

# Embedded Analytics and Data Value Index

2021 Vendor and Product Assessment



REPORT



VENTANA RESEARCH

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**Bend, Oregon**  
**April 2021**

Ventana Research performed this research and analysis independently. Our goals were to determine the Value Index for Embedded Analytics and Data and to evaluate vendors and products in accordance with the Ventana Research methodology and blueprint. We charged no fees for this research and invited to participate all vendors that are delivering relevant applications to enable embedded analytics and data. This report includes products generally available as of December 15, 2020.

Our purpose in conducting this research was to evaluate the maturity of software vendors and products and their value for enterprise use in embedded analytics and data. Nothing in this report of our research is intended to imply that one vendor or product is the right choice for any particular organization. Rather, it provides a baseline of knowledge that organizations can use to evaluate vendors and products to manage and improve embedded analytics and data. Unlike IT analyst firm reports that use subjective factors to rate vendors, our findings are drawn from thorough, research-based analysis of customer assurance and product categories that best represent how an organization should evaluate its technology supplier.

The complete Value Index report with detailed analysis is available for purchase. We can provide additional insights on this Value Index and advice on its relevance to an organization through the Ventana On-Demand research and advisory service. Assessment services based on this research also are available.

We certify that Ventana Research performed the research to the best of our ability, that the analysis is a faithful representation of our knowledge of vendors and products, and that the analysis and scoring are our own.

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## Value Index Overview

For almost two decades, Ventana Research has conducted market research in a spectrum of related areas including business planning, data preparation, machine learning, data and analytics in the cloud, natural language processing, and big data analytics and integration. We have also examined the expansion of analytics through the use of cloud computing, mobile and advanced analytics, as well as how analytics and data products use collaboration capabilities, social media techniques and location-related analytics. The findings of these research undertakings contribute to our comprehensive approach.

This report on the Embedded Analytics and Data Value Index is the distillation of a year of market and product research efforts by Ventana Research. It is an assessment of how well vendors' offerings will address buyers' requirements for analytics and data software. The index is structured to replicate an RFI/RFP process by incorporating all criteria needed to evaluate, select, utilize and maintain technology, and maintain relationships with vendors.

In this Value Index, Ventana 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: Usability, Manageability, Reliability, Capability and Adaptability. In addition, we consider two customer-experience categories: Vendor Validation, and Total Cost of Ownership and Return on Investment (TCO/ROI). To assess functionality, one of the components of Capability, we applied the Ventana Research Value Index methodology and blueprint, which links the personas and processes for embedded analytics and data to an organization's requirements.



**Ventana Research has designed the Value Index to provide a balanced perspective of vendors and products that is rooted in an understanding of business drivers and needs.**

Unlike many IT analyst firms that rank vendors from an IT-only perspective or consider futures or vision over what is available in the products today, Ventana Research has designed the Value Index to provide a balanced perspective of vendors and products that is rooted in an understanding of business drivers and needs. This approach not only reduces cost and time but also minimizes the risk of making a decision that is bad for the business. Using the Value Index will enable your organization to achieve the levels of efficiency and effectiveness needed to use embedded analytics and data.

We use our research-based analytics and methodology to generate the Value Index ratings. We then build them into a set of indicators that we present in both analytic and graphic form, each



depicting the value of a specific vendor's offering in terms of what it can deliver relevant to your embedded analytics and data needs.

The Value Index is not an abstraction; we use a carefully crafted best practices-based methodology to represent how organizations assess vendors and products. We have designed the Value Index to ensure that it provides objective research and guidance to organizations looking to assess and evaluate their applications for business and IT needs.



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The structure of the Value Index reflects our understanding that the effective evaluation of vendors and products involves far more than just examining product features, potential revenue or customers generated from marketing and sales. We believe it is important to take this comprehensive research-based approach, since making the wrong choice of an embedded analytics and data technology can raise the total cost of ownership, lower the return on investment and hamper an organization's ability to reach its 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 vendors that does not represent a best fit for your organization.

To ensure the accuracy of the information we collected, we asked participating vendors to provide product and company information across the seven categories that taken together reflect the concerns of a well-crafted RFP. Ventana Research then validated the information, first independently through our database of product information and extensive web-based research, and then in consultation with the vendors. Most selected vendors also participated in one-on-one consultative sessions, after which we requested them to provide additional documentation to support any new input.

Ventana Research believes that an objective review of specific vendors and products is critical to the establishment of embedded analytics and data software and applications. An organization's review should include a thorough analysis of both what is possible and what is relevant. We urge organizations to do a thorough job of evaluating embedded analytics and data systems and tools and offer this Value Index as both the results of our in-depth analysis of these vendors and as an evaluation methodology.



## The Findings

All of the products we evaluated are feature-rich, but not all the capabilities they offer are equally valuable to users or support everything needed across the entire lifecycle of use. Moreover, the existence of too many capabilities may be a negative factor for an organization if it introduces unnecessary complexity. Nonetheless, you may decide that a larger number of functions is a plus, especially if some of them match your organization's established practices or better support a new initiative that is driving the purchase of new software.

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

### Overall Scoring of Vendors Across Categories

The Value Index for Embedded Analytics and Data in 2021 finds IBM first on the list with Qlik in second place and MicroStrategy in third. Companies that place in the top three in any category earn the designation Value Index Leader. Qlik has done so in four of the seven categories; IBM and MicroStrategy have done so in three; Board, Information Builders, Oracle, SAP and Yellowfin are Value Index Leaders in two; and Tableau in one.

### Ventana Research Value Index

Embedded Analytics and Data: Overall

Vendors		Performance
IBM	1	78.1%
Qlik	2	75.8%
MicroStrategy	3	75.7%
Information Builders	4	74.4%
Domo	5	72.6%
Oracle	6	72.3%
Yellowfin	7	71.8%
SAP	8	71.3%
SAS	9	70.0%
Tableau	10	69.3%
Microsoft	11	66.1%
Board	12	64.5%
Infor	13	64.1%
Sisense	14	61.7%
Tibco	15	59.1%
ThoughtSpot	16	56.5%
Google	17	55.9%
Amazon	18	48.2%



Source: Ventana Research Value Index  
Embedded Analytics and Data  
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## IBM

### Company and Product Profile

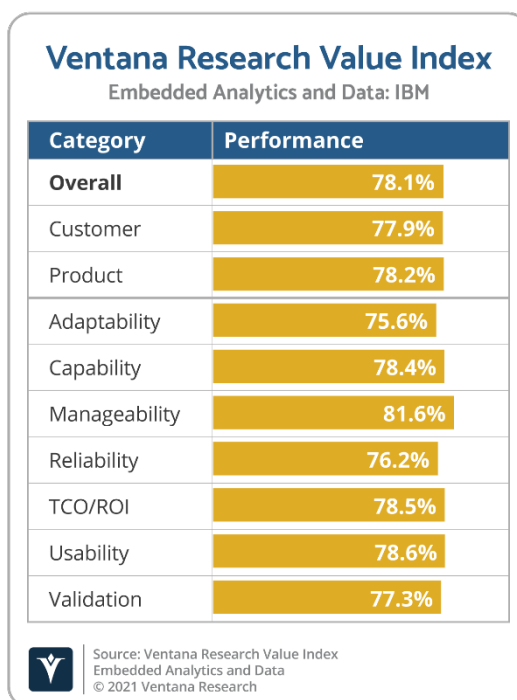
“IBM is a leading cloud platform and cognitive solutions company. Restlessly reinventing since 1911, we are the largest technology and consulting employer in the world, with more than 350,000 employees serving clients in 170 countries.”

“IBM Cognos Dashboard Embedded is an API-based solution that lets developers easily add end-to-end data visualization capabilities to their applications. Embed data visualizations directly into your applications. IBM Cognos Dashboard Embedded gives developers a way to embed an intuitive, drag-and-drop visualization tool, providing end users the ability to explore data and create visualizations that answer the unique questions important to your business.”

### Ventana Research Evaluation

IBM, one of the largest providers of technology products and services, has been providing BI capabilities for decades. It was categorized as an Exemplary Vendor and an Overall Value Index Leader ranking first overall in this evaluation. IBM was a Value Index Leader in Customer Experience, in Product Experience, where it was first, and within Capability and Manageability, where it was first and within TCO/ROI.

IBM Cognos Analytics provides REST APIs and JavaScript APIs to enable embedding and extending analytics. It also provides a URL for interacting with Cognos components and a command line interface. Custom visualizations can be developed using JavaScript. The user interface can be customized to reflect corporate branding.



Despite being the top performer, a few visualizations and analytical functions would have improved IBM’s rating in the Capability category. IBM would have performed better in Adaptability with more support for integration into business processes and applications. Validation rating would improve if more specific information about services related to Cognos Analytics were easily accessible to prospects.



## About Ventana Research

Ventana Research is the most authoritative and respected benchmark business technology research and advisory services firm. We provide insight and expert guidance on mainstream and disruptive technologies through a unique set of research-based offerings including Benchmark Research and technology evaluation assessments, education workshops and our research and advisory services, Ventana On-Demand. Our unparalleled understanding of the role of technology in optimizing business processes and performance and our best practices guidance are rooted in our rigorous research-based benchmarking of people, processes, information and technology across business and IT functions in every industry. This Benchmark Research plus our market coverage and in-depth knowledge of hundreds of technology providers means we can deliver education and expertise to our clients to increase the value they derive from technology investments while reducing time, cost and risk.

Ventana Research provides the most comprehensive analyst and research coverage in the industry; business and IT professionals worldwide are members of our community and benefit from Ventana Research's insights, as do highly regarded media and association partners around the globe. Our views and analyses are distributed daily through blogs and social media channels including [Twitter](#), [Facebook](#) and [LinkedIn](#).

To learn how Ventana Research advances the maturity of organizations' use of information and technology through benchmark research, education and advisory services, visit [www.ventanaresearch.com](http://www.ventanaresearch.com).

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## What We Offer

Ventana Research provides a variety of customizable services to meet your specific needs including workshops, assessments and advisory services. Our education service, led by analysts with more than 20 years of experience, provides a great starting point to learn about important business and technology topics from compliance to BI to building a strategy and driving adoption of best practices. We also offer tailored Value Index Assessment Services to help you define your strategy, build a business case and connect the business and technology phases of your project. And we provide Ventana On-Demand (VOD) access to our analysts on an as-needed basis to help you keep up with market trends, technologies and best practices.

Everything at Ventana Research begins with our focused research, of which this Value Index is a part. We work with thousands of organizations worldwide, conducting research and analyzing market trends, best practices and technologies to help our clients improve the efficiency and effectiveness of their organizations. Through the Ventana Research community we also provide opportunities for professionals to share challenges, best practices and methodologies. Sign up for Individual membership at <https://www.ventanaresearch.com/> to gain access to our weekly insights and learn about upcoming educational and collaboration events, including webinars, conferences and opportunities for social collaboration on the Internet.

We offer the following membership levels for business and IT professionals:

**Individual membership:** For business and IT professionals interested in full access to our website and analysts for themselves. The membership includes access to our library of hundreds of white papers and research notes, briefings, and telephone or email consulting sessions to provide input and feedback.

**Team membership:** For business and IT professionals interested in full access to our website and analysts for a five-member team. The membership includes access to our library of hundreds of white papers and research notes, briefings, telephone or email consulting sessions to provide input and feedback, and use of Ventana Research materials for business purposes.

**Business membership:** For business and IT professionals interested in full access to our website and analysts for their larger team or small business unit. The membership includes access to our library of hundreds of white papers and research notes, briefings, telephone or email consulting sessions to provide input and feedback, use of Ventana Research materials for business purposes, and additional analyst availability.





**Business Plus membership:** For business and IT professionals interested in full access to our website and analysts for larger numbers of company employees. The membership includes access to our library of hundreds of white papers and research notes, briefings, telephone or email consulting sessions to provide input and feedback, quotes and validation for media, use of Ventana Research materials for business purposes, additional analyst availability, and access to our team for scheduled strategy consulting sessions.

**[Additional services](#) are available for solution providers, software vendors, consultants and systems integrators.**

This Value Index report is one of a series that are available for purchase. Also available are any of our extensive library of Benchmark Research reports. To purchase a report or learn more about Ventana Research services—including workshops, assessments and advice—please contact [sales@ventanaresearch.com](mailto:sales@ventanaresearch.com).