

Analytics and Data Buyers Guide

Software Provider and Product Assessment



EXECUTIVE
SUMMARY

***ISG** Research



Analytics and Data

The processes and technology of the analytics and data software industry continue to play an instrumental role in enabling an enterprise's business units and IT organization to optimize data in tactical and strategic ways. To accomplish this, organizations must provide technology that supports a variety of personas, enabling them to access data, generate and apply insights from analytics, communicate the results and support collaboration as needed.

ISG Research defines analytics and data technology as the use of mathematics to create measurements and metrics that enable the evaluation of any form of data to provide insights and guide decision-making. It includes the collection and preparation of data needed for analyses, often one of the most time-consuming aspects of analytics. It also includes the various forms of visualization and dissemination of information, such as dashboards, reports, emails or text messages. Analytics range from simple ratios and percentages to forecasting, optimization and simulation. Increasingly, analytics must also include artificial intelligence-based insights using predictive, descriptive and prescriptive models.



Operating without analytics would be like flying a plane without an instrument panel.

In today's data-driven world, enterprises must use analytics to understand and plan the details of operations across every department and the lines of business and IT. Organizations use analytics to track costs, create staffing plans, assess worker and supplier performance, identify variances and plan corrective actions. Analytics also helps inform workers and facilitates communication throughout the organization to coordinate actions toward a common mission and specific objectives. Operating without analytics would be like flying a plane without an instrument panel.

While analytics as a contemporary business tool dates back more than four decades, today's business intelligence requirements have expanded well beyond query, reporting, analysis and publishing. Enterprises need tools for sourcing and integrating data and the use of analytics for planning and forecasting, as well as dashboards that present analytics in a variety of visualizations. Now, analytics requires presentations in the form of natural-language narratives using generative AI with an increasing number of software providers able to support multiple languages. The collaborative sharing of insights helps reduce the time to take action and make decisions.

Artificial intelligence and machine learning extend analytics, enabling it to classify, predict and suggest behaviors that help improve business operations. Enterprises need software providers to use ML to analyze product usage data to enhance and streamline interactions, anticipate the best next step in the analytical process and perform or recommend that step. In addition, GenAI is being applied to all aspects of data analytics software to make products



easier to use by recommending data preparation steps, suggesting visualizations of data and documenting analytics processes. Advanced analytics, which incorporates AI and ML, has become a staple in analytic processes, with BI tools acting as delivery vehicles for this important information. Organizations that analyze data using machine-learning technology report gaining a competitive advantage, improving customer experiences, increasing sales and responding faster to opportunities. In light of these benefits, it is no surprise that nearly two-thirds of organizations report using machine learning today, and three-quarters of organizations in our research plan to increase the use of machine learning.

The ultimate goal of analytics is to help enterprises make and implement decisions that

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Self-service analytics continues to be a goal for most enterprises, and those that achieve it report greater satisfaction with the use of analytics.

improve operations and the bottom line. The range of analytics capabilities has become known as decision intelligence. Decision intelligence involves analyzing historical performance, determining potential courses of action, evaluating the results of those actions, identifying the best path forward and coordinating the activities that support the implementation of the decisions.

Ideally, these processes can be conducted on a self-service basis. Self-service analytics continues to be a goal for most enterprises, and those that achieve it report greater satisfaction with the use of analytics. Organizations that access analytics without IT assistance are more satisfied than those requiring IT assistance.

Enterprises seeking to provide self-service analytics also need self-service data preparation. We have seen significant additional capabilities in this area resulting from the application of GenAI. In many of our research studies, preparing data is reported as the most time-consuming part of the analytics process, and our research finds that a majority of organizations are not comfortable allowing business users access to data that has not been integrated or prepared for them by IT. We expect GenAI-based self-service data preparation capabilities will reduce the often-necessary involvement of IT. Semantic models can also enhance self-service data preparation processes, especially when coupled with GenAI.

While AI and ML still require highly specialized skills, software providers have used elements of AI and ML to provide augmented intelligence capabilities such as automated insights and key driver analyses that require little or no input from line-of-business workers using the tools. These augmented intelligence capabilities, often delivered as narratives using GenAI, make it easier for a larger segment of the workforce to gain insights they might not see otherwise. ISG Software Research asserts by 2026, almost all business intelligence software providers will include augmented intelligence based on GenAI to make analytics easier to use.



Augmented intelligence enables enterprises to change the analytics processes from a “pull” model, where analysts must create analyses, to a “push” model, where many analyses are created automatically. This push model also ensures more consistency in an enterprise’s analytics discipline because many of the analyses are automated, ensuring the same types of information are available to all.

For analytics to be effective, they must be accessible. Nearly all software providers now use GenAI to enable natural language processing, making it easier to access and find information via search and understand information through narratives explaining the analyses. Line-of-business workers also need access to analytics to conduct business, which means providing rich mobile access to analytics to support a workforce seeking to conduct business in any location at any time. Workers today expect these mobile capabilities, and organizations must choose analytics and data platforms that can deliver on these needs.

Collaboration in conjunction with analytics has finally become much more commonplace. Two-thirds of organizations report using or planning to use collaboration with analytics. Software providers now offer many options to enable collaboration, ranging from commenting on analyses to rating data sources. Other applications enable organizations to assign tasks and track them to completion, ensuring that the enterprise takes specific actions.

Analytics should lead to action. Enterprises use a variety of operational applications to ensure the implementation of decisions resulting from analyses. Embedding analytics directly into these systems makes it easier for line-of-business workers to access the information they need without using a different system, reducing the need for additional training.

As software providers continue to build out rich application programming interfaces that provide access to nearly all of the functionality in products, some providers offer prebuilt connections, delivering analytical outputs into operational systems. ISG Research asserts that by 2026, more than two-thirds of line-of-business workers will have immediate access to cross-functional analytics embedded in activities and processes, helping to make operational decision-making more efficient and effective.

Analytics must also be timely. Enterprises often operate 24/7. Information streams into business operations from a rapidly growing number of devices and sources. Without the ability to analyze this information as it occurs, organizations risk missing an opportunity to respond in the moment. Our research shows that one-half of organizations consider it essential to process streaming data and event information in seconds or milliseconds.

Analytics
Market Assertion

By 2026, almost all business intelligence software providers will include augmented intelligence based on GenAI to make analytics easier to use.

Matt Aslett
Director of Research, Analytics and Data

ISG Research

The graphic is a dark blue rectangular box with a thin white border. It features the title 'Analytics' in large white font, followed by 'Market Assertion' in a smaller white font. Below this is a white text block containing the market assertion. At the bottom right is a circular portrait of Matt Aslett, a man with short blonde hair, smiling. Below the portrait is his name 'Matt Aslett' in white, and his title 'Director of Research, Analytics and Data' in a smaller white font. The ISG Research logo is at the bottom left of the box.



As organizations seek to expand the spectrum of analytic requirements, transitioning to enterprise-class analytics is an essential step forward. Software providers have responded to these broadening needs with additional capabilities. In some cases, providers have invested in

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developing additional capabilities. Others have acquired software companies that offer capabilities complementary to the existing portfolio. Not only have the capabilities expanded, but the number of providers has proliferated. Despite this expansion, there are still few software providers attempting to deliver the entire spectrum of capabilities we evaluate in this assessment. You will likely need more than one provider to meet your analytic needs.

This research evaluates the following software providers that offer products to address key elements of analytics and data as we define it: Alibaba Cloud, Amazon Web Services, Cloud Software Group, Domo, GoodData, Google Cloud, IBM, Idera, Incorta, Infor, insightsoftware, Microsoft, MicroStrategy, Oracle, Qlik, SAP, SAS, Sisense, Salesforce (Tableau), ThoughtSpot and Zoho.

The ISG Buyers Guide™ for Analytics and Data evaluates software providers and products in three key capability areas: data, analytics and communication. Data capabilities evaluated include defining and managing data models, accessing, integrating and governance data and managing master data. Analytics evaluation criteria include data discovery using computers, browsers and mobile devices; query; visualization; presentation; calculation; and advanced analytics, including predictive capabilities. Software providers are evaluated for communications capabilities, including informing audiences of the results of analyses by defining and delivering relevant information via any device, supporting collaboration among those audiences with sharing and social media-style interactions and automating delivery and action on the results of analyses with alerting and agents.



Buyers Guide Overview

For over two decades, ISG Research has conducted market research in a spectrum of areas across business applications, tools and technologies. We have designed the Buyers Guide to provide a balanced perspective of software providers and products that is rooted in an understanding of the business requirements in any enterprise. Utilization of our research



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methodology and decades of experience enables our Buyers Guide to be an effective method to assess and select software providers and products. The findings of this research undertaking contribute to our comprehensive approach to rating software providers in a manner that is based on the assessments completed by an enterprise.

The ISG Buyers Guide™ for Analytics and Data is the distillation of over a year of market and product research efforts. It is an assessment of how well software providers' offerings address enterprises' requirements for analytics and data software. The index is structured to support a request for information (RFI) that could be used in the request for proposal (RFP) process by incorporating all criteria needed to evaluate, select, utilize and maintain relationships with software providers. An effective product and customer experience with a provider can ensure the best long-term relationship and value achieved from a resource and financial investment.

In this Buyers Guide, ISG Research evaluates the software in seven key categories that are weighted to reflect buyers' needs based on our expertise and research. Five are product-experience related: Adaptability, Capability, Manageability, Reliability, and Usability. In addition, we consider two customer-experience categories: Validation, and Total Cost of Ownership/Return on Investment (TCO/ROI). To assess functionality, one of the components of Capability, we applied the ISG Research Value Index methodology and blueprint, which links the personas and processes for analytics and data to an enterprise's requirements.

The structure of the research reflects our understanding that the effective evaluation of software providers and products involves far more than just examining product features, potential revenue or customers generated from a provider's marketing and sales efforts. We believe it is important to take a comprehensive, research-based approach, since making the wrong choice of analytics and data technology can raise the total cost of ownership, lower the return on investment and hamper an enterprise's ability to reach its full performance potential. In addition, this approach can reduce the project's development and deployment



time and eliminate the risk of relying on a short list of software providers that does not represent a best fit for your enterprise.

ISG Research believes that an objective review of software providers and products is a critical business strategy for the adoption and implementation of analytics and data software and applications. An enterprise's review should include a thorough analysis of both what is possible and what is relevant. We urge enterprises to do a thorough job of evaluating analytics and data systems and tools and offer this Buyers Guide as both the results of our in-depth analysis of these providers and as an evaluation methodology.



How To Use This Buyers Guide

Evaluating Software Providers: The Process

We recommend using the Buyers Guide to assess and evaluate new or existing software providers for your enterprise. The market research can be used as an evaluation framework to establish a formal request for information from providers on products and customer experience and will shorten the cycle time when creating an RFI. The steps listed below provide a process that can facilitate best possible outcomes.

1. Define the business case and goals.
Define the mission and business case for investment and the expected outcomes from your organizational and technological efforts.
2. Specify the business needs.
Defining the business requirements helps identify what specific capabilities are required with respect to people, processes, information and technology.
3. Assess the required roles and responsibilities.
Identify the individuals required for success at every level of the enterprise from executives to frontline workers and determine the needs of each.
4. Outline the project's critical path.
What needs to be done, in what order and who will do it? This outline should make clear the prior dependencies at each step of the project plan.
5. Ascertain the technology approach.
Determine the business and technology approach that most closely aligns to your enterprise's requirements.
6. Establish software provider evaluation criteria.
Utilize the product experience: Adaptability, Capability, Manageability, Reliability and Usability, and the customer experience in TCO/ROI and Validation.
7. Evaluate and select the technology properly.
Weight the categories in the technology evaluation criteria to reflect your enterprise's priorities to determine the short list of software providers and products.
8. Establish the business initiative team to start the project.
Identify who will lead the project and the members of the team needed to plan and execute it with timelines, priorities and resources.



The Findings

All of the products we evaluated are feature-rich, but not all the capabilities offered by a software provider are equally valuable to types of workers or support everything needed to manage products on a continuous basis. Moreover, the existence of too many capabilities may be a negative factor for an enterprise if it introduces unnecessary complexity. Nonetheless, you may decide that a larger number of features in the product is a plus, especially if some of them match your enterprise's established practices or support an initiative that is driving the purchase of new software.

Factors beyond features and functions or software provider assessments may become a deciding factor. For example, an enterprise may face budget constraints such that the TCO evaluation can tip the balance to one provider or another. This is where the Value Index methodology and the appropriate category weighting can be applied to determine the best fit of software providers and products to your specific needs.

Overall Scoring of Software Providers Across Categories

The research finds Oracle atop the list, followed by SAP and Microsoft. Software providers that place in the top three of a category earn the designation of Leader. Oracle has done so in six categories; SAP in five; Microsoft in four; and AWS, MicroStrategy and Google in one category each.

The overall representation of the research below places the rating of the Product Experience and Customer Experience on the x and y axes, respectively, to provide a visual representation and classification of the software providers. Those providers whose Product Experience have a higher weighted performance to the axis in aggregate of the five product categories place farther to the right, while the performance and weighting for the two Customer Experience categories determines placement on the vertical axis. In short, software providers that place closer to the upper-right on this chart performed better than those closer to the lower-left.

The research places software providers into one of four overall categories: Assurance, Exemplary, Merit or Innovative. This representation classifies providers' overall weighted performance.

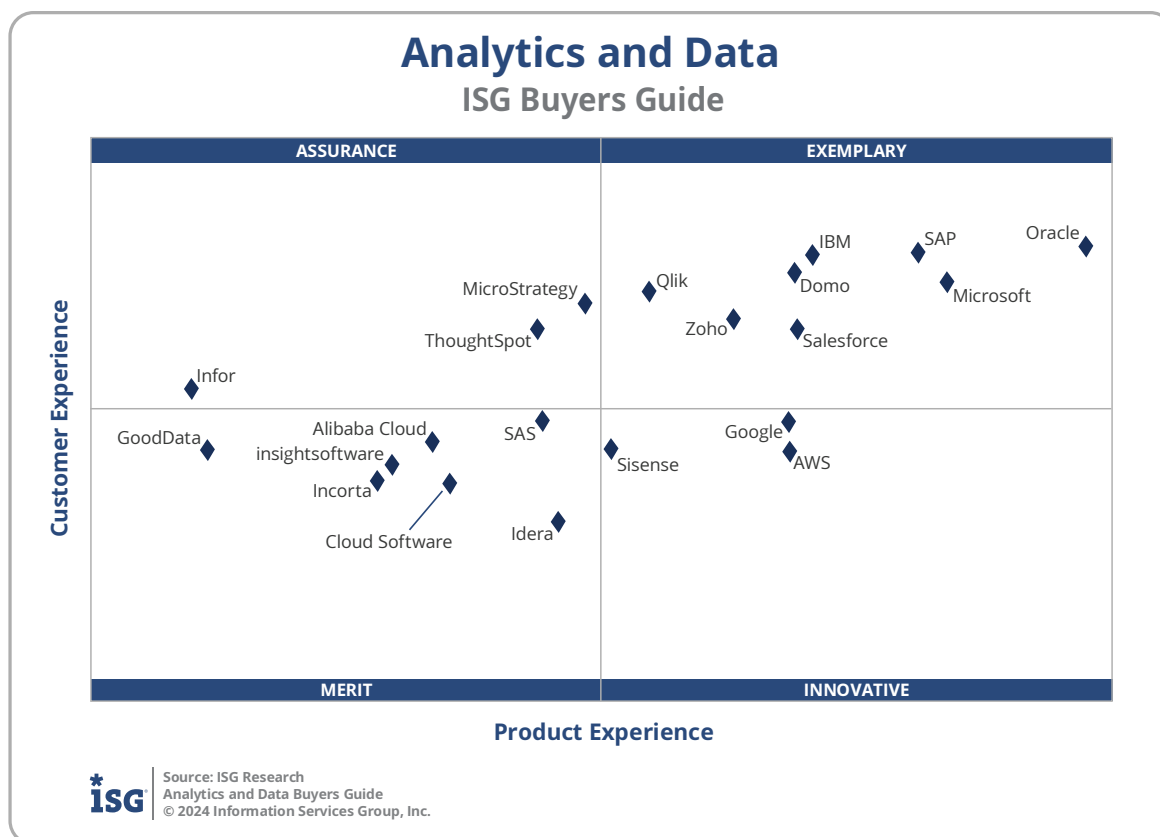
Analytics and Data

Overall

Providers	Grade	Performance
Oracle	A-	Leader 85.3%
SAP	B++	Leader 80.2%
Microsoft	B++	Leader 80.1%
Domo	B++	77.4%
IBM	B++	77.1%
Salesforce	B++	75.3%
Zoho	B+	73.9%
Qlik	B+	72.5%
MicroStrategy	B+	71.7%
Google	B+	70.5%
AWS	B+	70.4%
ThoughtSpot	B+	69.2%
Sisense	B	67.0%
SAS	B	66.5%
Idera	B	63.7%
Cloud Software	B-	61.0%
insightsoftware	B-	59.9%
Incorta	B-	59.3%
Alibaba Cloud	B-	58.8%
Infor	C++	56.1%
GoodData	C++	53.7%



Source: ISG Research
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Exemplary: The categorization and placement of software providers in Exemplary (upper right) represent those that performed the best in meeting the overall Product and Customer Experience requirements. The providers rated Exemplary are: Domo, IBM, Microsoft, Oracle, Qlik, Salesforce, SAP and Zoho.

Innovative: The categorization and placement of software providers in Innovative (lower right) represent those that performed the best in meeting the overall Product Experience requirements but did not achieve the highest levels of requirements in Customer Experience. The providers rated Innovative are: AWS, Google and Sisense.

Assurance: The categorization and placement of software providers in Assurance (upper left) represent those that achieved the highest levels in the overall Customer Experience requirements but did not achieve the highest levels of Product Experience. The providers rated Assurance are: Infor, ThoughtSpot and MicroStrategy.

Merit: The categorization of software providers in Merit (lower left) represents those that did not exceed the median of performance in Customer or Product Experience or surpass the threshold for the other three categories. The providers rated Merit are: Alibaba Cloud, Cloud Software, GoodData, Idera, Incorta, insightsoftware and SAS.

We warn that close provider placement proximity should not be taken to imply that the packages evaluated are functionally identical or equally well suited for use by every enterprise



or for a specific process. Although there is a high degree of commonality in how enterprises handle analytics and data, there are many idiosyncrasies and differences in how they do these functions that can make one software provider's offering a better fit than another's for a particular enterprise's needs.

We advise enterprises to assess and evaluate software providers based on organizational requirements and use this research as a supplement to internal evaluation of a provider and products.



Product Experience

The process of researching products to address an enterprise's needs should be comprehensive. Our Value Index methodology examines Product Experience and how it aligns with an enterprise's life cycle of onboarding, configuration, operations, usage and maintenance. Too often, software providers are not evaluated for the entirety of the product; instead, they are evaluated on market execution and vision of the future, which are flawed since they do not represent an enterprise's requirements but how the provider operates. As more software providers orient to a complete product experience, evaluations will be more robust.

The research results in Product Experience are ranked at 80%, or four-fifths, of the overall rating using the specific underlying weighted category performance. Importance was placed on the categories as follows: Usability (20%), Capability (30%), Reliability (10%), Adaptability (10%) and Manageability (10%). This weighting impacted the resulting overall ratings in this research. Oracle, Microsoft and SAP were designated Product Experience Leaders.

Analytics and Data

Product Experience

Providers	Grade	Performance
Oracle	A-	Leader 69.7%
Microsoft	A-	Leader 65.1%
SAP	B++	Leader 64.2%
IBM	B++	60.8%
Salesforce	B++	60.4%
Domo	B++	60.1%
AWS	B++	60.0%
Google	B++	60.0%
Zoho	B+	58.2%
Qlik	B+	56.2%
Sisense	B+	55.3%
MicroStrategy	B+	55.0%
Idera	B	53.7%
ThoughtSpot	B	53.5%
SAS	B	53.1%
Cloud Software	B	50.2%
Alibaba Cloud	B-	49.6%
insightsoftware	B-	48.2%
Incorta	B-	47.7%
GoodData	C++	42.2%
Infor	C++	41.5%



Source: ISG Research
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Customer Experience

The importance of a customer relationship with a software provider is essential to the actual success of the products and technology. The advancement of the Customer Experience and the entire life cycle an enterprise has with its software provider is critical for ensuring satisfaction in working with that provider. Technology providers that have chief customer officers are more likely to have greater investments in the customer relationship and focus more on their success. These leaders also need to take responsibility for ensuring this commitment is made abundantly clear on the website and in the buying process and customer journey.

The research results in Customer Experience are ranked at 20%, or one-fifth, using the specific underlying weighted category performance as it relates to the framework of commitment and value to the software provider-customer relationship. The two evaluation categories are Validation (10%) and TCO/ROI (10%), which are weighted to represent their importance to the overall research.

The software providers that evaluated the highest overall in the aggregated and weighted Customer Experience category are Oracle, SAP and IBM. These category leaders best communicate commitment and dedication to customer needs.

Software providers that did not perform well in this category were unable to provide sufficient customer case studies to demonstrate success or articulate their commitment to customer experience and an enterprise's journey. The selection of a software provider means a continuous investment by the enterprise, so a holistic evaluation must include examination of how they support their customer experience.

Analytics and Data Customer Experience

Providers	Grade	Performance
Oracle	A-	Leader 17.3%
SAP	A-	Leader 17.1%
IBM	A-	Leader 17.0%
Domo	A-	16.6%
Microsoft	A-	16.4%
Qlik	B++	16.2%
MicroStrategy	B++	15.7%
Zoho	B++	15.5%
Salesforce	B++	15.2%
ThoughtSpot	B++	15.0%
Infor	B	13.5%
Google	B	13.4%
AWS	B	13.1%
SAS	B	12.9%
Sisense	B-	12.3%
Alibaba Cloud	B-	12.2%
GoodData	B-	12.1%
insightsoftware	B-	11.6%
Incorta	C++	11.2%
Cloud Software	C++	11.0%
Idera	C++	10.2%



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Appendix: Software Provider Inclusion

For inclusion in the ISG Buyers Guide™ for Analytics and Data in 2024, a software provider must be in good standing financially and ethically, have more than 50 dedicated workers, at least \$50 million in annual or projected revenue verified using independent sources, sell products and provide support on at least two continents, and have at least 100 customers. The principal source of the relevant business unit's revenue must be software-related and there must have been at least one major software release in the past 12 months. The product must be actively marketed as an analytics product and capable of accessing data from a variety of sources, modeling the data for analysis, analyzing the data using a variety of techniques, communicating the results in a variety of ways and supporting the data and analytics processes within an organization.

The research is designed to be independent of the specifics of software provider packaging and pricing. To represent the real-world environment in which businesses operate, we include providers that offer suites or packages of products that may include relevant individual modules or applications. If a software provider is actively marketing, selling and developing a product for the general market and it is reflected on the provider's website that the product is within the scope of the research, that provider is automatically evaluated for inclusion.

All software providers that offer relevant analytics and data products and meet the inclusion requirements were invited to participate in the evaluation process at no cost to them.

Software providers that meet our inclusion criteria but did not completely participate in our Buyers Guide were assessed solely on publicly available information. As this could have a significant impact on classification and ratings, we recommend additional scrutiny when evaluating those providers.



Products Evaluated

Provider	Product Names	Version	Release Month/Year
Alibaba Cloud	DataV	6.0	June 2023
	Quick BI	5.0.1	April 2024
AWS	Amazon QuickSight	October 2024	October 2024
Cloud Software	Spotfire	14.4	June 2024
Domo	Domo	October 2024	October 2024
GoodData	GoodData Cloud	October 9	October 2024
	GoodData Cloud Native	GoodData.CN.3.20	
Google	Looker / Looker Studio Pro	24.18 / October 31	October 2024
IBM	IBM Cognos Analytics	12.0.4	October 2024
Idera	Yellowfin	9.13.0.1	October 2024
Incorta	Incorta Data Direct Platform; Incorta Cloud	2024.7.2	July 2024
Infor	Infor Birst	2024.x	October 2024
insightsoftware	Logi Symphony	24.3	October 2024
Microsoft	Power BI	October 2024 Update (2.137.751.0)	October 2024
MicroStrategy	MicroStrategy ONE	11.4.9	September 2024
Oracle	Oracle Analytics Cloud; Oracle Analytics Server	2024 F24230-25	September 2024
Qlik	Qlik Cloud; Qlik Sense	1.174.9 May Release	October 2024 May 2024
Salesforce	Tableau Cloud, Tableau Server, Tableau Embedded Analytics, Tableau Data Management, Tableau Advanced Management, Tableau Desktop, Tableau Prep, Tableau Mobile	2024.3	October 2024



SAP	SAP Analytics Cloud	Q3 2024 (2024.15)	August 2024
SAS	SAS Viya	2024.10	October 2024
Sisense	Sisense Fusion	L2024.3	October 2024
ThoughtSpot	ThoughtSpot Analytics	10.1.0.cl / 9.8.0sw	October 2024
Zoho	Zoho Analytics	6.0	September 2024



Providers of Promise

We did not include software providers that, as a result of our research and analysis, did not satisfy the criteria for inclusion in this Buyers Guide. These are listed below as “Providers of Promise.”

Provider	Product	\$50M Revenue	50 Workers	100 Customers	Available Information
Kyvos	Kyvos Insights	No	Yes	Yes	Yes
OpenText	Magellan	Yes	Yes	Yes	No
Pyramid Analytics	Pyramid	No	Yes	Yes	Yes
Sigma Computing	Sigma	No	Yes	Yes	Yes



About ISG Software Research

ISG Software Research provides expert market insights on vertical industries, business, AI and IT through comprehensive consulting, advisory and research services with world-class industry analysts and client experience. Our ISG Buyers Guides offer comprehensive ratings and insights into technology providers and products. Explore our research at www.isg-research.net.

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