yes
 - **Price caps/price holds:** Yes
- **Noteworthy portfolio capabilities or areas to mention:**
 - UiPath's IDP journey largely began as a way to provide an in-house alternative when incorporating document-specific information or intelligence into automation flows but is being increasingly adopted as a standalone service.
 - UiPath brings a cloud-native development approach to IDP including a technology-neutral ethos for building IDP models and automations, including the support and ingestion and use of third-party IDP platforms (or engines), as well as first- and third-party LLMs.

Strengths

- **Consistent accuracy across document types.** Customers and partners give UiPath high marks for its ability to support and deliver accurate IDP outputs across a range of document types and use cases. Of course, the level of effort to reach this high level of accuracy differs, but UiPath's IDP software was able to show consistent performance.
- **AI-powered automation as an IDP on-ramp and front door.** UiPath's success and broad market leadership as an AI-powered automation platform puts it in a great position for capturing growth as new and existing customers look to integrate a document component into their broader automation workflows.
- **Use case prioritization and quantification tools.** UiPath's efforts to work with clients to quantify the ROI of their use cases is a key differentiator. The quantification tools help provide hard-dollar financial justification for the pursuit and prioritization of IDP use cases with customers, often a critical hurdle for project/vendor approval and funding.

Challenges

- **Price premiums for legacy use cases.** Customers and partners indicate that UiPath's IDP capabilities are priced at a market premium. This premium is more pronounced when

customers are focused largely on use cases with document types that are structured and semistructured.

- **Support for legacy IDP features and capabilities.** As UiPath's IDP software is newer to the market, it may lack some of the legacy IDP configurations and capability options that customers have come to expect. To note, UiPath continues to invest heavily to close these gaps and has a strong track record of implementing its aggressive and innovative R&D road map.

Consider UiPath When

UiPath has made tremendous strides in a few short years to build and scale the capabilities, functionality, and reach of its IDP portfolio. This modular and increasingly integrated portfolio includes UiPath's Document Understanding, Communications Mining, and Business Automation Platform, making UiPath a strong vendor of consideration for any organization looking to experiment, learn, or expand its use of IDP more broadly.

- **Should UiPath be considered for global deployments?** Yes, UiPath can support global, regional, or in-country deployments on a global basis.
- **Should UiPath be considered for all sizes of businesses?** Yes, UiPath can address IDP needs from small businesses to enterprises.
- **Should UiPath be considered by all verticals looking to deploy IDP?** Yes, UiPath's IDP software should be considered by all industry verticals.
- **Should UiPath be considered for all document structures and types (structured, semistructured, and unstructured)?** Yes, UiPath's IDP software should be considered for all document structures and types.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and

interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

IDC outlines the definition and location of these submarkets as part of IDC's Worldwide Software taxonomy (for more information see *IDC's Worldwide Software Taxonomy, 2023*, IDC #US50513623, April 2023):

- **Capture applications** convert unstructured data to structured information that can be passed to another enterprise application and/or consumed by a downstream task or process. These applications may increasingly use embedded AI software services, such as entity recognition/extraction and image recognition.
- **Document understanding AI** software uses embedded technologies from the conversational AI and computer vision AI tools submarkets such as computer vision, natural language processing (NLP), ontologies, and language analysis for harvesting intelligence from scanned documents and/or images of documents. Documents are often unstructured, which means the content's location or format may vary between two otherwise similar forms. Vendors deploying document understanding AI technologies are increasingly investigating and integrating generative AI (GenAI) and large language models (LLMs) to help deliver additional software features and capabilities including semantic understanding, document querying, and advanced entity extraction.

LEARN MORE

Related Research

- *Market Analysis Perspective: Worldwide Document Understanding AI Software, 2023* (IDC #US51220023, September 2023)
- *Worldwide Intelligent Document Processing Market Shares, 2022: Document AI Drives Market Growth* (IDC #US49993023, July 2023)
- *Worldwide Intelligent Document Processing Software Forecast, 2023-2027* (IDC #US50254123, July 2023)
- *IDC TechBrief: Future of Work – Intelligent Document Processing* (IDC #US50824423, June 2023)
- *Intelligent Document Processing: Using AI to Reimagine the Document and Improve Content Accessibility and Usage* (IDC #US50618723, May 2023)
- *IDC MaturityScape Benchmark: Content-Centric Workflow 2.0 in the United States, 2023* (IDC #US50426223, May 2023)

Synopsis

This IDC study represents a vendor assessment of the intelligent document processing market through the IDC MarketScape model. This assessment discusses both quantitative and qualitative characteristics that explain success in the IDP market. This IDC MarketScape covers a variety of

vendors participating in the IDP space. The evaluation is based on a comprehensive and rigorous framework that assesses vendors relative to the criteria and to one another and highlights the factors expected to be the most influential for success in the market in both the short term and the long term.

“This extensive IDC MarketScape study aims to help technology buyers understand the complexity and nuances of the ever-changing IDP software vendor landscape,” said Matt Arcaro, research director of IDC’s Computer Vision AI Tools and Technology research program. “Although at the topmost level many approaches and technologies seem very similar, there are often subtle vendor differences that ultimately impact the success of deployment or solution fit. IDC has tried to capture some of these differences, nuances, as well as competitive differentiation within the outputs and rigor of this study.”

“It is an exciting time for companies looking to convert their business-critical unstructured documents into structured, centralized data resources whose insights are tied directly into downstream systems and processes/workflows,” said Amy Machado, research manager of IDC’s Enterprise Content and Knowledge Strategies research program. “With the breadth of offerings and leaps made in the last year with GenAI, buyers have many options to fulfill their IDP needs, and this study will help them find the right partner.”

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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