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Magic Quadrant for Analytics and Business Intelligence Platforms

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Today's analytics and BI platforms are augmented throughout and enable users to compose low/no-code workflows and applications. Cloud ecosystems and alignment with digital workplace tools are key selection factors. This research helps data and analytics leaders plan for and select these platforms.

Market Definition/Description

Analytics and business intelligence (ABI) platforms enable less technical users, including businesspeople, to model, analyze, explore, share and manage data, and collaborate and share findings, enabled by IT and augmented by artificial intelligence (AI). ABI platforms may optionally include the ability to create, modify or enrich a semantic model including business rules.

Today's ABI platforms have an emphasis on visual self-service for end users, augmented by AI to deliver automated insights. Increasingly, the focus of augmentation is shifting from the analyst persona to the consumer or decision maker. To achieve this, automated insights must not only be statistically relevant, but they must also be relevant in context of the user's goals, their workflow and the actions they need to take based on the data. ABI platforms are beginning to capture more information about user behavior and interests in order to deliver a more impactful experience to the consumer. This trend will continue to increase as ABI tools are integrated further into personal productivity tools where additional user behaviors can be tracked. Complementing this with interaction methods, such as natural language query (NLQ) or conversational analytics interfaces, and natural language generation (NLG) descriptions delivered as a response, democratizes access to data to make decisions.

Many platforms are adding capabilities for users to easily compose low-code or no-code automation workflows and applications. This blend of capabilities is helping to expand the vision for analytics beyond simply delivering datasets and presenting dashboards to delivering enriched contextualized insights, refocusing attention on decision-making processes, and ultimately taking actions that will deliver business value.

The ABI, data science and machine learning (DSML), and cloud data and analytics (D&A) markets continue to converge, often in the form of intelligent composable applications for customers. Vendors are pushed to improve their analytics capabilities while simultaneously helping their customers maintain a balance between control and agility as their platforms scale across multipersona users, advanced analytics capabilities, diverse data and emerging use cases.

Vendors in the ABI market are diverse and include startups backed by venture capital funds, large enterprise application companies, independent analytics companies and all the large cloud hyperscalers. The vast majority of new spending by customers in this market is on cloud deployments, as they look to address scalability and performance needs in the face of the increasing complexity of analytics use cases and the types and volumes of data. In many cases, ABI platforms are entry points for a wider set of cloud data and analytics capabilities offered by cloud vendors and their ecosystems.

ABI platform functionality includes the following 12 critical capabilities, which have been updated to reflect areas of change and differentiation by vendors, particularly in capabilities more closely associated with augmented analytics:

1. **Security:** Capabilities that enable platform security, administering of users, auditing of platform access and authentication.
2. **Governance** (formerly called “manageability”): Capabilities that track usage and manage how information is created and shared from prototype to production.
3. **Cloud-enabled analytics:** The ability to build, deploy and manage analytics and analytic applications in the cloud, based on data both in the cloud and on-premises, and across multicloud deployments.
4. **Data source connectivity:** Capabilities that enable users to connect to and ingest data contained in various types of storage platforms, both on-premises and in the cloud.
5. **Data preparation**: Support for drag-and-drop, user-driven combination of data from different sources, and the creation of analytic models (such as user-defined measures, sets, groups and hierarchies).
6. **Catalog**: The ability to display content to make it easy to find and consume. The catalog is searchable and makes recommendations to users.
7. **Automated insights**: A core attribute of augmented analytics, this is the ability to apply machine learning (ML) techniques to automatically generate insights for end users (for example, by identifying the most important attributes in a dataset).
8. **Data visualization:** Support for highly interactive dashboards and the exploration of data through the manipulation of chart images. This includes an array of visualization options that go beyond

those of pie, bar and line charts, such as heat and tree maps, geographic maps, scatter plots and other special-purpose visuals.

9. **Natural language query:** This enables users to query data using terms that are either typed into a search box or spoken.

10. **Data storytelling:** The ability to generate news style data stories — combining headlines, narrative text, data visualizations and audiovisual content based on the ongoing monitoring of findings.

11. **Natural language generation:** The automatic creation of linguistically rich descriptions of insights found in data. Within the analytics context, as the user interacts with data, the narrative changes dynamically to explain key findings or the meaning of charts or dashboards.

12. **Reporting:** This capability provides pixel-perfect, parameterized and paginated reports that can be scheduled and burst to a large user community.

Magic Quadrant

Figure 1: Magic Quadrant for Analytics and Business Intelligence Platforms

Source: Gartner (March 2022)

Vendor Strengths and Cautions

Alibaba Cloud

Alibaba Cloud is a Niche Player in this Magic Quadrant. It competes primarily in Asia/Pacific, but it has global potential. Alibaba Cloud is the largest public cloud platform provider in Asia/Pacific. It offers data preparation, visual-based data discovery, interactive dashboards and augmented analytics through its Quick BI platform. This platform is available as a SaaS option running on Alibaba Cloud's infrastructure, an on-premises option on Apsara Stack Enterprise and an embedded analytics option with Alibaba Business Advisor.

Quick BI 4.1 has improved data source connectivity capabilities for accelerated queries and broader integration options with the mainstream digital workplace applications (DingTalk, WeChat/WeCom and Lark) in China.

Strengths

- **Digital workplace-oriented collaborative analytics:** Quick BI is seamlessly integrated with DingTalk — Alibaba Cloud's digital workplace application that has massive adoption in China. DingTalk not only improves collaborative analytics with multipersona users, but is also an important sales channel for Quick BI.
- **Composable analytics to drive actions:** Quick BI is utilized in Alibaba Cloud's "Data Middle Office" strategy, which delivers modular and reusable D&A capabilities. Quick BI offers native support for Dataphin (a data integration product), which can be used to help compose analytic applications and automate business-oriented actions in Business Advisor, closing the loop of analytic tasks.
- **Data literacy program:** Quick BI launched its task-based training program to upskill its users, including onboarding, systematic product courses, real-world practice with users' own data and analytics experience sharing via livestreaming. The program is coupled with incentives that provide coupons to offset the license cost and store credits for Alibaba Cloud's e-commerce store.

Cautions

- **Investment focus:** Although Alibaba Cloud is large in overall company size, Quick BI is not a strategic focus compared to the vendor's DBMS and AI product lines. The overall headcount for Quick BI is fewer than 100 people, which is significantly lower than other major hypescalers' ABI platforms.

- **Product dependence:** Like other large cloud service providers' analytics offerings, Quick BI is highly dependent on other Alibaba Cloud services to provide governance, data management and advanced analytics capabilities. Although Quick BI is competitively priced, the total cost of a customer's analytics ecosystem may rise when they require additional capabilities that are only adapted to the service Alibaba Cloud provides.

- **Geographical presence and market momentum:** Alibaba Cloud is a China-focused vendor, with a minimal installed base elsewhere. As a SaaS offering, Quick BI is often packaged into the vendor's integrated Data Middle Office solution.

Amazon Web Services

Amazon Web Services (AWS) is a Niche Player in this Magic Quadrant. Amazon QuickSight is primarily sold into the AWS customer base. Customers cite strength of integration with the Amazon data stack, scalability, performance and a competitive pricing model as key reasons for adoption.

In 2021, Amazon QuickSight took a big step into the augmented analytics realm by adding a natural language query capability called Q. It has also added core ABI features, such as the ability to embed analytic content in other areas and scheduled enterprise-scale reporting.

Strengths

- **Scalability:** Amazon QuickSight's serverless cloud architecture enables organizations to support large scale BI deployments. Instead of purchasing a fixed number of cores to handle peak demand, Amazon QuickSight customers can scale based on usage and leverage the AWS cloud stack to support a large number of users concurrently.

- **Competitive pricing strategy:** Amazon QuickSight has a unique pay-per-session model for content consumers, charging $0.30 per 30-minute session, with a maximum charge of $5 per user per month ($10 per user per month when Q is enabled). Amazon QuickSight content authors pay per user per month with optional discounts for annual commitments.

- **Strong integration with AWS:** AWS is one of the largest cloud service providers in the world by revenue. Many organizations are investing heavily in AWS for the backbone of their data and analytics stack. AWS has already made significant progress with Amazon Redshift, Amazon Athena and Amazon EMR. Amazon QuickSight natively integrates with existing AWS security frameworks and data sources.

Cautions

- **Slow customer adoption as enterprise ABI platform:** Amazon QuickSight's market share and momentum as an enterprise ABI platform remains low relative to competitors. Amazon QuickSight's "willingness to recommend" was evaluated in the bottom quartile of the 20 vendors in this research, according to Gartner Peer Insights data during the evaluation period. However, this

assessment has improved significantly when looking at the reviews completed in the last 12 months.

- **Lack of business application ecosystem:** AWS lacks a broad first-party business application ecosystem capable of driving demand for Amazon QuickSight. Similarly, its nascent personal productivity and collaboration offerings (Amazon WorkDocs) lack significant adoption, unlike similar offerings from Microsoft and Google. This limits both the opportunities for AWS to drive business-user demand and the comparative appeal of Amazon QuickSight.

- **AWS centricity:** Amazon QuickSight runs only on AWS. The lack of capability to embrace a multicloud world clashes with the fact that most organizations will have data on multiple clouds. Although AWS can make Amazon QuickSight work for hybrid data connectivity — by leveraging SPICE or direct query — platform deployment is limited to AWS. As a result, AWS's growth in the ABI platform market will mostly come from its own installed base.

Domo

Domo is a Challenger in this Magic Quadrant. It has strong functionality and momentum in the face of much more established competitors. Domo's cloud-based ABI platform offers over 1,000 data connectors, consumer-friendly data visualizations and a low-code/no-code environment for BI application development. Because of the platform's ease of use and fast time to deployment, Domo typically sells directly to lines of business.

While multicloud, Domo is particularly gaining traction from organizations that have chosen a non-Microsoft cloud ecosystem but want a strong native cloud ABI platform. In 2021, Domo's Sandbox was introduced, enabling customers to take a DevOps approach to analytics content creation and promotion.

Strengths

- **Momentum in a crowded market:** Domo is not only retaining customers, but growing existing customer accounts significantly. While still common to "land" within the lines of business, many accounts formerly limited to individual lines of business have expanded into larger user bases, often led by data and analytics leadership. Domo is winning new customers and increasing its relevance to enterprise buyers by catering to a wide array of user personas.

- **Speed of deployment:** Domo's ability to connect quickly to enterprise applications enables rapid deployment. Domo's connectivity is differentiated in that it maintains API-like connectors that can respond dynamically to changes in source-side schemas. The new Domo for Snowflake goes beyond a push-down query model to enable full read/write from Domo to the cloud database.

- **Consumer design focus:** Since 2010, Domo has been competing with a consumer-centric approach in a market almost exclusively focused on "power users," but new market dynamics emphasizing the "analytic consumer" and the "empowered analyst" should work in Domo's favor.

Cautions

- **Lack of broader application ecosystem channels:** Domo faces a competitive disadvantage against ABI platform vendors that leverage the existing installed base of their own application ecosystems and cloud platforms. In particular, some buyers will prioritize ABI platforms that are embedded as integrated components in their cloud incumbent (such as AWS, Microsoft Azure or Google) or application incumbent (such as Salesforce, Oracle or SAP).

- **Limited geographic presence:** As a cloud-based vendor, Domo relies on virtual presence for countries beyond the U.S., Japan, the U.K. and Australia. Users should consider the suitability of cloud-based or virtual support versus an in-country presence.

- **Premium pricing model:** Domo's prices have decreased substantially in the face of stiff competition, but it still prices at a premium compared with the low-cost cloud providers such as Microsoft (with Power BI) and AWS (with QuickSight). Domo has been forced to readjust its pricing model to keep pace, but evaluators will still need to consider its pricing.

Google

Google is a Challenger in this Magic Quadrant. Looker is a cloud-architected ABI platform that offers highly governed analytics, including self-service visualizations and dashboards, predicated on the LookML semantic layer. Looker still supports multicloud scenarios, both from a deployment and database connectivity standpoint, and continues to deepen integrations across other products within the Google Cloud stack since being acquired in 2020.

In 2021, Looker absorbed Google Data Studio and its product team, with plans to deeply integrate the user experience across both products on the roadmap. Looker's new extension framework is a fully hosted development surface that empowers developers to build data-powered applications.

Strengths

- **In-database architecture and governance:** Looker offers direct query of cloud databases, lakes and apps as their primary data connectivity method. This allows users to leave the data where it is while still taking advantage of the virtualized LookML semantic layer. Google plans to open the LookML data modeling layer to other ABI platforms (Microsoft Power BI, Tableau) as well as their own assets including Data Studio, Google Sheets and Google Slides.

- **Application development resources:** The developer portal, APIs, software development kits (SDKs) and extension framework (including the Data Dictionary) enable customers and OEMs to assemble customer-facing applications and embed analytics in business workflows. New features include a prebuilt UI Components library (visualizations) and prepackaged "actions" to push data or instructions into third-party tools.

- **Google Cloud Platform (GCP) ecosystem opportunities:** Google integrated Looker into GCP go-to-market activities. BigQuery bundles enable a simplified client setup to drive growth in the GCP

installed base. Deeper product and go-to-market integration across other areas of Google Cloud, such as Workspace, further enhance Looker's value proposition in its installed base.

Cautions

- **SQL skills required for advanced users:** In contrast to competitors' visual drag-and-drop data modeling and advanced analytics, Looker requires coding for developers and data modelers. It mitigates this by offering prebuilt data and ML model Blocks from its Marketplace. These address common analytical patterns (Healthcare NLP API, Contact Center AI functions) and sources (Google Ads and Analytics, Salesforce), and include a new API Explorer and entity relationship diagrams.

- **Limited augmented consumer vision:** Augmented analytics features for automated insights, data storytelling and NLG are absent, and the NLQ interface is weak relative to competitors. Vision for augmented capabilities address analyst personas' needs, but are mostly catching up with the current state of augmented capabilities in the market.

- **Limited global presence:** Although Google expanded Looker's worldwide presence and is unifying with Google Data Studio's large user base in Asia/Pacific, adoption outside of the U.S., Western Europe and Japan is limited.

IBM

IBM is a Visionary in this Magic Quadrant. IBM Cognos Analytics with Watson offers consistent core capabilities across hybrid, multicloud, public, private and on-premises deployments. Cloud Pak for Data supports AWS, Azure, GCP and IBM Cloud, and gives customers the choice to use it in conjunction with IBM's containerized stack of D&A services, including storage, data virtualization, data refinery, data catalog and DSML services.

In 2021, IBM enhanced its user interface and became a Watson-powered BI solution, better integrating automated insights via "Watson Moments" and NLP, NLG for data storytelling and NLQ "Assistant." It is also investing in bringing planning and analytics together.

Strengths

- **Breadth of use cases:** Cognos is one of the few platforms that can deliver across enterprise reporting, governed and self-service visual exploration, data visualization, augmented analytics and embedding in a single platform.

- **Flexible deployment options:** IBM offers deployment options including on-premises, SaaS, hosted on the IBM Cloud, or "bring your own license" for the major infrastructure as a service (IaaS) platforms (AWS, Azure, GCP), and a platform approach via IBM Cloud Pak for Data.

- **Roadmap for applying analytics everywhere:** IBM's vision is to unify planning, reporting and analysis in a common portal that offers "what if?" scenario planning, Mode 1 reporting, and predictive models and forecasting. Its sales strategy includes selling Cognos and IBM Planning Analytics with Watson together with links to the wider IBM portfolio.

Cautions

- **Fading brand value:** IBM put significant effort into its broad D&A marketing efforts and vision centered on IBM Cloud Pak for Data. While the vision embraces openness and market convergence technologically speaking, the messaging is not resonating with evaluators in the market. Cognos rarely appears on evaluation shortlists seen by Gartner, unless IBM is already an incumbent vendor. Gartner client inquiries indicate Cognos is increasingly marginalized despite improvements.

- **Lack of sales adoption drivers:** Despite being a large vendor with a wide D&A offering and strong geographic strategy, IBM's lack of a digital workplace application "uplift" (like Google Workspace, Microsoft Office and Zoho Workplace) or an enterprise application "tailwind" (e.g., Oracle, Salesforce, SAP) limits IBM Cognos Analytics' touchpoints with organizations that might invest in the platform.

- **Price versus cloud vendor alternatives:** Cognos subscription license pricing per user per month for new customers has been reduced substantially, in line with pricing of smaller or independent ABI vendors. However, pricing per user is higher than some other large cloud providers.

Incorta

Incorta is a Niche Player in this Magic Quadrant. Incorta's key value proposition is to reduce time to insight for its users by offering an end-to-end D&A platform — from data acquisition and data management to data visualization — with minimal involvement from IT.

In 2021, Incorta introduced Incorta Cloud SaaS and role-specific content for first-time users to help accelerate time to insight. The new Data Wizard functionality focuses on easing self-service content creation by providing guided processes to assist users in setting up data pipelines. Incorta has also extended its visualization features by allowing end users to create custom visualizations through its Component SDK capability.

Strengths

- **Time to insight:** Incorta uses its Direct Data Mapping (DDM) functionality to increase query performance and reduce the time to insight by eliminating some extraction, transformation and loading (ETL) and data modeling tasks that would otherwise have to be manually built. This is ideal for organizations that may lack a robust D&A team or infrastructure, but need to generate value quickly or wish to directly analyze detailed operational data.

- **End-to-end data and ABI capabilities:** Incorta provides a unified data and analytics platform that includes steps from data acquisition to data visualization. This allows less-technical users to easily source data from various applications, databases or local files, and perform self-service analytics with minimal IT involvement.

- **Packaged business content:** Incorta provides packaged analytics applications for various systems like NetSuite and Salesforce. Its most comprehensive offering is for Oracle E-Business Suite (EBS), with prebuilt dashboards, KPIs and schemas for specific EBS financial modules such as Payables, Receivables, Fixed Assets, General Ledger, Sub-Ledger Accounting and Cash Management.

Cautions

- **Lack of augmented analytics features:** Incorta lacks key native augmented analytics features like NLG, NLQ, automated insights and key driver analysis. However, it can support some of these capabilities through third-party tools.

- **Immature Incorta Cloud offering:** Incorta has taken significant strides to become a cloud-first platform. However, while Incorta can access data hosted on all major cloud platforms, Incorta currently only deploys on Google Cloud into just a handful of global regions. This can be an issue for customers who need to deploy on a particular cloud platform or region for competitive or regulatory reasons.

- **Momentum in a crowded market:** Gartner inquiry and search data as well as a review of job postings on third-party websites reveal lower momentum for Incorta relative to competitors. While Gartner Peer Insights data indicates Incorta customers currently are satisfied with the availability of third-party resources, this is typically a concern from ABI buyers relative to market leaders.

Microsoft

Microsoft is a Leader in this Magic Quadrant. It has massive market reach and momentum through Office 365 and a comprehensive, visionary product roadmap. Microsoft Power BI offers data preparation, visual-based data discovery, interactive dashboards and augmented analytics.

The new “goals” capability enables data-driven and collaborative tracking of key business metric scorecards. Power BI is primarily deployed as a SaaS option running in Azure, but offers a less-functional on-premises option in Power BI Report Server. Microsoft continues to align Power BI closely with Office 365, Microsoft Teams, Excel and SharePoint. In 2022, Microsoft’s vision is to make Power BI the hub for data and analytics in an organization.

Strengths

- **Alignment with Office 365, Teams and Azure Synapse:** The inclusion of Power BI in the Office 365 E5 SKU has provided an enormous channel for the platform's spread. As many customers turn to Teams for remote work collaboration, the ability to access Power BI and now "goals" within the same Teams interface is a compelling integration for business users. Power BI and Azure Synapse alignment addresses multiple data and analytics personas and use cases.

- **Price/value combination:** Power BI does not sacrifice quality in order to achieve its disruptively low pricing model. The Power BI cloud service is rich in its capabilities, which include an enlarged set of augmented analytics and automated ML (autoML) capabilities.

- **Power portfolio and product ambition:** Microsoft has a clear vision for cross-utilization of Power BI, Power Apps and Power Automate to drive business value. Power Apps can be embedded in Power BI dashboards or access Power BI datasets, and Power Automate flows can be constructed to take various actions based on the data. AI-powered services, such as text, sentiment and image analytics, are available within Power BI Premium.

Cautions

- **Gaps in on-premises capabilities:** Compared with the Power BI cloud service, Microsoft's on-premises offering lacks significant functional capabilities, including dashboards, streaming analytics, prebuilt content, natural language question and answer, automated insights, and alerting.

- **Azure as the only deployment option:** Microsoft does not give customers the flexibility to choose a cloud IaaS offering. While data connectivity enables multicloud and hybrid cloud scenarios, its Power BI service runs only in Azure. However, customers that utilize Azure can take advantage of the global reach and multigeography capabilities offered by Microsoft's cloud platform.

- **Content publication process and governance:** Creating a process for promotion and publication of Power BI content can lead to a significant administrative overhead for customers. With a one-to-one relationship between published Power BI apps and Workspaces, organizations may be manually managing many hundreds of Workspaces — an issue Microsoft plans to address in its roadmap. How to govern self-service usage is one of the most common questions asked about Power BI by users of Gartner's inquiry service.

MicroStrategy

MicroStrategy is a Niche Player in this Magic Quadrant. MicroStrategy excels at scalability, manageability and security desired by IT. It offers rich BI and reporting functionality, including HyperIntelligence, which uses a semantic graph to dynamically identify predefined insights within existing applications. While the capabilities are robust, they are no longer as differentiated in a rapidly evolving market.

In 2021, MicroStrategy launched a new fully containerized and microservices-driven platform architecture capable of running in a multitenant SaaS environment. It also continued to invest heavily in bitcoin. As of 30 December 2021, it invested $3.75 billion to acquire 124,391 bitcoins, diversifying from its traditional ABI focus.

Strengths

- **Open platform:** As companies inevitably make investments that span multiple cloud and business application stacks, MicroStrategy stands out as one of the few vendors that truly prioritizes both deployment and data connectivity interoperability. Its interoperability is bolstered by a strong direct query architecture.
- **Mode 1 and Mode 2 reporting:** MicroStrategy is one of the key vendors for customers that want all the security, manageability and scale of complex Mode 1 reporting and a modern agile Mode 2 analytical environment.
- **Stability of integrated product:** MicroStrategy does not acquire codebases. All new developments are built organically. This leads to more stable, less buggy code, especially compared with competitors that fill product gaps with acquisitions.

Cautions

- **Lack of surrounding data or application ecosystem:** Much of the momentum in the ABI platform market comes from the shift to deployment on cloud ecosystems, as well as to cloud-based business applications. Although MicroStrategy's platform is offered as a service on AWS and Microsoft Azure, and interacts well with other cloud technologies, ABI solutions owned by cloud and business application megavendors have a go-to-market advantage.
- **Customer experience and support:** MicroStrategy was recently awarded a Customers' Choice distinction on Gartner's Peer Insights platform. However, the data used in the Magic Quadrant evaluation period indicates that reviewers for MicroStrategy assessed its overall customer experience, service and support, and availability of quality third-party resources (integrators, service providers, etc.) well below average compared to other vendors in this research.
- **Augmented analytics capabilities:** MicroStrategy has two big feature gaps: automated insights and NLG. For organizations looking to automate much of their analysis, these gaps may prove to be deal breakers. In particular, weak NLG will limit MicroStrategy's ability to deliver automated data storytelling.

Oracle

Oracle is a Visionary in this Magic Quadrant. Oracle Analytics Cloud (OAC) is a cloud-first platform that provides augmented analytics capabilities across the data and analytics workflow. Oracle offers

Oracle Analytics Server (OAS) for on-premises deployments, and also offers prebuilt data and analytics solutions for a growing list of Oracle applications via Fusion Analytics Warehouse (FAW).

In 2021, customer programs such as Cloud Coach and Code Innovate were added to help customers maximize the effectiveness of their Oracle environment and co-innovate alongside customers. To expand company awareness, Oracle added high-profile sports partnerships this year, such as the Premier League, Red Bull Racing in Formula 1 and the Golden State Warriors in the NBA.

Strengths

- **Enterprise cloud D&A:** Oracle offers an end-to-end cloud solution, including infrastructure, data management, analytics and analytic applications, with data centers in 30 cloud regions including U.K. and U.S. governments and the U.S. Department of Defense. In addition, FAW offers native integration and closed-loop actions for Oracle's ERP, human capital management, supply chain and NetSuite products. Oracle maintains an open architecture approach to accommodate customers' multicloud needs.

- **Augmented capabilities throughout:** Oracle enhanced its already strong augmented analytics capabilities, adding integrated graph analytics capabilities such as subgraphs, shortest path and page rank as well as enhancing explainability of ML models generated. Users can leverage NLQ through the OAC interface, Oracle Analytics Day by Day for mobile devices, as well as interfaces powered by Oracle Digital Assistant. It is the only platform on the market to support NLQ in 28 languages.

- **Consumer-focused product vision:** Oracle invests aggressively in capabilities that augment the analyst and the consumer, such as conversational user experiences and automated data storytelling features that generate audio podcasts highlighting key trends, changes in data, outliers, and additional insights contextualized for users.

Cautions

- **Momentum in crowded market:** Oracle has a strongly competitive product, but is not considered as frequently as the Leaders in competitive evaluations known to Gartner. While Oracle does have a surrounding applications ecosystem to sell into, traction outside of this installed base is limited.

- **Oracle application-centric:** Although OAC can access any data source, its packaged analytic applications (Fusion Analytics Warehouse and NetSuite Analytics Warehouse) work only with Oracle enterprise applications out of the box. To gain similar capabilities, non-Oracle application customers would have to build applications for themselves using OAC.

- **Evolving operations:** Oracle has invested to improve customer programs focused on collaborative support and innovation in 2021 for OAC. However, these improvements have yet to be reflected in Gartner Peer Insights data, which indicates a slightly below-average evaluation for service and support.

Pyramid Analytics

Pyramid Analytics is a Niche Player in this Magic Quadrant. Pyramid offers an integrated suite for modern ABI across the data life cycle, out of the box. This includes ML-based data preparation, data wrangling, data discovery and sharing, dashboards and report publishing, automated insights, and autoML model building with security and governance. Pyramid has a strong focus in financial services, insurance, retail and manufacturing industries, but broadened its customer base in 2021.

Also in 2021, Pyramid improved the speed of its direct query engine, augmented analytics, marketplace of DSML algorithms, and open-source Python and R scripts for modeling.

Strengths

- **Breadth of use cases:** Pyramid offers centralized data preparation, reporting, visual data discovery, augmented analytics and citizen data science functionality in a single platform. Pyramid includes a fully operational data science workbench, allowing customers to operationalize DSML code with the same toolset as their data preparation and analytics.
- **Direct query and comprehensive deployment options:** PYRANA enables users to execute queries and complex business calculations directly in the data source, using SQL-like Pyramid Query Language (PQL) and/or MDX. It provides flexible cloud-based infrastructure deployable on-premises or in hybrid environments, and enables SaaS products and embedded analytics.
- **Augmented analytics capabilities:** Pyramid provides augmented data modeling, automatic data visualizations, robust NLG, NLQ via “Ask Pyramid,” strong data storytelling with infographics, and a collaborative UI and catalog. Its key driver analysis has explainable AI via right-click to “explain” data. In 2021, it refined its automated insights and Smart Discover framework, and invested in customer training and certification.

Cautions

- **Product positioning and market perception:** Pyramid has struggled to communicate a differentiated product positioning, despite the extensive product capabilities it offers, and it is difficult to differentiate on product functionality alone in today’s ABI market. Pyramid lacks a clear vertical strategy for data to dashboard solutions, except those led by partners. Its marketing strategy is starting to resonate, but only gains some awareness relative to competitors
- **Limited market traction:** Pyramid has traditionally suffered from a limited sales strategy due to a lack of business application or border ecosystems to sell into. Recent partnerships with AWS and SAP should broaden Pyramid’s reach.
- **Third-party resources and skills:** The effects of Pyramid’s new partnerships and cloud channels have not made a significant impact yet. Gartner Peer Insights data indicates below-average assessments for the availability of quality third-party resources. Peer Insights reviewers did report that Pyramid is above average in areas of service and support directly from the vendor.

Qlik

Qlik is a Leader in this Magic Quadrant. It has a strong product vision around augmented analytics and closed-loop decision making. Qlik's lead product, Qlik Sense, leverages its Associative Engine along with its Cognitive Engine to deliver self-service analytics and context-aware insights and suggestions to analysts and consumers alike.

In 2021, Qlik acquired NodeGraph and Big Squid, adding more capabilities to its extensive portfolio of acquisitions. Qlik introduced Qlik Forts this year, allowing customers to push down Qlik Sense SaaS capabilities wherever their data resides. It also launched Qlik Application Automation, a no-code solution that allows users to automate tasks and data workflows. In January 2022, Qlik announced plans for an IPO.

Strengths

- **Flexibility of deployment:** Qlik allows users the flexibility to deploy on-premises, with any major cloud provider, across multiple clouds or a combination of these approaches. Customers can also utilize Qlik's full SaaS offering.
- **Expanding portfolio of capabilities:** Qlik has expanded its breadth of capabilities using a combination of in-house development and strategic acquisition of companies. The recent acquisitions of Big Squid and NodeGraph will allow Qlik to offer autoML and enhance metadata management features for customers.
- **Customer engagement and data literacy programs:** Qlik encourages customers and potential customers to leverage Qlik's Data Literacy Program to become data literate. QlikView customers can make use of Qlik's Analytics Modernization Program to migrate to Qlik Sense for newer use cases. Users can also make use of Qlik's Executive Insights Center to align analytics to business outcomes.

Cautions

- **Product licensing complexity:** Qlik Sense offers core analytic and BI platform capabilities in a single license. Qlik's client-managed deployments offer add-ons such as Qlik Catalog, Qlik Insight Advisor Chat for chatbot experiences and Qlik NPrinting for Mode 1 reporting at additional licensing costs. Qlik's SaaS platform includes all capabilities as part of the standard subscription.
- **Plateaued market momentum:** Gartner's search and client inquiry data reveal a lower momentum for Qlik compared to other Leaders in the Magic Quadrant. Although Qlik's Analytics Modernization Program helps existing Qlik customers move to Qlik Sense, some are using the opportunity to reevaluate the market entirely and assess other vendors.
- **Product cohesiveness:** Qlik has made a number of acquisitions over the last few years (two in 2021) to fill product capability gaps and to expand its portfolio across the D&A space. While the

acquisitions have been strategic, time to seamless integration, potential for overlapping product functionality and, most importantly, the effects on future packaging and pricing are concerns for existing and potential Qlik customers.

Salesforce (Tableau)

Salesforce (Tableau) is a Leader in this Magic Quadrant. It offers a visual-based exploration that enables business users to access, prepare, analyze and present findings in their data. Tableau CRM, formerly Einstein Analytics, provides augmented analytics capabilities for analysts and citizen data scientists.

In 2021, Tableau unveiled new Slack integrations and improved its NLQ experience, Ask Data, which is now included with all license types along with Explain Data. Ask Data can be added to a dashboard as an integrated object, and new Lenses allow analysts to curate existing datasets. Tableau improved enterprise capabilities by adding centralized row-level security and virtual data connections that enable users to extract and manage data tables.

Strengths

- **Business user-centric:** Tableau provides an intuitive experience for business users to visually explore their data. The patented VizQL engine powers the no-code drag-and-drop interface. The acquisition of Narrative Science, the data storytelling vendor, will improve Tableau's NLG and data storytelling capabilities in the future.
- **Analytics economy:** Users demonstrate a fanlike attitude toward Tableau. The analytics ecosystem Tableau has built, the Tableau Economy, brings an expansive community of customers, partners and people with analytics skills. One hundred new accelerators were rolled out in the Tableau Exchange, and a "Hire Me" function was added to Tableau Public to help hire talent with Tableau skills.
- **Salesforce ecosystem opportunity:** A new revenue category, "Data," will incorporate MuleSoft, Tableau and Tableau CRM, all of which were previously included in "Platform and Other," demonstrating Salesforce's dedicated investment to data and analytics business as part of its ecosystem.

Cautions

- **Premium pricing:** Compared with cloud vendors in this market, Tableau's license cost is expensive, an issue raised by clients durings inquiries with Gartner. Tableau Prep Builder is bundled with the Creator license. Additional fees are required for Data Management, Server Management and Einstein Discovery; however, a new enterprise subscription plan bundles Data Management and Server Management to help customers scale.

- **Service and support:** Gartner Peer Insights reviewers report Tableau slightly below the average when it comes to overall service and support, particularly related to timeliness of the vendor's response. Some Tableau customers are unclear about the process for finding the Tableau-specific support they expect. Additionally, although the support organization is not impacted, Tableau no longer has operations directly located in Mainland China, leaving regional customers concerned.

- **Evolving Einstein Discovery experience:** The process for building and deploying Einstein Discovery's no-code machine learning models is disconnected from the Tableau user experience. Users are redirected to Tableau CRM Studio in Salesforce, where they must reconnect to their desired dataset to train a model and then manually map the fields used when training back to the fields used in Tableau. Plans to address this user experience are on Tableau's 2022 roadmap.

SAP

SAP is a Visionary in this Magic Quadrant. SAP Analytics Cloud is a cloud-native multitenant platform with a broad set of data visualization, reporting and augmented analytics capabilities. It is tightly integrated with SAP enterprise planning capabilities and the SAP application ecosystem.

In 2021, SAP focused on improvements in usability, performance and a streamlined UX between SAP Analytics Cloud and Data Warehouse Cloud. Its optimized Story Viewer and Story Designer help less technical users design, navigate and interact with Stories. Analytics Designer, a low-code development environment of SAP Analytics Cloud, uses new SDKs and APIs to enable analytical application design that pulls from all SAP Analytics Cloud capabilities.

Strengths

- **Unmatched SAP connectivity:** SAP Analytics Cloud offers seamless native connectivity to SAP enterprise applications including SAP S/4HANA. It is embedded in SAP cloud applications, such as SAP SuccessFactors and SAP Ariba. SAP Analytics Cloud directly queries on-premises SAP resources (SAP BusinessObjects Universe, SAP Business Warehouse and SAP HANA) for live data.

- **Augmented capabilities and closed-loop analytics:** SAP Analytics Cloud allows users to conduct "What if?," "How has it changed?" and "How is it calculated?" analysis. It also offers strong functionality for NLG, NLP and automated insights. It has integrated functionality for planning, analysis and prediction that differentiates it from almost all competing platforms.

- **Analytics accelerators for SAP business apps:** SAP Analytics Cloud is part of a wider D&A portfolio that includes SAP Data Warehouse Cloud and offers prebuilt business content for various industries and lines of business online. It includes data models, data stories and visualizations, templates for SAP Digital Boardroom agendas, and guidance on using SAP data sources.

Cautions

- **Lower momentum:** SAP has lower market momentum compared to market leaders in the space, according to Gartner inquiry and search data, a review of job postings on third-party websites and social media analysis. Two-thirds of Gartner Peer Insights reviewers have been using SAP Analytics Cloud for two years or less. This shows positive signs for future adoption, but is tempered by a slightly below-average overall customer experience evaluation from the same reviewers.

- Limited adoption outside of SAP ecosystem: SAP Analytics Cloud sells predominantly into its existing business application customers and legacy BI installed base. Customers without a SAP-centric application or data ecosystem rarely shortlist SAP Analytics Cloud, based on conversations with clients via the Gartner inquiry service.

- **Cloud-only deployments:** SAP Analytics Cloud is a cloud-native platform (although it can query on-premises data). Customers seeking an on-premises deployment would need to leverage SAP BusinessObjects BI and support SAP Analytics Cloud and its analytics catalog functionality and Universe connector for a complete hybrid deployment experience. SAP Analytics Cloud and SAP BusinessObjects BI have different roadmaps, support and maintenance schedules.

SAS

SAS is a Visionary in this Magic Quadrant. SAS Visual Analytics is one component of SAS's end-to-end portfolio offering visual and augmented data preparation, ABI, DSML and AI solutions.

In 2021, SAS introduced SAS Viya 4, which is cloud-native and fully containerized. SAS and Microsoft formed a technology and go-to-market partnership, with Azure becoming a cloud provider for SAS Cloud and plans for future SAS integration with Microsoft's cloud portfolio. SAS Visual Analytics added automated explanation and outlier detection, plus conversational BI, with the ability to build customizable chatbots.

Strengths

- **Unified platform:** SAS offers a compelling product vision for customers to prepare their data, analyze it visually, and build, operationalize and manage data science, ML and AI models in an augmented design experience. Moreover, with Visual Analytics, SAS is one of the few vendors in this Magic Quadrant to support text analytics natively in a core product.

- **Market-leading data visualization:** SAS Visual Analytics continues to lead the market with high marks for data visualization, interactivity, variety of visualization styles supported, geographic mapping, support for charting libraries and time series animation.

- **Global reach with industry solutions:** SAS is one of the largest privately held software vendors, with a physical presence in 47 countries and a global ecosystem of system integrators. SAS Visual Analytics forms the foundation for most of SAS's extensive portfolio of industry solutions, which includes predefined content, models and workflows.

Cautions

- **Limited adoption:** Based on Gartner inquiries, searches on gartner.com and feedback on Gartner Peer Insights, SAS Visual Analytics has seen limited traction in the market. The lack of a major business application or public cloud ecosystem doesn't give it a huge installed base to sell into.
- **Bundled pricing:** SAS Visual Analytics is typically bundled as part of a larger software purchase of other SAS products. SAS has lowered the price of SAS Visual Analytics substantially to make it more competitive. Although SAS offers line-item pricing, it is hard for clients to know how much they are paying for SAS Visual Analytics versus other SAS products. And being part of a large software bundle makes SAS Visual Analytics seem more expensive when not sold as a stand-alone service.
- **Natural language query:** Overall, SAS Visual Analytics is a feature-rich analytics and BI platform, and in particular has strong NLG and text analytics capabilities. However, the platform is lagging the market in NLQ. It lacks support for a question-and-answer format with support for synonyms, spatial and time reasoning, type-ahead features, and suggestions.

Sisense

Sisense is a Visionary in this Magic Quadrant. Sisense provides an end-to-end augmented analytics platform that supports self-service as well as complex data projects and development of analytics applications. Over half of Sisense's ABI platform customers use the product in an OEM form.

In 2021, Sisense rebranded its product to Sisense Fusion to reflect its focus on embedding analytics into business workflows. New Sisense Notebooks bridge the gap between data professionals who need to conduct advanced analysis using SQL, Python, R and visual self-service users. The Sisense Extense Framework allows developers to build applications or workflows, or users can leverage one of the prebuilt Infusion Apps for embedding analytic capabilities in productivity tools.

Strengths

- **Composable vision:** Sisense Fusion has a microservices-based architecture that is fully extensible. Sisense is commonly used to embed analytics capabilities, such as interactive visualization and NLQ, within a composed analytic application experience to enable better decision making. Infusion Apps further help users to tie analytics to actions, with prebuilt examples for Google Chrome, Google Sheets, Google Slides, Microsoft Teams, Salesforce and Slack.
- **Multipersona platform:** Sisense Fusion is designed as a unified platform to support both ABI and DSML for different roles with collaboration. Sisense Notebooks and integration with Jupyter Notebooks bring data scientists, citizen data scientists, analysts and business users to the same platform where they can work seamlessly together.
- **Deployment options and platform openness:** Sisense Fusion is cloud-agnostic and multicloud-capable. It has deep partnerships with AWS, GCP and Microsoft, along with strong cross-cloud

analytics orchestration. Sisense can catalog other analytics vendors' assets via APIs. Sisense also offers extensible connectivity to other reporting tools. A new analytics marketplace is designed as a one-stop shop to publish and build analytics artifacts including connectors, applications and workflows.

Cautions

- **Momentum outside core use case:** Sisense has built a successful OEM business with its strong partner program. This helps it avoid direct competition with Microsoft (Power BI) and Tableau, which are dominant in self-service analytics use cases. However, this means it faces stronger competitive pressure in the wider ABI market.
- **Support and services ecosystem:** As is common across many independent or smaller ABI vendors, and supported by Gartner Peer Insights data, reviewers evaluated Sisense below the average for the quality and availability of third-party resources (integrators, service providers, and so on) and the overall quality of its peer user community.
- **Operations:** In 2021, Sisense was named a Customers' Choice vendor in Gartner Peer Insights Voice of the Customer for overall customer satisfaction. However, ABI customers have a high bar for technical support from their vendor of choice, and reviewers on the Gartner Peer Insights platform indicated a below-average evaluation for Sisense's service and technical support. Sisense has appointed a new leader for technical support and community to resolve such issues.

Tellius

Tellius is a Visionary in this Magic Quadrant. Tellius is an augmented, focused analytics and BI platform that delivers capabilities for consumers, analysts and citizen data scientists. It can be deployed as a SaaS offering, on-premises or in the cloud platform a customer chooses.

Tellius delivers insights using its "What?," "Why?," and "How?" style interface. "What?" insights are derived using an NLQ search interface, and users are able to assemble their own dashboards via standard drag-and-drop methods. The "Why?" interface automatically surfaces hidden key drivers and trends, accompanied by NLG summaries. The "How?" interface identifies underlying segments and signals that could be areas for decision makers to take action.

Strengths

- **Support for multiple personas:** While the dominant interaction methods of Tellius users are NLQ and automated insights, Tellius supports citizen data scientists and data scientists by offering ML model-building capabilities that range from completely automated experiences, wizard-built models or Python interfaces. All of these can be packaged and deployed via APIs.
- **Faster time to value with augmented analytics:** With Tellius' Quick Start, users are guided through a workflow that allows them to specify variables, filters and timelines of interest. This triggers a

process whereby Tellius produces personalized search queries, dashboards and trend insights based on explicit preferences.

- **Scalability and utilization of cloud ecosystems:** Tellius is built on top of Apache Spark for scalable data processing, but also allows customers to directly query cloud data warehouses such as Snowflake and Amazon Redshift. Tellius' purpose-built engine handles subsecond ad hoc queries as well as ML/AI workloads, intelligently routing user queries to the most efficient engine.

Cautions

- **Momentum and availability of third-party resources:** According to Gartner inquiry and search data, interest in Tellius is well below the average compared to market leaders. Similarly, Gartner Peer Insight data reveals that availability of third-party resources (integrators, service providers, and so on) is a weak point in the eyes of customers.
- **Gaps in data storytelling and reporting:** While Tellius has robust NLQ and automated insight capabilities, data storytelling and reporting are less customizable relative to its competitors. Specifically, users are unable to construct infographics or connected slideshow-like presentations (on the roadmap for 2022), nor does Tellius support paginated reports or report bursting.
- **Limited geographic presence:** Tellius is almost entirely U.S.-based, with two support centers in the U.S. and one in India.

ThoughtSpot

ThoughtSpot is a Visionary in this Magic Quadrant. It is defined by its search-driven user experience, the ability to answer analytically complex questions with personalized and relevant answers, and deployment at scale.

In 2021, ThoughtSpot enhanced its Everywhere embedded analytics, introduced a new developer playground and new custom action capabilities, and offered prebuilt SpotApps and SpotIQ Monitor for KPIs. Its composable SpotApp architecture lets customers build analytical applications for vertical and domain use cases. It is investing in a notebook-style SQL workspace, native voice assistant and chatbot integrations with digital workplace tools.

Strengths

- **Search and AI at scale:** ThoughtSpot supports complex questioning of billions of rows of data via its in-memory database or in-database query. Automated insights from SpotIQ discover outliers and key drivers, and perform comparative analysis at scale without coding.
- **Consumer-centric vision:** ThoughtSpot appeals to buyers of an easy, Google-like search NLQ, and offers a social experience for analytics consumers who can ask questions by typing or speaking.

Its technology learns from collective behavior, social signals, and networked, cataloged insights to provide the most relevant suggestions, answers and automated insights.

- **Market recognition as augmented analytics platform:** Awareness of ThoughtSpot's value proposition is high, and the vendor is shortlisted by most of Gartner's inquiry users when prioritizing NLQ, NLP and augmented analytics. Its marketing strategy and "dashboards are dead" campaign resonates well beyond its installed base and ecosystem. ThoughtSpot also increased its composability messaging with its 2021 acquisition of SeekWell, which syncs insights back to business applications.

Cautions

- **Evolving presence as the enterprise standard:** ThoughtSpot typically complements other ABI platforms. Despite being early to market and offering robust NLQ technology, almost all competitors are quick to emulate these capabilities to some degree. This may leave organizations questioning whether or not adding a search-based ABI platform to their existing ABI ecosystem adds sufficient value for the effort.

- **Lack of broader D&A ecosystem and global reach:** ThoughtSpot does not offer its own data ecosystem or enterprise apps, making visibility more challenging, as these ecosystems are driving many ABI buyers' decisions. However, ThoughtSpot is aligned to Databricks, dbt, Google BigQuery and Snowflake, and has SpotApps for ServiceNow and Google Analytics and Adwords. While it has a growing presence outside of the U.S., it is still smaller relative to market leaders.

- **Evolving community and end user training:** Offering visionary capabilities requires accompanying training and support for customers to maximize value — an ongoing challenge as markets collide. Gartner Peer Insights reviewers feel the quality and availability of end-user training are limited, as are the availability of quality third-party resources (service providers, integrators, and so on).

TIBCO Software

TIBCO Software is a Visionary in this Magic Quadrant. It has a strong presence in the life sciences, high-tech manufacturing, transport and logistics, and energy sectors, but less momentum outside its installed base, relative to other vendors. TIBCO Spotfire combines capabilities across data science, visual data discovery and streaming analytics, with its vision for "hyperconverged analytics." It offers robust capabilities for analytics in dashboards, interactive visualization, data preparation and analytic workflows.

In 2021, TIBCO Software focused on capabilities that democratize data science features and included operationalizing features for ML models. It also introduced a virtual data catalog that allows users to easily search and browse published data across the organization.

Strengths

- **Advanced data preparation and predictive modeling:** Spotfire has sophisticated data preparation features, such as automatically detecting column metadata and inferring relationships between tables. It also provides several predictive modeling methods for users, in addition to some strong data storytelling capabilities.

- **Cloud flexibility and enterprise readiness:** The Spotfire platform has modern automated administration capabilities, and the same service-oriented architecture is used in cloud, on-premises and in hybrid deployments. It has been optimized for scaled, secure deployment by some very large, geographically distributed organizations.

- **Vision for data and analytics convergence:** TIBCO's hyperconverged analytics strategy embodies the collision in the market and leverages its product strengths across data visualization, data science and streaming analytics to deliver more real-time and tailored insights.

Cautions

- **Limited market momentum:** TIBCO has less momentum than many of its competitors in this market. Spotfire forms only a small fraction of inquiries from users of Gartner's client inquiry service. Data from Gartner Peer Insights suggests that Spotfire is evaluated less often than competing offerings.

- **Perceived high cost of software**: Gartner Peer Insights reveal pricing and contract flexibility as a concern for some customers for adoption. Price is a major factor in all ABI buying decisions, and buyers' expectations have changed due to the downward pricing pressure applied to the market by large cloud providers.

- **Product gaps:** TIBCO Spotfire has some functionality gaps, such as the inability for users to comment and collaborate on the D&A assets in Spotfire's integrated data catalog. In addition, Spotfire lacks the ability to build automated data stories from its automated insights.

Yellowfin

Yellowfin is a Visionary in this Magic Quadrant. Yellowfin began as a vendor of a web-based BI platform for reporting and data visualization, but has since expanded to offer data preparation and augmented analytics, and has become known for its innovations around data storytelling.

In 2021, Yellowfin continued its investment in augmented analytics, including adding Guided NLQ for business users to ask questions of data, new Signals for automated business monitoring, and data storytelling feeds that integrate directly into action-based dashboards. It also enhanced its analytics application development experience with Yellowfin JavaScript API and REST API SDKs, which allow citizen developers to select Yellowfin capabilities and compose them into consumer analytical applications.

Strengths

- **Consumer-centric vision:** Yellowfin's product vision is both expansive and innovative. In 2021, Yellowfin launched Guided NLQ for nontechnical users to ask questions, and it continues its growing investment in the consumerization of augmented analytics and data storytelling feeds.
- **Openness:** Yellowfin offers a cloud-agnostic architecture, and much of its usage is by independent software vendor partners embedding Yellowfin in order to deliver analytics in their applications. This is also true for the nonembedded use case. Yellowfin's data preparation outputs are nonproprietary and can be used with other analytic tools. In addition, Yellowfin Stories can integrate Microsoft Power BI, Qlik and Tableau reports, dashboards and apps into long-form data story content.
- **Composability:** The improved APIs enable action-oriented analytics by automating tasks and opening up access to Yellowfin capabilities, including Signals, Stories, Threshold Alerts, Collaboration and Notifications. This creates contextual integrations with host applications, removing context switching between transactional actions and analytic workflows.

Cautions

- **Low market momentum:** Despite its visionary approach, Yellowfin has little market traction compared with its competitors. It rarely appears on the vendor shortlists of users of Gartner's client inquiry service, and it is less-often searched for on Gartner's website. The size of an ABI platform's user community greatly influences its likelihood of selection — and in Yellowfin's case, the community is small.
- **Limited analytics governance:** Yellowfin provides a solid approval workflow for content certification, but it lacks some key governance capabilities for development such as version control and multiple developer support. Git integration is on the roadmap.
- **Minimal geographic reach:** Although its product supports nine languages and is used internationally with seven support centers, Yellowfin is little known outside Asia/Pacific. The company has fewer than 200 staff, with only four countries having over 10 full-time Yellowfin employees. The company did slowly increase its number of employees during 2021, and it was acquired by global B2B software provider Idera, Inc. in early 2022.

Zoho

Zoho is a Niche Player in this Magic Quadrant. Zoho Analytics offers data preparation, self-service data visualization, embedded analytics capabilities and a marketplace of prebuilt analytical apps. Zoho is primarily deployed as a pure SaaS solution, but is also deployable in the cloud service provider of the customer's choice and occasionally on-premises.

Zoho has a growing midmarket and enterprise customer base, independent of the tens of thousands of existing Zoho customers who already can access Zoho Analytics capabilities via their Zoho One suite or CRM Plus. Zoho recently included its AI/ML-enabled Zoho DataPrep as part of Zoho Analytics, as well as enhancing its Ask Zia conversational interface.

Strengths

- **Sales strategy:** Zoho Analytics' SaaS offering and relationship with the broader suite of Zoho applications give existing or new Zoho customers access to analytics and BI capabilities in an ecosystem they're already familiar with.
- **Customer experience:** While Zoho Analytics customers are predominantly small to midsize companies, Gartner Peer Insight reviewers report that the overall experience with the vendor is above average relative to other Magic Quadrant vendors.
- **Natural language query:** Zoho Analytics' Ask Zia functionality allows users to ask questions about their data in natural language. Ask Zia can support complex analytical questions using terms such as "rank," "compare," "predict" or "convert." It can also automatically handle time reasoning.

Cautions

- **Momentum as enterprise analytics vendor:** Gartner inquiry and search data indicate lower momentum compared to leaders in the space. In conversations with Gartner clients evaluating enterprise ABI platforms, Zoho Analytics rarely appears on shortlists.
- **Product gaps:** Data visualization capabilities are weak relative to competitors. Interactivity on visuals such brushing and lassoing are absent. Governance features such as certifying datasets or watermarking analytic content are also absent. However, consumers of data can only access datasets after it is marked ready-to-use in the data preparation flow.
- **Limited product vision:** While Zoho Analytics has a clear vision for enhancing its product and go-to-market with more augmentation and prebuilt analytical content, much of the vision focuses on closing gaps in key areas where competitors are already executing. Elements of the collision between DSML platforms and ABI platforms are also limited in Zoho Analytics' vision.

Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant may change over time. A vendor's appearance in a Magic Quadrant one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

The following vendors met the inclusion criteria for 2022, and were added:

- Incorta
- Tellius
- Zoho

Dropped

- Board — Board is primarily used in financial planning use cases and therefore did not meet inclusion criteria for 2022.
- Infor — Infor did not meet the market momentum criteria for the ABI platform market in 2022.
- Information Builders — This vendor was acquired by TIBCO Software.

Inclusion and Exclusion Criteria

To qualify for inclusion in this Magic Quadrant, vendors had to meet both of the following criteria:

- Offer a generally available software product that met Gartner's definition of an ABI platform:

- Analytics and business intelligence platforms enable less technical users including business people to model, analyze, explore, share and manage data, and collaborate and share findings, enabled by IT and augmented by AI. It may optionally include the ability to create, modify or enrich a semantic model including business rules.

- Rank among the top 20 organizations in the market momentum index defined by Gartner for this Magic Quadrant. Data inputs used to calculate ABI platform market momentum included a balanced set of measures:
  - Gartner customer search and inquiry volume and trend data.
  - Volume of job listings specifying the ABI platform on TalentNeuron and on a range of employment websites in the U.S., Europe and China.
  - Frequency of mentions as a competitor to other ABI platform vendors in reviews on Gartner's Peer Insights forum during the year ending July 2021.
  - Social media communities and overall trends.

In line with Gartner's Magic Quadrant methodology, the number of vendors covered is limited to 20. However, there are many more ABI platform vendors that are not covered in this research.

Honorable Mentions

The five vendors mentioned below either featured in the 2021 edition of this Magic Quadrant or have momentum that may make them of interest to organizations looking beyond the vendors covered in the present Magic Quadrant. The following list, which does not include all the notable vendors absent from this Magic Quadrant, is in alphabetical order:

- **AnswerRocket.** AnswerRocket offers an augmented data discovery platform that enables users to explore data using NLQ and automatically produce insights using NLG. The platform also enables companies to operationalize their data science models, making them accessible and approachable to business users and analysts. AnswerRocket did not meet the criteria for market momentum required for full coverage in this Magic Quadrant.

- **Board.** Board differentiates itself by providing a decision-making platform (analytics and financial planning and analysis) that supports business processes more fully than vendors of competing ABI products aim to. Board did not meet the criteria for market momentum required for full coverage in this Magic Quadrant.

- **FanRuan.** FanRuan is one of the largest ABI vendors in China, where its traditional, report-centric BI product, FineReport, is widely used. Its new FineBI product offers self-service, visually driven BI via an on-premises deployment model. FanRuan did not meet the criteria for market momentum required for full coverage in this Magic Quadrant.

- **GoodData.** GoodData is a cloud platform specializing in multitenant use cases from self-service and embedded analytics to composable analytics applications that can accommodate machine learning and complex data. The "headless BI" engine allows other tools, and even other ABI platforms, to access the GoodData semantic layer via open APIs. A low-code/no-code UI allows users to quickly build visualizations and apps with their data. GoodData did not did not meet the criteria for market momentum required for full coverage in this Magic Quadrant.

- **Infor.** Infor Birst is an end-to-end data warehouse, reporting and visualization platform built for the cloud. Birst integrates with Infor ERP applications with context-aware filtering and workflows. Birst was featured in the 2021 edition of the ABI Magic Quadrant. Birst did not meet the criteria for market momentum required for full coverage in this Magic Quadrant due to its go-to-market focus on Infor customers and embedded BI.

Evaluation Criteria

The Ability to Execute criteria used in this Magic Quadrant are as follows (for the sources of information that informed Gartner's evaluations using these criteria, see the Evidence section):

Product or Service: This criterion assesses how competitive and successful a vendor's ABI platform product is with regard to the critical capability areas, in light of the vendor's RFP response and video submission.

Overall Viability: This criterion concerns the organization's financial status and model as it relates to ABI. It also takes account of existing and prospective customers' views about the vendor's likely future relevance.

Sales Execution/Pricing: This criterion covers the vendor's capabilities in sales activities. It includes the overall evaluation and contract negotiation/flexibility with a vendor as well as the value the customer receives.

Market Responsiveness/Record: This criterion addresses the extent to which a vendor has momentum and success in the worldwide market using a balanced set of measures.

Customer Experience: This criterion concerns customers' experience of working with a vendor after a purchase. Factors include the availability of quality third-party resources (such as integrators and service providers), the quality and availability of end-user training, and the quality of the peer user community.

Operations: This criterion concerns how well a vendor supports its customers, and how trouble-free its software is.

Ability to Execute

Table 1: Ability to Execute Evaluation Criteria

Evaluation Criteria ↓	*Weighting* ↓
Product or Service	High
Overall Viability	High
Sales Execution/Pricing	Medium
Market Responsiveness/Record	High
Marketing Execution	NotRated

Evaluation Criteria ↓	*Weighting* ↓
Customer Experience	High
Operations	High

Source: Gartner (March 2022)

The Completeness of Vision criteria used in this Magic Quadrant are as follows (for the sources of information that informed Gartner's evaluations using these criteria, see the Evidence section):

Market Understanding: This criterion concerns how closely aligned a vendor is with the shifting needs of analytic buyers and how widely its customers use recent and emerging capabilities.

Marketing Strategy: This criterion considers whether a vendor has a clear set of messages that communicate its value and differentiation in the ABI platform market, and whether that vendor is generating awareness of its differentiation.

Sales Strategy: This criterion concerns the extent to which a vendor's sales approach benefits from a range of options and drivers that encourage customers to evaluate its ABI platform.

Offering (Product) Strategy: Gartner evaluates a vendor's ability to support key trends that will create business value in future. Existing and planned products and functions that contribute to these trends are factored into each vendor's score for this criterion, based on its presented roadmap.

Vertical/Industry Strategy: This criterion assesses how well a vendor can meet the needs of various industries through templates or packaged data and analytics content.

Innovation: This criterion gauges the extent to which a vendor is investing in, and delivering, unique capabilities. It considers whether a vendor is setting standards for innovation that others are emulating.

Geographic Strategy: This criterion considers how well-represented a vendor is around the world.

Completeness of Vision

Table 2: Completeness of Vision Evaluation Criteria

Evaluation Criteria ↓	***Weighting*** ↓
Market Understanding	High
Marketing Strategy	High
Sales Strategy	High
Offering (Product) Strategy	High
Business Model	NotRated
Vertical/Industry Strategy	Low
Innovation	High
Geographic Strategy	Medium

Source: Gartner (March 2022)

Quadrant Descriptions

Leaders

Leaders demonstrate a solid understanding of the key product capabilities and the commitment to customer success that buyers in this market demand. They couple this understanding and commitment with an easily comprehensible and attractive pricing model that supports proof of value, incremental purchases and enterprise scale. In the modern ABI platform market, buying decisions are made, or at least heavily influenced, by business users who demand products that are easy to buy and use. They require these products to deliver clear business value and enable the use of powerful analytics by those with limited technical expertise and without upfront involvement from the IT department or technical experts. In a rapidly evolving market featuring constant innovation, Leaders

do not focus solely on current execution. Each also ensures it has a robust roadmap to solidify its position as a market leader and thus helps protect buyers' investments.

Challengers

Challengers are well-positioned to succeed in this market. However, they may be limited to specific use cases, technical environments or application domains. Their vision may be hampered by the lack of a coordinated strategy across various products in their portfolio. Alternatively, they may fall short of the Leaders in terms of effective marketing, sales channels, geographic presence, industry-specific content and innovation.

Visionaries

Visionaries have a strong or differentiated vision for delivering a modern ABI platform. They offer deep functionality in the areas they address. However, they may have gaps when it comes to fulfilling broader functionality requirements or they may have lower scores for customer experience, operations and sales execution. Visionaries are thought leaders and innovators, but they may be lacking in scale, or there may be concerns about their ability to grow and still execute consistently.

Niche Players

Niche Players do well in a specific domain (industry, vertical or use case), or they are good at meeting the ABI needs of organizations using a particular cloud stack. But they may have limited ability to surpass other vendors in terms of innovation or performance. They may focus on a specific domain or aspect of the ABI platform market, but lack deep functionality elsewhere. Alternatively, they may have a reasonably broad ABI platform, but limited implementation and support capabilities or relatively limited customer bases (in only a specific region or industry, for example).

Context

This Magic Quadrant assesses vendors' capabilities on the basis of their execution in 2021 and future development plans. As vendors and the market are evolving, the assessments may be valid for only one point in time.

Readers should not use this Magic Quadrant in isolation as a tool for selecting vendors and products. They should treat it as one reference point among the many required to identify the most suitable vendor and product. When selecting a platform, they should use this Magic Quadrant in combination with

Critical Capabilities for Analytics and Business Intelligence Platforms. We also recommend using Gartner's client inquiry service.

Readers should not ascribe their own definitions of Completeness of Vision or Ability to Execute to this Magic Quadrant (they often incorrectly equate these with product vision and market share,

respectively). The Magic Quadrant methodology uses a range of criteria to determine a vendor's position, as shown by the Evaluation Criteria section above.

Market Overview

According to Gartner's market share analysis, revenue in the ABI platform market grew by 16% in 2020, compared with 19% in 2019, to reach just over $7 billion. Pricing pressure and strong competition were broadly responsible for this small deceleration (see Market Share Analysis: Analytic Platforms, Worldwide, 2020). As reported in prior years, although spending on ABI is growing more slowly than in the 2010s, the number of people using ABI platforms is accelerating massively into the millions. This huge increase in user numbers is due to the growing variety of analytics use cases stemming from the pandemic, combined with more accessible pricing with the price per user being a fraction of what it was a decade ago.

Cloud data and analytics ecosystems continue to drive spending. All but one of the seven hyperscale cloud infrastructure and platform service vendors have an offering in the ABI platform market either directly or via an acquired subsidiary (see Magic Quadrant for Cloud Infrastructure and Platform Services). [1] The presence of the major cloud ERP and CRM application providers is also an influencer of ABI platform selection considerations. On one hand, cloud-led sourcing creates inevitable concerns about lock-in and unforeseen costs of the data and analytics portfolio. On the other, the cloud service providers (CSPs) accept the importance of openness in their software stacks and the growing importance of "multicloud" approaches, whereby organizations run applications in, and across, multiple cloud offerings.

Currently, one vendor — Microsoft — dominates the market in terms of user adoption. The massive growth of the Microsoft Power BI cloud service has continued, fueled largely by the bundling of this product with Office 365 (at E5 license level) at a greatly reduced price. The increasing integration of Power BI with Microsoft Teams fuels further growth, given the importance of remote working.

The dedicated, specialist analytics vendors in the ABI platform market are using their independence from the big cloud providers as competitive differentiators against the large cloud players, playing on customers' lock-in concerns. One flanking approach is to open previously closed products in order to minimize competition with ubiquitous ABI tools. Another is to focus on finding specific market segments and matching offerings to their needs.

The proliferation of augmented analytics capabilities is putting the ABI and data science and ML platform markets on a collision course. ABI platforms increasingly include functionality to perform augmented data science and ML tasks, with predictive models being executed "behind the scenes," and insights "surfaced" within the ABI process flow. Data science and ML platforms, for their part, increasingly feature enhanced data transformation and discovery capabilities, such as data visualization, that are traditionally more characteristic of ABI platforms (see Market Guide for Augmented Analytics Tools).

The market is continuously evolving, with many platforms adding capabilities for citizen analysts/developers to easily compose low-code or no-code automation workflows and applications. This blend of capabilities is helping to expand the vision for analytics beyond simply delivering datasets and presenting dashboards to delivering enriched contextualized insights. This has refocused attention on the decision-making processes and ultimately on taking actions that deliver business value (see Market Guide for Embedded Analytics and Scaling Analytics Requires Balance and Synergy Between Self-Service Analytics and Composable Analytics Applications).

Evidence

Gartner's analysis in this Magic Quadrant is based on sources that include:

- Gartner analysts' opinions of vendors.
- Customers' perceptions of vendors' strengths and challenges, drawn from ABI-related inquiries received by Gartner.
- Gartner Peer Insights data (see below).
- A questionnaire completed by vendors about their business.
- Vendor briefings covering differentiation, customer use cases and product roadmaps.
- An extensive RFP questionnaire inquiring how each vendor delivers the specific features that make up the 12 critical capabilities defined for this market.
- Video demonstrations of how vendors' ABI platform products address the 12 critical capabilities.
- Externally sourced data on market momentum (job postings, videos on the web and so on).

Gartner Peer Insights

Gartner Peer Insights reviews were considered for metrics relating to operations (service and support, and quality of technical support), customer experience (availability of third-party resources, quality/availability of end-user training, and overall experience), sales experience (pricing and contract negotiation), market responsiveness (value received) and market understanding (understanding customer needs). We considered reviews for modern ABI platform products posted from 8 November 2020 through 8 November 2021.

[1] The exception, Chinese vendor Tencent Cloud, has invested in Yonghong Tech and offers its Yonghong BI platform on an OEM basis.

Evaluation Criteria Definitions

Ability to Execute

Product/Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability: Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.

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