# Embedded Analytics Buyers Guide

Software Provider and Product Assessment



**İSG** Research



# **Embedded Analytics**

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

ISG Research defines Embedded Analytics as the ability to incorporate analytic applications, or portions thereof, into other business applications and business processes. It includes application programming interfaces that interact with analytic applications, including metadata and provisioning. It also involves the ability to rebrand analytics components to match other organizational applications.

For many years, analytics providers offered large, monolithic applications that were difficult to embed in other applications. APIs for accessing and interacting with these applications were extremely limited. As overall application architectures evolved toward microservices, analytics providers followed suit and evolved the products into related services and components. This change made individual components more easily accessible and required software providers to create APIs between components. As the market penetration of analytics products plateaued, providers recognized the opportunity to publish the APIs to reach a larger user base via embedded analytics. Today, nearly all analytics providers have rich APIs and a strategy for embedding.

Analytics embedded in business processes and applications are more accessible to line-ofbusiness workers, and analyses are easier to perform in part because the application collects and assembles data. Our research shows that data preparation can be the most timeconsuming step in the analytical process, and embedded analytics can dramatically reduce or

eliminate this step. Analysis is also easier to consume because there is no need to switch context between the business application and an analysis tool.

Perhaps more importantly, analytics embedded within applications can more easily lead to action. For instance, if an analysis suggests a change in pricing, the appropriate logic, if included, can make those changes. If an analysis identifies a marketing campaign for a specific customer segment, the technology can perform the segmentation and launch the. campaign. For these reasons, we expect that through 2026, more than two-thirds of line-of-business workers



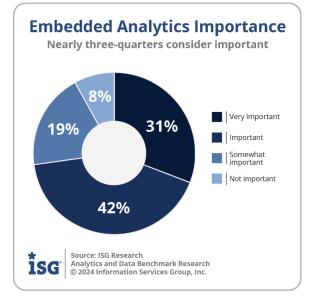


will have immediate access to cross-functional analytics embedded in activities and processes, helping make operational decision-making more efficient and effective.

This Buyers Guide focuses on the challenge of delivering analytics and business intelligence in the context of business processes and applications. These needs are substantial—more than one-half of organizations (53%) report that users of analytics tools cannot perform analyses without IT involvement. Our research on cloud-based analytics, predictive analytics, data preparation and big data analytics shows strong interest in embedded delivery of those capabilities. Analytics providers understand the need to deliver embedded analytics; most have been developing and enhancing APIs and other mechanisms to integrate analytics more tightly into business processes and applications. However, it can be challenging for analytics and business intelligence software providers to package and deliver the capabilities in a way that makes them easy to embed into other applications and processes. Providers have made

significant strides to overcome these challenges because organizations recognize the importance of embedded analytics. Nearly three-quarters of participants in our Analytics and Data Benchmark Research consider embedded analytics important.

Software providers must offer tools for defining data models and accessing data from applications and other data sources. These tools will likely support a different audience than typical analytics tools. An application development team, for instance, would create the framework for line-of-business workers to perform analyses. In addition, the tools must provide mechanisms to integrate inputs to and outputs from the



analytical processes with other applications. Embedded analytics also requires programmatic access to the management and administration functions to minimize installation and maintenance of the system for line-of-business personnel.

Enterprises are aware of the value of embedded analytics. The next step is to embrace it by determining the embedded analytics capabilities offered in currently deployed software and comparing those with what other providers offer. Evaluating embedded analytics also requires an assessment of the underlying analytics capabilities. Great APIs and software development kits can only do so much if the foundation of underlying analytics is weak. Consequently, this Buyers Guide combines a comparison of embedded analytics capabilities with core analytics capabilities to determine the provider's overall rankings. Enterprises can then use this report to help guide purchasing decisions and conversations with providers about the roadmap for embedded analytics. The market continues to evolve, but organizations can realize value today that will improve analytics processes.



The ISG Buyers Guide™ for Embedded Analytics evaluates software providers and products in the three key areas of data, analytics and communications. It includes much of the criteria used in our Overall Analytics and Data Buyers Guide but emphasizes the capabilities that support integration and customization.

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



# **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 Embedded Analytics 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 embedded analytics 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 embedded analytics 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 embedded analytics 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 embedded analytics 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 embedded analytics 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. <u>Define the business case and goals.</u>

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 Microsoft and SAP. Companies that place

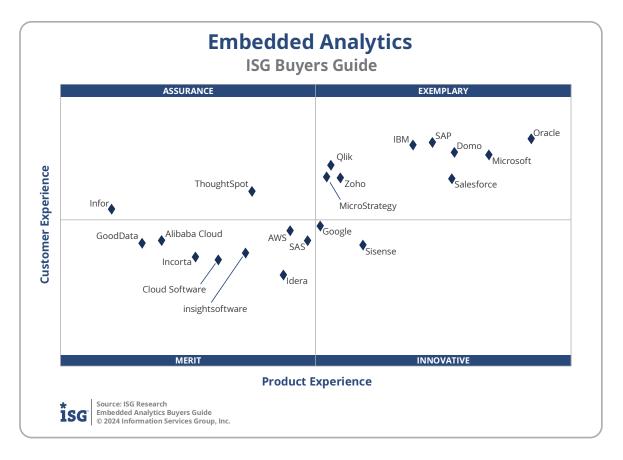
in the top three of a category earn the designation of Leader. Oracle has done so in six categories; SAP and Microsoft in five; and AWS, Domo, Google, IBM and Qlik in one category.

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.

Providers	Grade	Performance		
Oracle	A-	Leader	86.5%	
Microsoft	A-	Leader	82.1%	
SAP	B++	Leader	79.8%	
IBM	B++		78.6%	
Domo	B++		78.4%	
Salesforce	B++		76.8%	
Zoho	B+		74.1%	
Qlik	B+		73.5%	
MicroStrategy	B+		72.9%	
Google	B+		72.2%	
AWS	B+		70.4%	
Sisense	B+		70.3%	
SAS	В		68.5%	
ThoughtSpot	В		68.1%	
Idera	В		64.9%	
insightsoftware	В		62.5%	
Cloud Software	B-		61.6%	
Alibaba Cloud	B-		61.4%	
Incorta	B-		50.2%	
GoodData	B-	5	7.9%	
Infor	B-	5	7.2%	





**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, MicroStrategy, 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: 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 and ThoughtSpot.

**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, AWS, 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 embedded analytics, 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 (5%), Capability (40%), Reliability (5%), Adaptability (20%) and Manageability (10%). This weighting impacted the resulting overall ratings in this research. Oracle, Microsoft and Domo were designated Product Experience Leaders. While not a Leader,

Providers	Grade			
Oracle	A-	Leader	68.0%	
Microsoft	A-	Leader	65.1%	
Domo	B++	Leader	62.9%	
Salesforce	B++		62.8%	
SAP	B++		61.6%	
IBM	B++		60.3%	
Sisense	B+		58.8%	
Zoho	B+		58.7%	
Qlik	B+		58.1%	
MicroStrategy	B+		57.9%	
Google	B+		57.2%	
SAS	B+		56.7%	
AWS	B+		55.9%	
Idera	B+		55.6%	
ThoughtSpot	В		53.1%	
insightsoftware	В		52.7%	
Cloud Software	В		50.8%	
Incorta	B-	4	19.6%	
Alibaba Cloud	B-	4	7.4%	
GoodData	B-	40	5.3%	
nfor	C++	44	.8%	

Salesforce was also found to meet a broad range of enterprise product experience requirements.



#### **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 categories 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

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	В	1	3.5%	
Google	В	1	3.4%	
AWS	В	1:	3.1%	
SAS	В	12	2.9%	
Sisense	B-	12	.3%	
Alibaba Cloud	B-	12.	.2%	
GoodData	B-	12.	1%	
insightsoftware	B-	11.6	5%	
Incorta	C++	11.2	%	
Cloud Software	C++	11.0	%	
Idera	C++	10.2%		

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.



# Appendix: Software Provider Inclusion

For inclusion in the ISG Buyers Guide™ for Embedded Analytics in 2024, a software provider must be in good standing financially and ethically, have more than 50 dedicated Workers and 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 last 12 months. The product must be actively marketed as an analytics product that can be customized and embedded in other applications. It must be 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 embedded analytics 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 Quick Bl	6.0 5.0.1	June 2023 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 GoodData Cloud Native	October 9 GoodData.CN.3.20	October 2024
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	10.3.0.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 authoritative market research and coverage on the business and IT aspects of the software industry. We distribute research and insights daily through our community, and we provide a portfolio of consulting, advisory, research and education services for enterprises, software and service providers, and investment firms. Our premier service, ISG Software Research On-Demand, provides structured education and advisory support with subject-matter expertise and experience in the software industry. ISG Research Buyers Guides support the RFI/RFP process and help enterprises assess, evaluate and select software providers through tailored Assessment Services and our Value Index methodology. Visit <a href="https://www.ventanaresearch.com">www.ventanaresearch.com</a> to sign up for free community membership with access to our research and insights.

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