# Mobile Analytics Buyers Guide

2023 Vendor and Product Assessment





#### Bend, Oregon

#### September 2023

The information contained in this Ventana Research Buyers Guide provides a baseline of knowledge that organizations can use to evaluate the sophistication of vendors and products in the area of mobile analytics. Our findings are drawn from thorough, research-based analysis of product and customer experience categories that best represent how an organization should evaluate technology vendors.

Nothing in this report and our research is intended to imply that one vendor or product is the right choice for any one particular organization. Rather, our goal is to provide an objective ranking and rating of vendors and products related to the topic of this Buyers Guide using our research methodology and blueprint for successful evaluation and selection. We performed this research independent of any external influence, charged no fees for any technology vendor to participate in the research and invited all relevant vendors that met our inclusion criteria. This report includes products generally available as August 1, 2023.

The complete Buyers Guide report and research is available to be licensed for use across an organization or the Internet. We provide insights on the technology industry, software categories and vendors related to this Buyers Guide to organizations through our Ventana On-Demand research and advisory service. We also offer assessment services using this research to help discover and provide guidance on vendor selection.

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





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# **Mobile Analytics**

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

For analytics to be effective, they need to be available to line-of-business personnel as needed in their normal course of conducting business, which today means providing rich mobile access to analytics to support a mobile workforce seeking to conduct business in any location at any time. Workers today expect these mobile capabilities, so organizations must make choices to provide analytics platforms that can deliver. Many of these workers switch between desktop/laptop devices when in the office to mobile devices when outside the office or even when attending an internal meeting, so integration between these two modes is important as well.

This Buyers Guide assessment focuses on the challenge of delivering analytics and business intelligence (BI) on a variety of mobile devices including smartphones and tablets. When it comes to smaller devices such as smartphones, it may not be realistic to expect

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Two-thirds of organizations (67%) consider it important to access analytics from mobile devices.

full-blown analyses due to the small form factor, but screen resolution on larger devices such as tablets can support nearly any type of functionality that mobile personnel may need. These needs are substantial: two-thirds of organizations (67%) consider it important to access analytics from mobile devices and more than two-fifths (45%) of organizations report that it is important or very important to be able to address data preparation tasks on mobile devices.

Analytics vendors are divided in their approach to providing mobile capabilities. Many vendors have invested in developing applications that are native to the two platforms that dominate the mobile landscape: Apple's iOS and Google's Android operating system. Other vendors have opted to invest in an HTML5 approach, often in combination with a helper application that provides some of the native capabilities such as participation in the store or marketplace where applications are distributed. Our research suggests that both approaches can be effective.



Vendors also differ in their approach to designing the mobile applications. Some take a design once, deploy anywhere approach where every visualization is available on all devices. This approach requires some interpretation on what the best mobile layout might be for each analysis. For instance, a dashboard may consist of four individual visualizations each occupying one quadrant of the display. On a small mobile device such as a smartphone, these are often presented with each visualization occupying the entire screen and vertical scrolling enabled to move through all four. Other vendors offer a mobile design view that offers the opportunity not only to preview how the devices will display information but to design visualizations specifically for mobile devices. The former approach makes it easier to build and manage the applications. The latter allows for more control over the use of limited screen real estate for mobile devices.

The small form factor of these mobile devices, especially smartphones, has helped push the boundaries on ease of use. Users can't be expected to make multiple selections and

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Mobile devices offer capabilities such as voice interaction, location information and cameras that can enhance the user experience.

accomplish complex interactions using a small display, so vendors have simplified how tasks are performed. In addition, mobile devices offer capabilities such as voice interaction, location information and cameras that can enhance the user experience. Voice interaction can be used for natural language query and natural language responses, and we are starting to see multilingual natural language capabilities. As support for wearables becomes more prevalent, voice interaction could make those devices much more interactive. In some cases, mobile device information can be used to

initiate queries or charts based on a customer or vendor's location information. Cameras can identify products on retail store shelves and their location to help drive sales analyses and projections.

We also see a growing interest in — and a growing set of capabilities for — collaboration in conjunction with analytics. Two-thirds of organizations report they are using or plan to use collaboration with analytics. Collaboration provides a way for organizations to derive more value from their analytics by sharing results and interacting with others who can put the information to use in the operations of the business. Collaboration also helps make it easier for individuals to find the information or analyses they need more quickly. Mobile technology is critical for successful collaboration because it reaches so far into the





community of potential collaborators. They can be informed via their mobile devices that a topic of interest requires their input or that new information is available.

This research evaluates the following vendors that offer products that address key elements of mobile data as we define it: AWS, Cloud Software Group, Domo, GoodData, Google, IBM, Idera, Incorta, Infor, insightsoftware, Microsoft, MicroStrategy, Oracle, Pyramid Analytics, Qlik, SAP, SAS, Sigma Computing, Sisense, Tableau (Salesforce), ThoughtSpot and Zoho.



# **Buyers Guide Overview**

For over two decades, Ventana Research has conducted market research in a spectrum of areas across business applications, tools and technologies. Ventana Research has designed the Buyers Guide to provide a balanced perspective of vendors and products that is rooted in an understanding of the business requirement in any organization. Utilization of our research methodology and decades of experience enables our Buyers Guide to be an effective method to assess and select technology vendors and products. The findings of this research undertaking contribute to our comprehensive approach to ranking and rating vendors in a manner that is based on the assessments completed by an organization.

This Ventana Research Buyers Guide: Mobile Analytics is the distillation of over a year of market and product research efforts. It is an assessment of how well vendors' offerings will address organizations requirements for mobile analytics software. The index is structured to support a request for information (RFI) that could be used in the RFP process by incorporating all criteria needed to evaluate, select, utilize and maintain relationships with technology vendors. An effective product and customer experience with a technology vendor can ensure the best long-term relationship and value achieved from a resource and financial investment.



Ventana Research has designed the Buyers Guide to provide a balanced perspective of vendors and products that is rooted in an understanding of business requirements in any organization.

In this Buyers Guide, 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: Adaptability, Capability, Manageability, Reliability, and Usability. In addition, we consider two customer-experience categories: 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 mobile analytics to an organization's requirements.



The structure of the research 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 a vendor's marketing and sales efforts. We believe it

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Ventana Research believes that an objective review of vendors and products is a critical business strategy for the adoption and implementation of software. is important to take a comprehensive research-based approach, since making the wrong choice of a mobile analytics technology can raise the total cost of ownership, lower the return on investment and hamper an organization's ability to reach its potential performance. 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

product and customer experience categories that, taken together, reflect the concerns of a well-crafted RFI. 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 a one-on-one session providing an overview and demonstration, after which we requested they provide additional documentation to support any new input.

Ventana Research believes that an objective review of vendors and products is a critical business strategy for the adoption and implementation of mobile analytics 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 mobile analytics systems and tools and offer this Buyers Guide as both the results of our in-depth analysis of these vendors and as an evaluation methodology.



## How To Use This Buyers Guide

## **Evaluating Vendors: The Process**

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

- Define the business case and goals.
   Define the mission and business case for investment and the expected outcomes from your organizational and technology efforts.
- Specify the business needs.
   Defining the business requirements helps identify what specific capabilities are required with respect to people, processes, information and technology.
- 3. <u>Assess the required roles and responsibilities.</u>
  Identify the individuals required for success at every level of the organization from executives to front line 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.
- Ascertain the technology approach.
   Determine the business and technology approach that most closely aligns to your organization's requirements.
- 6. <u>Establish technology vendor evaluation criteria.</u>
  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 organization's priorities to determine the short list of vendors 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 technology vendor are equally valuable to all 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 organization 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 organization's established practices or support an 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.

#### **Scoring of Vendors Across All Categories**

The research finds Oracle first on the list with SAP in second place and Qlik in third.
Companies that place in the top three of a category earn the designation of Leader.
Oracle has done so in six of the seven categories; SAP in four; IBM in three; Qlik and Domo in two; and Microsoft, MicroStrategy, Sisense and Tableau 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 vendors. Those vendors whose Product Experience have a higher weighted performance to the axis in aggregate of the five

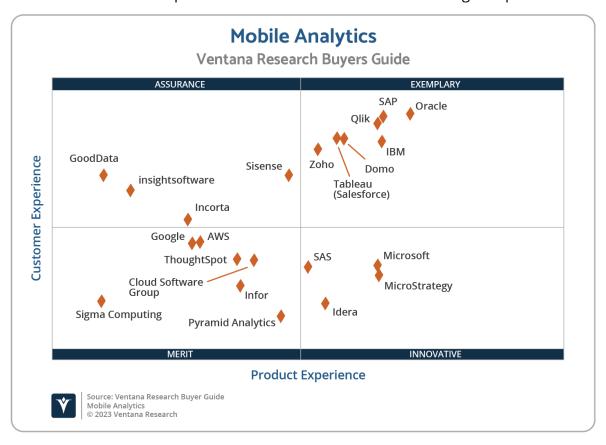
Vendors		Performance
Oracle	1	75.3%
SAP	2	73.3%
Qlik	3	72.6%
IBM	4	72.0%
Domo	5	69.6%
Tableau (Salesforce)	6	69.5%
Zoho	7	67.6%
Microsoft	8	66.5%
MicroStrategy	9	66.4%
Sisense	10	64.6%
SAS	11	61.7%
Idera	12	61.4%
Cloud Software Group	13	58.4%
Pyramid Analytics	14	57.9%
ThoughtSpot	15	57.4%
Infor	16	56.4%
Incorta	17	56.0%
AWS	18	55.7%
Google	19	55.3%
insightsoftware	20	53.6%
GoodData	21	52.3%
Sigma Computing	22	46.7%

product categories place farther to the right, while the performance and weighting for the



two Customer Experience categories determines their placement on the vertical axis. In short, vendors that place closer to the upper-right on this chart performed better than those closer to the lower-left.

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



**Exemplary**: The categorization and placement of vendors in Exemplary (upper right) represent those that performed the best in meeting the overall Product and Customer Experience requirements. The vendors awarded Exemplary are: Domo, IBM, Oracle, Qlik, SAP, Tableau and Zoho.

**Innovative**: The categorization and placement of vendors 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 vendors awarded Innovative are: Idera, Microsoft, MicroStrategy and SAS.

**Assurance**: The categorization and placement of vendors 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 vendors awarded Assurance are: GoodData, Incorta, insightsoftware and Sisense.



**Merit**: The categorization for vendors in Merit (lower left) represent those that did not exceed the median of performance in Customer or Product Experience or surpass the threshold for the other three categories. The vendors awarded Merit are: AWS, Cloud Software Group, Google, Infor, Pyramid Analytics, Sigma Computing and ThoughtSpot.

We warn that close vendor placement proximity should not be taken to imply that the packages evaluated are functionally identical or equally well suited for use by every organization or for a specific process. Although there is a high degree of commonality in how organizations handle mobile analytics, there are many idiosyncrasies and differences in how they do these functions that can make one vendor's offering a better fit than another's for a particular organization's needs.

We advise organizations to assess and evaluate vendors based on their requirements and use this research as a reference to their own evaluation of a vendor and products.



#### **Product Experience**

The process of researching products to address an organization's needs should be comprehensive. Our Value Index methodology examines Product Experience and how it

aligns with an organization's life cycle of onboarding, configuration, operations, usage and maintenance. Too often, vendors are not evaluated for the entirety of the products; instead, they are evaluated on market execution and vision of the future, which are flawed since they do not represent an organization's requirements but how the vendor operates. As more vendors orient to a complete product experience, the more robust of an evaluation can be conducted.

The research based on the methodology of expertise identified the weighting of Product Experience to 90% or four-fifths of the total evaluation. Importance was placed on the categories as follows: Usability (10%), Capability (50%), Reliability (10%), Manageability (10%) and Adaptability (10%). This weighting impacted the resulting overall rankings in this research. Oracle, SAP and IBM were designated Product Experience Leaders as a result of their commitment to mobile analytics technology. While not Leaders, vendor rankings for

Vendors		Performance
Oracle	1	66.3%
SAP	2	64.3%
IBM	3	64.2%
MicroStrategy	4	64.0%
Qlik	5	64.0%
Microsoft	6	64.0%
Domo	7	61.4%
Tableau (Salesforce)	8	61.2%
Idera	9	60.3%
Zoho	10	59.7%
SAS	11	58.8%
Sisense	12	57.7%
Pyramid Analytics	13	57.1%
Cloud Software Group	14	55.1%
Infor	15	54.1%
ThoughtSpot	16	53.9%
AWS	17	51.4%
Google	18	50.9%
Incorta	19	50.5%
insightsoftware	20	46.5%
GoodData	21	44.6%
Sigma Computing	22	44.5%

MicroStrategy, Qlik and Microsoft show that they meet a broad range of enterprise mobile analytics product experience requirements and placed them in the top third.

Many organizations will only evaluate product capabilities and functionality, but the research considers the collection of Adaptability, Manageability, Reliability and Usability nearly as important in mobile analytics processes.



#### **Customer Experience**

The importance of a customer relationship with a vendor is essential to the actual success of the products and technology. The advancement of the Customer Experience and the

entire life cycle an organization has with its vendor is critical for ensuring satisfaction in working with that vendor. Technology providers that have Chief Customer Officers area 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 the marketing of their commitment is made abundantly clear on website and in the buying process and customer journey.

Our Value Index methodology weights
Customer Experience at 10%, or one-tenth, as
it relates to the framework of commitment and
value to the vendor-customer relationship. The
two evaluation categories are Validation (5%)
and TCO/ROI (5%), which are weighted to
represent their importance to the overall
research.

The vendors that rank the highest overall in the aggregated and weighted Customer Experience categories are Oracle, SAP and Qlik. Vendors such as Tableau, Domo, IBM and Zoho were

Mobile Analytics **Customer Experience Vendors Performance** Oracle 8.4% 1 2 8.3% SAP 3 8.1% Tableau (Salesforce) 4 5 Domo 7.7% IBM 6 7.6% Zoho 7 7.4% Sisense 8 6.7% 9 6.7% GoodData 6.3% insightsoftware 10 Incorta 11 Google 12 AWS 13 4.9% ThoughtSpot 14 4.4% Cloud Software Group 15 Microsoft 16 4.2% SAS 17 4.2% 18 4.1% MicroStrategy Infor 19 Sigma Computing 20 3.3% 21 3.2% Idera **Pyramid Analytics** 22 2.8% Source: Ventana Research Buyers Guide © 2023 Ventana Research

not Overall Leaders, but have a high level of commitment to customer experience.

Many vendors we evaluated did not have sufficient information available through their website and presentations. While many have customer case studies to promote their success, they lack depth on their commitment to an organizations' journey. This makes it difficult for organizations to evaluate vendors on the merits of their commitment to customer success. As a result, half of the vendors' performances were scored at less than 50% of the maximum in our evaluation. As the commitment to a vendor is a continuous investment, the importance of supporting customer experience in a holistic evaluation should be included and not underestimated.

# Appendix: Vendor Inclusion

For inclusion in the Ventana Research Mobile Analytics Buyers Guide for 2023, a vendor must be in good standing financially and ethically, and 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 last 18 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 vendor packaging and pricing. To represent the real-world environment in which businesses operate, we include vendors that offer suites or packages of products that may include relevant individual modules or applications. If a vendor is actively marketing, selling and developing a product for the general market and is reflected on its website that it is within the scope of the research, that vendor is automatically evaluated for inclusion.

All vendors that offer relevant mobile analytics products and meet the inclusion requirements were invited to participate in the research evaluation process at no cost to them.

Eleven of the 22 vendors responded positively to our requests for additional information and provided completed questionnaires and demonstrations to help in our evaluation of their mobile analytics products. We categorize participation as follows:

**Complete participation**: The following vendors actively participated and provided completed questionnaires and demonstrations to help in our evaluation of their product: Domo, GoodData, IBM, insightsoftware, Oracle, Pyramid Analytics, Qlik, SAP, Sisense, Tableau and Zoho.

**Partial participation**: The following vendors provided limited information to help in our evaluation: Incorta, Infor and MicroStrategy.

**No participation**: The following vendors provided no information or did not respond to our request: AWS, Cloud Software Group, Google, Idera, Microsoft, SAS, Sigma Computing and ThoughtSpot.



Vendors 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 significant impact on their classification and rating, we recommend additional scrutiny when evaluating those vendors.

#### **Products Evaluated**

Vendor	Product Names	roduct Names Version		Participation Status
AWS	Amazon QuickSight	July 2023	July 2023	None
Cloud Software Group	Spotfire	12.5	June 2023	None
Domo	Domo	August 2023	August 2023	Complete
GoodData	GoodData Cloud GoodData Cloud Native	2.4 (Cloud Native),	July 2023	Complete
Google	Looker	23.12	July 2023	None
IBM	IBM Cognos Analytics	12.0.0	June 2023	Complete
Idera	Yellowfin	9.9.0	July 2023	None
Incorta	Incorta Open Data Delivery Platform, Incorta Cloud	6.0 (on-premises) 2023.7.0 (cloud)	July 2023	Partial
Infor	Infor Birst	2023.04	April 2023	Partial
insightsoftware	Logi Symphony	23.2	June 2023	Complete
Microsoft	Power BI	2.119.323.0	July 2023	None
MicroStrategy	MicroStrategy ONE	11.3.10	June 2023	Partial
Oracle	Oracle Analytics Cloud Oracle Analytics Server	July 2023 Update (Cloud); 2023 (Server)	July 2023 (Cloud); March 2023 (Server)	Complete

## Ventana Research Buyers Guide 2023: Mobile Analytics

Pyramid Analytics	Pyramid Decision Intelligence Platform	2023	June 2023	Complete
Qlik Sense Qlik Cloud		July 2023	July 2023	Complete
SAP	SAP Analytics Cloud	2023.16	August 2023	Complete
SAS SAS Viya		2023.07	July 2023	None
Sigma Computing	Sigma	July 2023	July 2023	None
Sisense	Sisense Fusion	2023.6	July 2023	Complete
Tableau (Salesforce)	Tableau Cloud, Tableau Server, Tableau Embedded Analytics, Tableau Data Management, Tableau Advanced Management, Tableau Desktop, Tableau Prep, Tableau Mobile	2023.2	June 2023	Complete
ThoughtSpot	ThoughtSpot Analytics	9.4.0	July 2023	None
Zoho	Zoho Analytics	5.0 (Build Number 5260)	July 2023	Complete



### **Vendors of Note**

We did not include vendors that, as a result of our research and analysis, did not satisfy the criteria for inclusion in the Buyers Guide. These are listed below as "Vendors of Note."

		\$50M	Actively Market Analytics	50 Dedicated	100
Vendor	Product	Revenue	Product	<b>Employees</b>	customers
Board International	Board	Yes	No	Yes	Yes
Hitachi Vantara	Pentaho Data Platform	Yes	No	Yes	Yes
Kyligence	Kyligence Zen Kyligence Enterprise	No	Yes	Yes	Yes
OpenText	Open Text Magellan	No	Yes	Yes	Yes
Sisu Data	Sisu Data Intelligence Engine	No	Yes	Yes	No
Tellius	Tellius	No	Yes	Yes	No



## 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 <a href="https://www.ventanaresearch.com">www.ventanaresearch.com</a>.

## What We Offer

Ventana Research provides a variety of consulting, advisory, research and education (CARE) services to meet your specific needs when evaluating and selecting vendors. We offer tailored Assessment Services using the Buyers Guide and Value Index methodology to help you evaluate technology vendors and products used today or that may be used in the future. Ventana On-Demand (VOD) provides structured education and advisory sessions to support business and technology professionals.

Everything at Ventana Research begins with our market research using our subject matter expertise and industry experience working with organizations worldwide. Our continuous approach to conducting research and analyzing market trends, best practices and



technologies helps our clients become more efficient and effective. Through the Ventana Research community we share our research and insights. Sign up for free membership at <a href="https://www.ventanaresearch.com/">https://www.ventanaresearch.com/</a> to gain access to our weekly insights and learn about upcoming educational and collaboration events.

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

**Individual membership:** For those interested in full access to our community and analysts for themselves. This level includes access to our library of market research and insights with access to industry analysts and subject matter experts by telephone or email.

**Team membership:** For those interested in full access to our community and analysts for a team. This level includes access to our library of market research and insights with ad-hoc advisory and structured consultative sessions to provide contextual feedback.

**Business membership:** For those interested in full access to our community and analysts for a larger group. This level includes access to our library of market research and insights with ad-hoc advisory and structured consultative sessions to provide contextual feedback.

**Business Plus membership:** For those interested in full access to our community and analysts across business teams and units. This level includes access to our library of market research and insights with ad-hoc advisory and structured consultative sessions to provide contextual feedback as well as additional strategic consulting sessions.

<u>Additional services</u> are available for technology vendors, consulting and systems integrators, and investment firms.

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