Magic Quadrant for Analytics and Business Intelligence Platforms

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The definition of self-service is shifting in this field as augmented capabilities pervade platforms. At the same time, cloud ecosystems and alignment with productivity tools have become key selection factors. This Magic Quadrant will help data and analytics leaders plan an analytics and BI roadmap.

Market Definition/Description

Analytics and business intelligence (ABI) platforms are characterized by easy-to-use functionality that supports a full analytic workflow — from data preparation to visual exploration and insight generation — with an emphasis on self-service usage and augmented user assistance.

Vendors in the ABI market range from startups backed by venture capital funds to large technology firms. The vast majority of new spending in this market is on cloud deployments, and major cloud platform players are present in the market. In many cases, ABI platforms are entry points for wider sets of cloud data management capabilities offered by these cloud vendors, examples being Microsoft Azure Synapse Analytics and IBM Cloud Pak for Data.

ABI platforms are no longer differentiated by their data visualization capabilities, which are now commoditized. All vendors can build interactive key performance indicator (KPI) dashboards using common chart forms (bar/column, line/area, scatter, pie and geographic maps) and drawing on a wide range of data sources. Differentiation has shifted to how well platforms support augmented analytics. Augmentation utilizes machine learning (ML) and artificial intelligence (AI)-assisted data preparation, insight generation and insight explanation to help business people and data analysts explore and analyze data more effectively than they could manually. Rather than being a

discrete capability, augmentation is now threaded through platforms as ML is applied across the data-to-decision workflow.

The scope of augmentation is extending. Originally intended to assist analyst personas using self-service, augmentation and, increasingly, automation are now being applied to help end users directly, giving rise to a new user category: augmented consumers. These are nontechnical people who expect insights to find them, often in the form of machine-generated data stories driven by automated insights based on ongoing monitoring of data relevant to their role, persona or job function. To ensure relevance, this functionality includes usage behavior, especially natural language query (NLQ) history and user feedback and ratings on automatically served content. This change has the potential to push ABI beyond the approximately 30% adoption ceiling that has been in placndee for many years. (For more information, see Augmented Analytics: Teaching Machines to Tell Data Stories to Humans.)

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

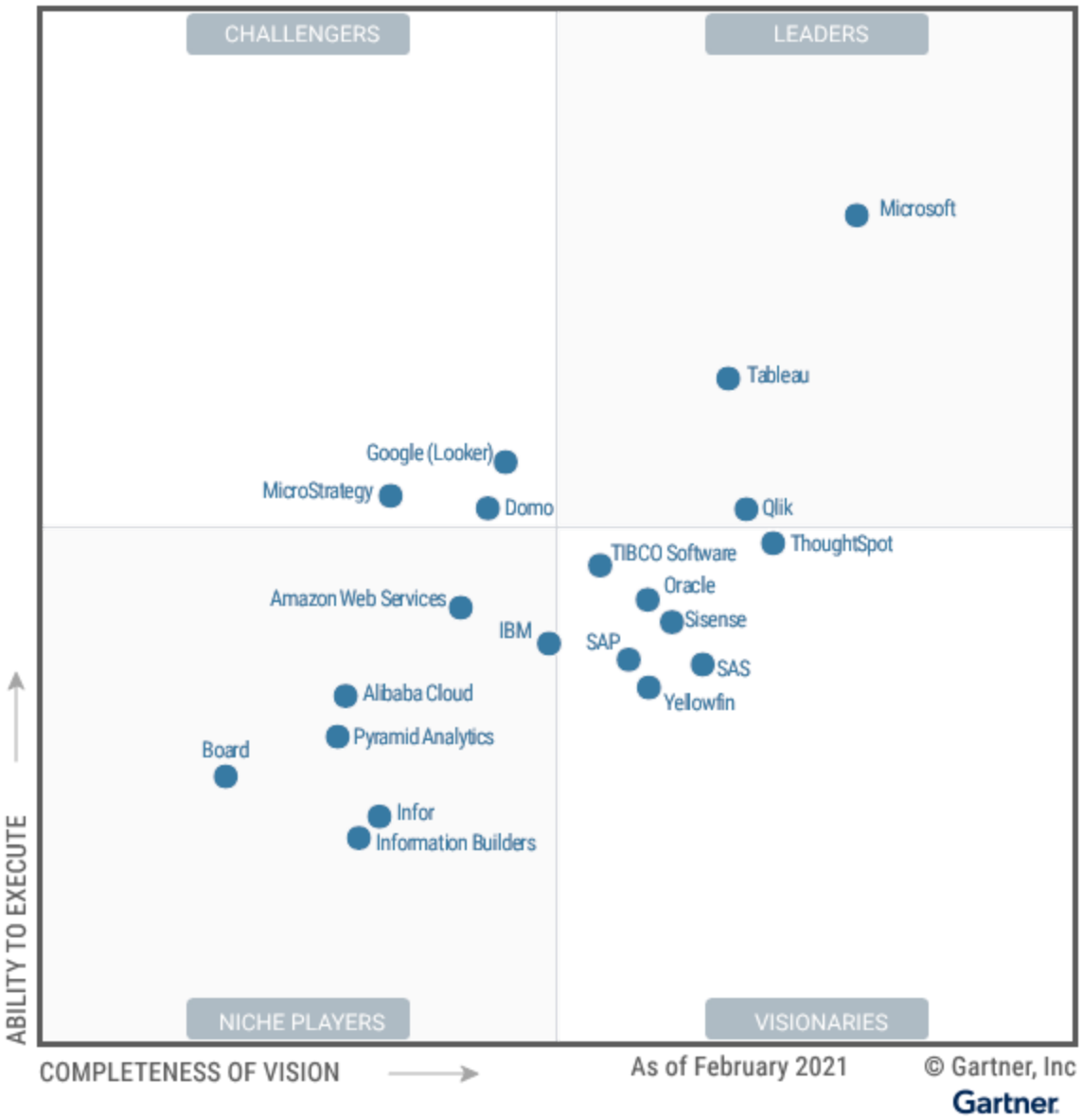
- Security: Capabilities that enable platform security, administering of users, auditing of platform access and authentication.
- Manageability: Capabilities that track usage of the ABI platform and manage how information is shared (and by whom).
- Cloud analytics: The ability to support building, deployment and management of analytics in the cloud, based on data stored both in the cloud and on-premises.
- Data source connectivity: Capabilities that enable users to connect to, query and ingest data, while optimizing for performance.
- 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).
- Catalog: The ability to automatically generate and curate a searchable catalog of analytic content, thus making it easier for analytic consumers to know what content is available.
- Automated insights: A core attribute of augmented analytics, this is the application of ML techniques to automatically generate findings for end users (for example, by identifying the most important attributes in a dataset).
- Data visualization: Support for highly interactive dashboards and exploration of data through manipulation of chart images.

- Data storytelling: The ability to combine interactive data visualization with narrative techniques in order to package and deliver analytic content in a compelling, easily understood form for presentation to decision makers.
- Natural language query (NLQ): This enables users to ask questions and query data and analytic content using terms that are either typed into a search box or spoken.
- Natural language generation (NLG): The automatic creation of linguistically rich descriptions of answers, data and analytic content. 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.
- Reporting: The ability to create and distribute (or “burst”) pixel-perfect, grid-layout, multipage reports to users on a scheduled basis.

Magic Quadrant

Figure 1: Magic Quadrant for Analytics and Business Intelligence Platforms

Source: Gartner (February 2021)



Vendor Strengths and Cautions

Alibaba Cloud

Alibaba Cloud is a Niche Player in this Magic Quadrant. As yet, it competes only 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.

With release 3.9, Quick BI has improved augmented analytics capability with DingTalk, Alibaba Cloud's digital workplace collaboration tool, and thus addresses a broader range of data and analytics consumers.

Strengths

- Vision for augmented analytics: Quick BI offers good support for data visualization and dashboards. It also offers some capabilities enabled by AI, beyond reporting and self-service analytics, namely augmented analytics features such as automated insights and NLQ to improve user adoption. Another capability, currently on Alibaba Cloud's roadmap, is integration with its data science platform, PAI Studio, to provide more in-depth insights aided by its internal ecosystem as a cloud service provider.
- Modular architecture supporting composable analytics: Quick BI is utilized in Alibaba Cloud's "Data Middle Office" strategy, which delivers a modular and reusable data and analytics capability. As such, Quick BI can be used to help compose analytic applications and provide business-oriented data products such as Quick Audience (for customer insights and marketing automation).
- Expertise in e-commerce: Quick BI can integrate with Business Advisor, Alibaba's market intelligence platform, to utilize and blend industry benchmark data. It gives organizations a stronger domain analytics capability, thanks to Alibaba Cloud's expertise in e-commerce.

Cautions

- Capability gaps due to single-market focus: Cloud computing in China is growing rapidly, and most Quick BI customers and prospects are in China. There is little incentive for Alibaba Cloud to test Quick BI's maturity by expanding into the more mature and demanding U.S. or EMEA cloud markets. Currently, organizations in China have lower expectations of cloud products, which tend to be of lower quality in this country. The market that Quick BI serves does not usually expect it to be comparable to non-Chinese products. Organizations looking for leading-edge functionality should consider competing platforms.
- Geographical presence and market momentum: Alibaba Cloud is a China-focused vendor, with a minimal installed base elsewhere. The newly released NLQ capability is available only in Chinese, which limits its international appeal. As a SaaS offering, Quick BI is often packaged into the vendor's

integrated Data Middle Office solution. Judging from the number of client inquiries that Gartner analysts have received and from job postings, Quick BI's market momentum as an ABI tool is not as strong as that of products from local competitors such as FanRuan.
- Product capabilities: Alibaba Cloud has improved Quick BI's overall product capabilities significantly, but these are still relatively weak, compared with those of some vendors in this Magic Quadrant. All 12 functional capabilities evaluated are below average.

Amazon Web Services

Amazon Web Services (AWS) is a Niche Player in this Magic Quadrant. Despite AWS's strong adoption in other areas of the data and analytics stack, Amazon QuickSight is relatively new, and AWS is not as well-known in the ABI platform market. Nevertheless, Amazon QuickSight has huge potential to sell to the AWS installed base.

Amazon QuickSight is a fully managed, cloud-based ABI service for performing ad hoc analysis and publishing interactive dashboards. The platform ingests data from a variety of on-premises and cloud-based data sources into its parallel, in-memory calculation engine, SPICE, and AWS claims it can scale to hundreds of thousands of users without any server setup or management.

In late 2020, AWS added embedded authoring capabilities with support for multitenant deployments and dashboards with autorefreshing data. Supported sources include real-time data in Elasticsearch and Amazon Timestream, as well as databases (such as Amazon Aurora, MySQL and PostgreSQL), data warehouses (Amazon Redshift, Snowflake and Teradata) and serverless options (such as Amazon Athena). Additionally, AWS has announced Amazon QuickSight Q, an ML-powered NLQ capability.

Strengths

- Potential price disruptor: AWS prices its QuickSight service at $216 per user per year for content authors. For content consumers, QuickSight has a pay-per-session model, charging $0.30 per 30-minute session, with a maximum charge of $5 per user per month. So the most a consumer would pay is $60 per user per year. This is at least half the list price of other vendors' per-user pricing models.

- Cross-selling opportunity: AWS is the largest cloud service provider in the world by revenue, and has an international presence and a global client base. 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 can draw on that momentum, with many data and analytics and application developers eager to build on the AWS stack.
- Frequent updates: Although Amazon QuickSight is a relatively new product and therefore missing some key features, the frequent refreshes of AWS's cloud architecture, coupled with its extensive development resources, indicate that QuickSight could close the functionality gap quickly. Moreover, AWS has wisely resisted any temptation to make acquisitions in the ABI platform space, which might enable quick gains in market share but would sacrifice tight integration with the AWS stack.

Cautions

- Emergent functionality: Amazon QuickSight provides core data connectivity and data visualization functionality. However, overall, QuickSight is less well-developed than competing platforms in a number of areas, and particularly in its data preparation, manageability, Mode 1 reporting, NLQ and catalog capabilities.
- Lack of business applications: Beyond its contact center application, AWS lacks a broad business application ecosystem to drive demand for its ABI offering. Similarly, its nascent personal productivity and collaboration offerings (Amazon WorkDocs) lack significant adoption, unlike those of Microsoft and Google. This may limit end-user demand for, and the comparative appeal of, AWS QuickSight.
- AWS centricity: 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 QuickSight work in a hybrid environment — by leveraging SPICE or direct query — hybrid cloud is not a strong part of the QuickSight vision. As a result, AWS's growth in the ABI platform market will mostly come from its own installed base.

Board

Board is a Niche Player in this Magic Quadrant. It mainly serves a submarket for financially oriented BI.

Board differentiates itself by providing a decision-making platform that supports business processes more fully than vendors of competing ABI products aim to. The company originated in Switzerland and most of its customers are still in Europe, but it also has an impressive roster of customers in the U.S. Board offers a subscription pricing model for on-premises and hosted cloud deployments.

In 2020, Board 11 was further developed by adding a set of REST APIs for front-end and back-end integration, new data visualization types and improved centralized user access management for distributed applications.

Strengths

- Low-code, closed-loop application creation: Board's platform capabilities enable users to extend beyond typical BI use cases. They can use self-service to build and publish process-oriented analytic applications that include functions such as data entry and business rules using a drag-and-drop interface.
- Unified analytics, BI, and financial planning and analysis (FP&A): Board is one of only two vendors in this Magic Quadrant to offer a modern ABI platform with integrated FP&A functionality. As such, Board is highly differentiated for buyers looking to close the gap between BI and processes such as those involved in planning, budgeting and financial consolidation.
- Extensive system integrator (SI) partners: Board has a well-established network of SI partners. These help to drive its growth and give it presence, by proxy, outside the nine markets where it has significant direct operations, namely the U.S., Switzerland, the U.K., Italy, Germany, Australia, France, Benelux and Spain.

Cautions

- Lack of market momentum: Board appears infrequently on vendor evaluation shortlists seen by Gartner, and its new customer growth is limited. Furthermore, Board's user community is one of the smallest of the vendors in this Magic Quadrant, with very little user-created content available on public video-sharing websites. Given the near functional parity between most ABI platforms for core use cases, these ecosystem factors are increasingly heavily weighted in product selection processes.

- Minimal recognition outside finance departments: In most cases, Board enters a company via the finance department, its brand being well-known there. Persuading end users in other functions to use its platform as an alternative to better-known BI platforms can prove difficult. Board is rarely named as the sole or main BI standard by users of Gartner's client inquiry service.
- Slow product release tempo: Board is not innovating as quickly as most ABI vendors. Compared with the monthly frequency of product releases issued by competitors, Board's approach is slower, which means that the gap between the capabilities it delivers and those of other platforms is growing. This is evident in areas like automated insight generation and NLQ.

Domo

Domo is a Challenger in this Magic Quadrant, thanks to significant improvements to its product and its consumer-led vision for ABI.

This vendor's focus on business-user-deployed dashboards and ease of use characterizes its appeal. Domo's cloud-based ABI platform offers over 1,000 data connectors, consumer-friendly data visualizations and dashboards, and a low/no-code environment for BI application development. Domo typically sells directly to business departments, such as marketing and sales, that are attracted to its platform's ease of use and fast time to deployment.

In 2020, Domo made significant improvements to the product, particularly in the areas of data preparation and manageability. These changes are significant, given Domo's reputation for delivering attractive front ends that appeal to senior executives but are less appealing to power users and business analysts. The data preparation improvements enable Domo to offer deeper analysis and more end-to-end capability.

Strengths

- Business momentum: Despite tough competition, Domo's subscription revenue increased by 25% between the first nine months of 2019 and the first nine months of 2020. Domo is winning new customers and increasing its relevance to enterprise buyers.
- 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.

- 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 adoption drivers: Domo faces a competitive disadvantage against ABI platform vendors that have 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: Although Domo’s platform supports multiple languages (English, Japanese, French, German, Spanish and simplified Chinese), the company has a direct presence in only four countries: the U.S., Japan, the U.K. and Australia. Three-quarters of its revenue derives from the U.S. This narrowness may impair its suitability for enterprises based in other countries.
- 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 (Looker)

Google (Looker) is a Challenger in this Magic Quadrant. Looker’s acquisition by Google in 2020 increased its market recognition and consideration by buyers, especially as Google made progress integrating Looker into Google Cloud Platform’s (GCP’s) portfolio and go-to-market efforts.

Looker offers modern ABI reporting and dashboard capabilities using an agile, centralized data model and an in-database architecture optimized for various cloud databases.

In 2020, Looker introduced enhancements to its user experience, including a mobile app (on both iOS and Android) and an NLQ interface (Looker Q&A) that uses the LookML semantic layer. For developers, Looker introduced the Looker extension framework, a hosted development environment on which it built and released the Looker Data Dictionary, its first Looker-authored extension. Looker also extended its integrations with Google Cloud applications, such as Google Marketing Platform and the Google Contact Center AI solution. Additionally, it added optimizations with Google Sheets and Google BigQuery.

Strengths

- In-database architecture and governed data model: The Google (Looker) offering does not require in-memory storage optimizations. Rather, it leaves data in the underlying database and uses the LookML data modeling layer to apply business rules. This enables power users and data engineers to model data and then reuse data and calculations in other applications in a trusted and consistent way. Looker is opening up LookML-governed data to other analytics and BI platforms, having added a Tableau-specific connector in 2020. This approach exploits the performance and scalability of the underlying database and supports data source flexibility.
- Customer-facing application development: The developer is a key persona for Looker. Google (Looker) offers extensive APIs, SDKs, developer tools and workflow integration support for end-user organizations and OEMs that want to create and embed analytics in application workflows, portals and customer-facing applications.
- Leverage within GCP ecosystem: Following its acquisition of Looker, Google has made progress integrating Looker into GCP go-to-market activities, including the introduction of new Google BigQuery product bundles. This, coupled with an acceleration in cloud data management and ABI adoption, has contributed to an increase in Looker's market momentum.

Cautions

- Power user skills requirement for data modeling: In contrast to the point-and-click and augmented approach taken by competing vendors' platforms, which are targeted at enabling less technically skilled users, Looker's data modeling requires coding. The product lacks data preparation capabilities for visually manipulating data. Additionally, automated model generation from Google BigQuery is a roadmap item.

- Narrowness of product offering: Looker has added NLQ and offers access to Google BigQuery ML-based functions and optimizations from within Looker. However, its current product is missing important capabilities that are likely to define the future of ABI platforms, such as AI-automated, augmented analytics and natural-language-driven consumerlike experiences.
- Limited global presence: Although Google has expanded Looker's global presence following the acquisition, adoption of Looker outside the U.S., Western Europe and Japan remains limited, compared with Leaders in this Magic Quadrant. Evaluators in those regions should take this into consideration.

IBM

IBM is a Niche Player in this Magic Quadrant. IBM Cognos Analytics is primarily of interest to existing IBM Cognos customers who are looking to modernize their ABI use.

IBM Cognos Analytics has multiple deployment options — public, private and on-premises — and, through IBM Cloud Pak for Data, offers multicloud support for AWS, Microsoft Azure, GCP and IBM Cloud. IBM Cloud Pak for Data also gives customers the choice to use IBM Cognos in conjunction with IBM's containerized stack of data and analytics services, including storage, data virtualization, data refinery, data catalog, and data science and ML services.

In 2020, IBM Cognos Analytics gained AI-assisted functionality to explore key driver relationships, time series analysis for univariate and multivariate forecasting, and "what if?" analysis in a single UI. In addition, its augmented data preparation capability was extended, to offer AI recommendations that help with data modeling.

Strengths

- Comprehensive functionality for Mode 1 and Mode 2 use cases: IBM Cognos Analytics is one of the few offerings that include enterprise reporting, governed and self-service visual exploration, and augmented analytics in a single platform. In addition, as existing IBM Cognos Framework Manager models and reports from earlier versions can be used in the single environment, there is a migration path and the ability to use existing content.
- Roadmap for applying analytics everywhere: Visionary elements of IBM's roadmap include a social insights add-on, AI-driven data preparation and analytic quality scores for data sources. A big part of 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 forecasts.
- Flexible deployment options: IBM offers a variety of deployment options to meet all customer requirements. These include on-premises, cloud (IBM-hosted cloud and IBM OnDemand Cloud Service) and “bring your own license” for any of the major infrastructure as a service (IaaS) platforms (Microsoft Azure, Google, AWS), and IBM Cloud Pak for Data.

Cautions

- Fading brand value: IBM has put significant effort into its broad data and analytics marketing efforts and vision centered on IBM Cloud Pak for Data, but this messaging is not resonating with evaluators in the ABI market. The Cognos brand is no longer commonly bracketed with the leading vendors in the minds of evaluators or potential users. IBM Cognos Analytics rarely appears on evaluation shortlists seen by Gartner, unless IBM is already an incumbent vendor. Interest in IBM Cognos Analytics from Gartner clients failed to rebound in 2020, judging from their inquiries and searches.
- Lack of sales adoption drivers: Despite being a large vendor with a wide data and analytics offering, IBM benefits from neither personal productivity suite uplift (as Microsoft and Google do) or an enterprise application “tailwind” (as Oracle and SAP do). This limits IBM Cognos Analytics’ touchpoints with organizations that might invest in the platform.
- Price versus cloud vendor alternatives: Prices for IBM Cognos Analytics Standard, Plus and Premium — at $15, $35 and $70 per user per month, respectively — are in line with those of independent ABI specialists but significantly higher than those of some other large cloud providers. Consequently, IBM struggles to be price-competitive in new deals.

Infor

Infor is a Niche Player in this Magic Quadrant. Its strategy aims primarily to meet the analytics needs of the Infor ERP installed base, as well as OEM/embedded analytics use cases.

Infor Birst is an end-to-end data warehouse, reporting and visualization platform built for the cloud. It also runs as an on-premises appliance on commodity hardware. Judging by

inquiries from Gartner clients, most organizations that consider using Birst are Infor customers.

In 2020, Infor added new capabilities to further integrate Birst with Infor ERP applications with context-aware filtering and workflows. It also added the capability to deliver real-time AI/ML while users are performing interactive analysis, and unified Mode 1 pixel-perfect reporting and Mode 2 visualization in the same design canvas. With version 7.6 of Birst, Infor completed its redesign of the administration experience, separating enterprise security from data engineering, and removed all final pieces of Adobe Flash. In addition, in 2020, pricing and packaging were greatly simplified to a single, all-inclusive user approach.

Strengths

- Range of prebuilt vertical applications: Infor Birst for CloudSuite gives Infor ERP customers prebuilt extraction, transformation and loading (ETL), data models and dashboards that are fully integrated into Infor business applications. It includes industry-specific analytics for manufacturing, distribution, healthcare, asset management and human capital management. For non-Infor data sources, Birst provides solution accelerators for specific domains, such as wealth management, insurance, sales and marketing.
- Flexibility and governance for self-service data models: Infor Birst's networked semantic metadata layer enables business units to create models that can be promoted to the wider enterprise. Birst has patented capabilities that combine centralized and decentralized operating modes of BI, supporting a process to enable agile end-user self-service while preventing analytical silos and the overhead often associated with centralized BI.
- Hybrid cloud capability: Infor Birst provides data preparation, dashboards, visual exploration and formatted, scheduled reports on a single cloud-native platform. It supports live connectivity with on-premises data sources and rapid creation of a data model and an all-in-one data warehouse on a range of storage options. Infor Birst supports six data center options in the U.S. (including on AWS GovCloud), Europe and Asia/Pacific. Customers can choose a single region or deploy across multiple regions. Birst also offers a cross-site migration tool to enable customers to easily migrate configurations across regions and hybrid cloud environments.

Cautions

- Strategic focus on Infor installed base: 2020 saw Infor shift strategy to focus Birst primarily on meeting the analytic needs of Infor ERP customers. In some ways

this is unfortunate, as Birst remains a strong product for stand-alone use but is now rarely considered by those outside the Infor installed base. As Birst's development direction becomes less about the open market's needs and more about tighter integration with Infor ERP, it will become less relevant to those who may otherwise have considered it an option.

- Reporting centricity: Although Infor Birst now has a single interface for reporting and data visualization, its interactive, visually driven charting functionality still lags behind that of other products on the market. Birst is mainly used for Mode 1 static and parameter-driven reporting, for which its functionality is well-developed, rather than for Mode 2 agile, visually driven requirements, for which it is weaker.
- Lack of consumerized, augmented vision: Although it has offered augmented data preparation from the outset, Infor lacks a strong vision when it comes to augmenting the user experience. Improved catalog and search capabilities are on its roadmap, however.

Information Builders

Information Builders is a Niche Player in this Magic Quadrant. Its WebFOCUS Designer is of most interest to its installed base and not often evaluated in competitive sales cycles of which Gartner is aware.

Information Builders sells the integrated WebFOCUS ABI platform, as well as individual components thereof. WebFOCUS Designer includes components from the WebFOCUS stack that are intended to satisfy modern self-service ABI needs.

Compared with previous versions, WebFOCUS 8207 has improved usability and performance, a modern self-service analytics experience and key content authoring workflows.

In 2020, Information Builders agreed to be acquired by TIBCO Software.

Note: During our research for this Magic Quadrant, TIBCO Software announced that it had entered into an agreement to acquire Information Builders. The acquisition was due to complete in the first quarter of 2021. As a result, product and company integration plans were not developed and available to share with Gartner in time for consideration in this Magic Quadrant. Consequently, representing the two as one entity is not

warranted, nor would it be useful to readers at this point. TIBCO Software and Information Builders are therefore represented separately in this Magic Quadrant.

Strengths

- External and large-scale deployments: Information Builders is well-known for deploying externally facing analytic applications at scale, sometimes for thousands of users per deployment. WebFOCUS offers flexible deployment options: Information Builders-managed cloud, private cloud and on-premises.
- Prepackaged analytic playbooks: Information Builders offers industry-specific solutions for healthcare, credit union, insurance, law enforcement and public-sector customers needing prepackaged data and analytics solutions without the need to invest in extensive upfront configuration and development. In this way, Information Builders enables faster time to value.
- Support for complex data: A core strength of Information Builders is data connectivity and integration of a variety of data sources, including real-time data streams.

Cautions

- Lack of differentiated vision: Although augmented functionality is being delivered and appears on its roadmap for 2021, Information Builders' overall vision and product strategy are not clearly differentiated from those of its competitors. Information Builders is more of a fast follower than a market disruptor that others need to copy.
- Lack of momentum: Although Information Builders' product roadmap shows drastic improvements to the existing platform, Gartner's search and inquiry data, along with external metrics such as social media following, indicate that its traction in the market remains low, relative to competitors. Consequently, skills in Information Builders' ABI platform are less readily available than for its competitors' platforms.
- Acquisition-related uncertainty: Information Builders has agreed to be acquired by TIBCO Software. Both organizations have offerings across the data and analytics stack, and they will have to work out where each of their tools belongs. WebFOCUS overlaps with both TIBCO Jaspersoft and TIBCO Spotfire. For potential buyers, this creates uncertainty. Information Builders and TIBCO are currently unfolding integration and synergy plans with a focus on creating multiple options for current customers and potential buyers.

Microsoft

Microsoft is a Leader in this Magic Quadrant. It has massive market reach through Microsoft Office and a comprehensive and visionary product roadmap.

Microsoft offers data preparation, visual-based data discovery, interactive dashboards and augmented analytics in Power BI. This is available as a SaaS option running in the Azure cloud or as an on-premises option in Power BI Report Server. Power BI Desktop can be used as a stand-alone, free personal analysis tool. Installation of Power BI Desktop is required when power users are authoring complex data mashups involving on-premises data sources.

Microsoft releases a weekly update to its cloud-based Power BI service, which gained hundreds of features in 2020. Notable additions include more augmented analytics in the form of AI-infused experiences, including smart narratives (NLG) and anomaly detection capabilities for out-of-the-box visuals.

Strengths

- Alignment with Office 365 and Teams: The inclusion of Power BI in the Office 365 E5 SKU has provided an enormous channel for the platform's spread, making it "self-seeding" in many organizations. The increasing integration of Power BI into Microsoft Teams, with its tens of millions of daily active users, will further increase Power BI's reach in the world of remote working. Power BI is now often the option that organizations have in mind when using Gartner's client inquiry service to ask about ABI platform selection — "why not Power BI?" is effectively the question most are asking.
- Price/power combination: The influence of Power BI has drastically reduced the price of tools in the ABI platform market since its launch. In this case, though, low price does not equate to limited functionality. The Power BI cloud service is extremely rich in its capabilities, which include an enlarged set of augmented analytics and automated ML capabilities. AI-powered services, such as text, sentiment and image analytics, are available within Power BI Premium and draw on Azure capabilities.
- Scope of product ambition: Microsoft continues to invest in a broad set of visionary capabilities and to integrate them with Power BI. It now claims to have 80,000 customers using AI services in Power BI deployments. It continues to encourage usage at scale by, for example, applying ML-driven automatic optimization of materialized views on Azure Synapse (and soon other data sources, including Snowflake and Redshift) to autotune query performance.

Cautions

- Functional gaps in on-premises version: Compared with the Power BI cloud service, Microsoft's on-premises offering has significant functional gaps, including in relation to dashboards, streaming analytics, prebuilt content, natural language question and answer, augmentation (what Microsoft calls Quick Insights) and alerting. None of these functions are supported in Power BI Report Server, its on-premises offering.
- Azure only: Microsoft does not give customers the flexibility to choose a cloud IaaS offering. Its Power BI service runs only in Azure. However, customers that utilize Azure can take advantage of the global reach offered by Microsoft's cloud platform. Power BI Premium enables customers to enable multigeography capabilities in their Power BI tenant, and they can deploy their capacity to one of 42 globally available data centers.
- Content promotion and publication process: The way in which Power BI handles the promotion and publication of content can lead to a significant administrative overhead for customers. The fact that there is a one-to-one relationship between published Power BI apps and Workspaces (Power BI's collaborative "development" environment) means that organizations may face a situation in which they are manually managing many hundreds of Workspaces. Retroactively fixing this issue is a complex task. How to govern self-service usage is perhaps the most common question asked about Power BI by users of Gartner's inquiry service. The Power BI team is, however, investing in governance capabilities to help customers manage their Power BI environments better.

MicroStrategy

MicroStrategy is a Challenger in this Magic Quadrant. It is functionally strong across a wide range of use cases, and its direct query capabilities make it well-suited for use on cloud data warehouses. However, its vision is narrow and fails to reflect other key selection drivers, particularly augmented analytics.

The MicroStrategy platform, which comprises an analytic product family for data connectivity, data visualization, reporting and advanced analytics, is supplemented by complementary mobile, cloud, embedded and identity analytics products. Its intuitive HyperIntelligence application uses a semantic graph to overlay and dynamically identify predefined insights within existing applications. Unusually, the MicroStrategy semantic graph is open to competing ABI platforms.

In 2020, MicroStrategy extended its HyperIntelligence capability to meet new asset management, retail stocking and other use cases, by enabling images and thresholds (HyperVision), thereby potentially putting ABI into the hands of decision makers on shop floors, for example. HyperIntelligence was also made available as a SaaS offering (Hyper.Now), enabling business users to author and share HyperIntelligence cards with little effort. MicroStrategy also maintained its commitment to openness by adding support for Jupyter Notebook and RStudio to its semantic graph, and further developed the enterprise deployment capabilities of its hosted service, MicroStrategy Cloud Environment, available on Microsoft Azure and AWS.

Strengths

- Direct query: In the era of visual data discovery, BI architectures catered to business analysts by ingesting data into BI platforms to bolster performance. As companies make significant investments in cloud databases, they will be disinclined to take the data out of those databases. MicroStrategy's native data integration will help facilitate the architectural shift to a direct query architecture.
- Mode 1 and Mode 2 reporting: MicroStrategy is one of the key providers for customers who 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 advantage of stack ABI solutions: 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. This may impact how users view MicroStrategy's platform and their likelihood of evaluating it.
- Lack of product differentiation: Launched in 2019, MicroStrategy's HyperIntelligence capability, which embeds insights, suggestions and actions directly into enterprise applications, is now its key differentiator. It forms a central aspect of MicroStrategy's growth strategy (along with an increased focus on SaaS offerings) and has attracted new customers. However, in Gartner's view, it will face increased competition from other ABI platforms as they also begin to

surface analytic findings directly in the context of users' workflows and collaboration. This may make it harder for MicroStrategy to differentiate its platform.
- Augmented analytics capabilities: Despite having had one of the most comprehensive ABI platforms for years, MicroStrategy now has two big feature gaps: automated insights and NLG. For organizations looking to help self-service users get the most from data and analytics adoption, these gaps may prove deal breakers.

Oracle

Oracle is a Visionary in this Magic Quadrant. Oracle Analytics Cloud (OAC) is an end-to-end cloud-first platform that provides data ingestion, preparation, visualization, dashboards, reporting and mobility. It offers pervasive augmented analytics, multilanguage consumer experiences, and Oracle cloud, data management and application optimizations.

Oracle's ABI capabilities can be deployed on the Oracle Cloud Infrastructure (OCI), on-premises in hybrid mode, in Oracle cloud application environments with Oracle Fusion Analytics Warehouse, or in third-party clouds.

During 2020, Oracle focused on enhancing its augmented capabilities and opening its platform to third-party components. This focus included integrations with third-party ML platforms and opening Oracle Analytics Cloud semantics to other ABI platforms. Cloud deployment options, once Oracle-only, have been expanded to third-party clouds and customer data centers using Oracle Cloud@Customer. At the same time, enhanced optimizations within the Oracle stack include the ability to use OAC with Oracle applications, and support for Oracle Machine Learning and Oracle Autonomous Data Warehouse.

Strengths

- Cohesiveness of augmented analytics capabilities: Oracle implemented augmented analytics capabilities across its platform earlier than most vendors. Users can leverage NLQ through the Oracle Analytics interface, through Oracle Analytics Day by Day for mobile devices, as well as through integration with a variety of chatbots and collaboration interfaces powered by Oracle Digital Assistant. OAC also features NLG with adjustable tone and verbosity in English and French. It is the only platform on the market to support NLQ in 28 languages.

- Product vision: Oracle invests aggressively in augmented analytics capabilities and consumerlike, conversational user experiences, including chatbot integration coupled with autogenerated insights and integrated podcast generation, to boost adoption through multiexperiences.
- Full-stack enterprise cloud: Oracle offers an end-to-end cloud solution, including infrastructure, data management, analytics and analytic applications, with cloud data centers in almost all regions of the world. In addition, Oracle Fusion Analytics Warehouse (FAW) offers native integration and closed-loop actions for Oracle's ERP, human capital management, supply chain, customer experience and NetSuite products.

Cautions

- Oracle application-centric: Although OAC can access any data source, at the time of writing its packaged analytic applications (FAW) work only with Oracle enterprise applications. To gain similar capabilities, non-Oracle application customers would have to build applications for themselves using OAC.
- Mind share: Oracle has a strongly competitive product, but its brand is not associated with modern ABI outside the Oracle customer base. As such, Oracle is not considered as frequently as the Leaders in competitive evaluations known to Gartner. In Gartner's opinion, organizations considering OAC will find that business user preference is unlikely to be an advantage they can use to drive adoption.
- Customer perception: Selling OAC to Oracle's wider installed base is a key part of Oracle's sales strategy. However, during 2020 it was evident from Gartner client inquiries that the views of Oracle BI Enterprise Edition (OBIEE) and Oracle Applications customers regarding OAC, although improving, were still often skeptical. Oracle is, however, making significant investments to reestablish the perception that it is a trusted enterprise ABI partner to its existing customers.

Pyramid Analytics

Pyramid Analytics is a Niche Player in this Magic Quadrant. It is growing by expanding primarily within its existing installed base, but also by adding more users and increasing utilization of its platform across more of the analytics pipeline.

Pyramid offers an integrated suite for modern ABI requirements. This has a broad range of analytical capabilities powered by a flexible cloud-based infrastructure deployable on any existing infrastructure — on-premises, in a cloud or in a hybrid environment — in order to scale up and out easily. Pyramid data connectors push compute down to the data source, rather than ingesting data in memory like many ABI tools.

Pyramid has built on its cloud strategy by introducing deeper support for Kubernetes, with improved elastic scaling to facilitate scaled processing of Python, R and SAS — and new options for multicloud deployments. To complement the containerized approach, Pyramid is introducing a specialized AWS Lambda version to support large-scale concurrent user deployments; additionally, a Microsoft Azure version is planned. Pyramid's adaptive augmented analytics platform now covers the whole data life cycle out of the box, from ML-based data preparation to automated insights and automated ML model building.

Strengths

- Broad range of use cases: Pyramid supports agile workflows, governed, visual data discovery, report-centric content creation and data science functionality within a single platform and interface.
- Augmented capabilities: Augmented features such as Smart Discover, Smart Reporting, Ask Pyramid (NLQ), AI-driven modeling, automatic visualizations and dynamic content offer powerful insights to all users, regardless of skill level.
- Comprehensive deployment, administration and workflow capabilities: Pyramid supports the full data pipeline, from data wrangling, data discovery and sharing through to dashboards and report publishing with enterprise-grade security and governance tools. The architecture is built around cloud deployment, with a cluster-based design that incorporates a zero-footprint client and hybrid data connectivity capabilities.

Cautions

- Execution of cloud vision: Although the latest version of Pyramid's platform delivers strong core product functionality and reflects a cloud-native vision, Gartner Peer Insights reviewers score Pyramid's cloud BI capabilities below average. Feedback from customers using Pyramid on-premises and trying to move into a hybrid environment is that the transition can be difficult. In addition, Pyramid has no SaaS offering.
- Limited availability of training resources: According to Gartner Peer Insights data, Pyramid scores below average for the quality and availability of its end-user

training. A lack of publicly available training, help forums and video content, relative to competitors in the sector, may hinder end-user adoption.
- Lack of ecosystem to sell to: The ABI sector is increasingly dominated by cloud data and analytics ecosystems and business application vendors. Being an independent player without wider application or collaboration offerings makes it difficult to gain traction in this crowded market. Like many other vendors in the sector, Pyramid finds it difficult to differentiate itself on product functionality alone, and, despite new partnerships and public cloud ecosystem channels, its momentum remains low, relative to that of competitors.

Qlik

Qlik is a Leader in this Magic Quadrant. It has a strong product vision for ML- and AI-driven augmentation, but lower market momentum than the other two Leaders.

Qlik's lead ABI solution, Qlik Sense, runs on the unique Qlik Associative Engine, which has powered Qlik products for the past 25 years. Qlik's Cognitive Engine adds AI/ML-driven functionality to the product and works with the Qlik Associative Engine to offer context-aware insight suggestions and augmentation of analysis. Qlik offers deployment flexibility, with enterprise SaaS and customer-hosted options including multicloud and on-premises installation, without limiting customers to any particular cloud.

Qlik continues to enhance its platform's open architecture and multicloud capabilities. It has built on its augmented analytics vision, with key elements based on its Cognitive Engine. Insight Advisor now enhances a full range of user experiences in Qlik Sense with search-based visual analysis, conversational analytics, associative insights, accelerated creation and data preparation. Qlik recently acquired RoxAI, Knarr Analytics and Blendr.io to enhance capabilities for alerting, continuous intelligence and SaaS platform integration, respectively.

Strengths

- Flexibility of deployment: Qlik offers the flexibility to deploy on-premises or with any major cloud provider, with multiclouds, or to use a combination of these approaches. Customers can also utilize Qlik's full SaaS offering.
- Comprehensive portfolio of capabilities: Qlik's purchase of companies will expand the breadth of its capabilities across the data and analytics pipeline. Qlik Sense delivers self-service visual data discovery capabilities for analysts or business

users, while also supporting developer-embedded analytics. Qlik Catalog is used for cataloging and governance. Also, although Qlik Data Integration Platform (formerly Attunity) is a stand-alone offering, it adds powerful integration and data movement capabilities under the Qlik umbrella.

- Data literacy and customer focus: Qlik's Data Literacy Program helps users of all levels, whether Qlik customers or not, to understand and utilize data. Qlik's Analytics Modernization Program encourages and helps existing QlikView customers to migrate to Qlik Sense for new use cases. Qlik's Executive Insights Center is an executive portal focused on helping customers link analytics to business outcomes; it is driven by Qlik executives and closely tied to existing marketing and customer success programs.

Cautions

- Product pricing complexity: Qlik Sense offers core analytic and BI platform capabilities in a single license, but also offers a number of add-on capabilities, such as Qlik Catalog, Qlik Insight Advisor Chat for chatbot experiences and Qlik NPrinting for Mode 1 reporting. These entail additional licensing and cost, if deployed on-premises. Qlik's SaaS platform includes all capabilities as part of the standard subscription, with the exception of reporting, which is not yet supported in the cloud.
- Low market momentum: Relative to other Leaders, Qlik's momentum remains the lowest, judging by Gartner's search and client inquiry data and a range of other indicators. Although Qlik's Analytics Modernization Program is meant to help existing Qlik customers move to Qlik Sense, many customers looking to modernize are using the opportunity to reevaluate the market entirely and assess other vendors.
- Lack of product cohesiveness: Qlik made acquisitions in 2020, thus adding to an already complex portfolio of previous acquisitions that are still on their own integration paths across the broad Qlik portfolio. Although Qlik is experienced at integrating acquired technologies, evaluators should consider how they would orchestrate wider use of Qlik's toolset, if looking beyond using Qlik Sense on-premises.

SAP

SAP is a Visionary in this Magic Quadrant. It offers augmented ABI functionality fully integrated within the SAP enterprise application ecosystem.

SAP Analytics Cloud is a cloud-native multitenant platform with a broad set of analytic capabilities. Most companies that choose SAP Analytics Cloud already use SAP business applications. SAP Analytics Cloud offers an add-in for Microsoft Office 365 on-premises or in the cloud.

In 2020, SAP enhanced its automated insights capabilities by adding new “How has it changed?” and “How is it calculated?” explanation functionality. Also, it rearchitected the self-service user experience workflow to apply augmentation across the data-to-visualization process. Finally, enterprise reporting was updated to add scheduled publication of data stories or PDFs, although it has not achieved parity with SAP BusinessObjects’ capabilities in this area.

Strengths

- Unmatched SAP connectivity: SAP Analytics Cloud is primarily of interest to organizations that use SAP enterprise applications. Seamless connectivity to those solutions is therefore of critical importance. SAP Analytics Cloud has native connectivity to SAP S/4HANA and is embedded in SAP cloud applications, including SuccessFactors and Ariba. Further, despite being cloud-only, SAP Analytics Cloud connects directly to on-premises SAP resources (SAP BusinessObjects Universes, SAP Business Warehouse and SAP HANA) for live data, with no data replication required. Direct data connectivity to non-SAP sources still lags behind that of competitors, however.
- Differentiated augmented, closed-loop capability: SAP Analytics Cloud’s integrated functionality for planning, analysis and prediction differentiates it from almost all competing platforms. Its ability to conduct “what if?” analysis is combined in SAP Analytics Cloud with a strong, multiyear focus on augmented analytics as a core design tenet. SAP Analytics Cloud offers strong functionality for NLG, NLP and automated insights.
- Breadth of capability and content: SAP Analytics Cloud is part of a wider data portfolio that includes SAP Data Warehouse Cloud. SAP Analytics Cloud offers a library of prebuilt content that is available online. This content covers a range of industries and line-of-business functions. It includes data models, data stories and visualizations, templates for SAP Digital Boardroom agendas, and guidance on using SAP data sources.

Cautions

- Lack of large community: SAP's platform has less market momentum than the ABI platforms of some similarly sized vendors. Judging from public job postings, few organizations are looking to hire staff with skills in, or familiarity with, SAP Analytics Cloud, which is surprising, given the size of the BI installed base that SAP could cross-sell to. This means there is a relatively small user community for SAP Analytics Cloud, at a time when community size is a key driver for selection and adoption because technologies are only marginally differentiated.
- Perception by potential users: Given its BusinessObjects heritage, SAP has been associated with report-centric BI, and the legacy of this is a perception among potential users that does not reflect SAP Analytics Cloud's modern, self-service capabilities. The need to convince potential users that SAP Analytics Cloud is worth considering puts SAP at a disadvantage to the competition in selection processes.
- Cloud-only offering: SAP Analytics Cloud is cloud-native and not available on-premises (although it can query on-premises data). It runs in SAP data centers or public clouds (on AWS and Alibaba, with support for Microsoft Azure planned). It is currently available on data centers in China, Japan, Saudi Arabia, Singapore, United Arab Emirates, Europe, the U.S., Canada, Australia and Brazil. For organizations that want to deploy an ABI platform on-premises, SAP's answer is to offer the SAP BusinessObjects BI platform.

SAS

SAS is a Visionary in this Magic Quadrant. This position reflects its robust and innovative product and its global presence, as well as its challenges in terms of marketing and price perception.

SAS offers SAS Visual Analytics on its cloud-ready and microservices-based platform, SAS Viya. SAS Visual Analytics is one component of SAS's end-to-end visual and augmented data preparation, ABI, data science, ML and AI solution. SAS's extensive Viya-based industry, forecasting, text analytics, intelligent decisioning, edge analytics and risk management solutions use SAS Visual Analytics on Viya.

In 2020, SAS introduced a unique market capability for report reviewing that analyzes reports and suggests good visual design, performance and accessibility practices. It also released SAS Conversation Designer (included with SAS Visual Analytics) for building customized chatbots through a low/no-code visual interface. From a

go-to-market perspective, 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 also introduced new competitive, revenue-capped pricing for SAS Visual Analytics.

Strengths

- End-to-end platform vision: 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 a single, integrated visual and augmented design experience (with progressive licensing). Moreover, with Visual Analytics, SAS is the only vendor in this Magic Quadrant to support text analytics natively in a core product.
- Augmented analytics: SAS is investing heavily in infusing augmented analytics across its entire platform. This includes investment in automated suggestions for relevant factors, and in insights and related measures and forecasts expressed using visualizations and natural language explanations. Automated predictions with key drivers and "what if?" analysis are supported in SAS Visual Analytics. The platform also features AI-driven data preparation suggestions, voice integration with user devices, chatbot integration and NLG capabilities developed by SAS, rather than an OEM.
- 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

- Market perception as outmoded: Although SAS now supports the open-source data science and ML ecosystem and has introduced a new SDK for SAS Visual Analytics, there remains a perception that SAS is expensive and proprietary. This perception has obstructed consideration of SAS in this market, beyond SAS's installed base. It also impacts the number of new data science and machine learning students that choose to learn SAS, as most focus their studies on open-source platforms.
- Inflexibility at contract renewal: Despite new capability-based and metered pricing options introduced in 2019, and new, attractive pricing of SAS Viya in 2020, most SAS customers are on older contracts. Gartner inquiries suggest that

these customers often perceive SAS contracts as being high-cost and inflexible and as involving difficult renewal negotiations.
- Migration challenges: SAS Viya provided a new open architecture and brought modernization to SAS 9 customers, and it is still evolving. However, although SAS has continued to improve its utilities to make migration from earlier releases easier, Gartner inquiries suggest that customers continue to view migration as a challenging undertaking.

Sisense

Sisense is a Visionary in this Magic Quadrant, one best known for its success with embedded analytics. It has a comprehensive partner program and a strategic partnership with AWS.

Sisense provides an end-to-end analytics platform that supports complex data projects by offering data preparation and visual exploration capabilities and augmented analytics. Over half of Sisense's ABI platform customers use the product in an OEM form.

Sisense 8.2 was released in September 2020 with NLQ capabilities powered by a knowledge graph and Sisense Notebook, which provides code-first augmented Insights.

Strengths

- Composable architecture: Sisense 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.
- Comprehensive product capability: Sisense's platform is functionally comprehensive, enabling both business users and expert developers with different skill levels. Cloud and NLQ capabilities are particular strengths.
- Open platform: Sisense is cloud-agnostic and multicloud-capable. It has deep partnerships with AWS, Google (GCP) and Microsoft, along with strong cross-cloud analytics orchestration. A robust cataloging capability supports other analytics vendor assets via APIs. Sisense also offers extensible connectivity to other reporting tools. An analytics marketplace in which to publish and build third-party analytics capability is on Sisense's roadmap.

Cautions

- Lower market 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 strategy means it has less momentum in the wider ABI market. Organizations choosing Sisense for nonembedded use may therefore need to work hard to present its platform to their user communities as an attractive alternative to better-known platforms.
- Product packaging complexity: Sisense offers a broad set of capabilities, but in three different product packages: Sisense for Product Teams, Sisense for Cloud Data Teams, and Sisense for Business Intelligence and Analytics Teams. While indicating the width of Sisense's overall offering, this approach entails complexity for organizations considering the vendor. Sisense plans to simplify its product packaging in 2021.
- Less consumer-focused: Sisense's new knowledge-graph-enabled NLQ feature offers new consumer capability, but the platform is generally focused more on the development ecosystem and personas. Sisense for Product Teams, an API-first platform, is its best-selling product. A new Sisense DevX Portal is intended to empower developers to build analytics applications. This vision aligns with Sisense's overall OEM strategy but may not resonate with potential adopters looking to address the needs of ABI consumers first.

Tableau

Tableau is a Leader in this Magic Quadrant. It offers a visual-based exploration experience that enables business users to access, prepare, analyze and present findings in their data. It has powerful marketing and expanded enterprise product capabilities, but the integration of Salesforce Einstein Analytics, now renamed Tableau CRM, remains a work in progress.

In 2020, Tableau enhanced its data preparation and data management capabilities. For data preparation, it released enhanced data modeling capabilities, which make it easier to analyze data across multiple tables at different levels of detail by building relationships between tables with a simple in-browser visual experience. For data management, Tableau Prep Conductor and Tableau Catalog offer a cohesive experience for operating and automating data management and understanding data lineage. An Einstein Discovery dashboard extension, the first integrated product to bring

the predictive modeling capabilities of Salesforce Einstein Analytics to the Tableau platform, is scheduled for release in March 2021.

Strengths

- Analytics user experience: Although Tableau keeps adding new capabilities, it always maintains a sleek experience for users, so they can perform analysis seamlessly. Although visual-based exploration is highly commoditized in today's market, Tableau can still differentiate itself by offering an intuitive analytics experience with richer capabilities based on its patented VizQL engine.
- Customer enthusiasm: Many customers demonstrate a fanlike attitude toward Tableau, as evidenced by the more than 145,000 people who attended its 2020 online user conference. Tableau Public, a free platform on which to publicly share and explore data visualizations online, has over 3 million interactive visualizations. A user-experience-focused design means that, particularly for users in analyst roles, Tableau's offering is compelling and even enjoyable to use.
- Salesforce opportunity: The Tableau Viz Lightning web component offers a low-code experience to simplify the task of integrating Tableau visualizations into Salesforce. Work.com, Salesforce's cloud offering to help organizations reopen workplaces safely and efficiently, uses the Tableau Viz Lightning web component to add a global COVID-19 tracker dashboard to the Workplace Command Center. The deeper integration of the MuleSoft data connector capabilities and a newly acquired Slack collaboration tool means that Salesforce clients have a strengthening set of reasons to consider Tableau.

Cautions

- Not cloud-native: Tableau offers cloud-hosted solutions (Tableau Online and Tableau CRM), but the company's heritage is in on-premises deployments, for which it has a massive installed base. Tableau does not have a cloud-native architecture for on-premises customers to embrace the cloud's full benefits. Deployment of Tableau Server in a containerized infrastructure is not currently supported (but is planned for 2021). As such, beyond Tableau Online, it cannot utilize the cloud's elasticity to automatically scale out in order to handle dynamic workloads.
- Premium pricing: Tableau's pricing is an issue raised by users of Gartner's client inquiry service. Compared with some of the cloud vendors in this market, Tableau is expensive. The addition of Tableau CRM for a list price of up to $150 per user

per month may well increase the concern of customers who are considering scaling their deployments or acquiring new functions.
- Integration challenges: As is to be expected, the integration of Salesforce's ABI capabilities with those of Tableau is taking time. Currently, users face a fragmented experience if they want to take advantage of the augmented analytics functions of the former Einstein Analytics while using the Tableau platform. Einstein Analytics' strengths in automated data stories, key driver analysis, custom automation and explainable AI are not yet integrated into the Tableau user experience.

ThoughtSpot

ThoughtSpot is a Visionary in this Magic Quadrant. Its innovative search-first approach to analysis is being widely emulated by competitors. Its appeal in the ABI platform market is primarily to buyers looking to add NLP and augmented analytics in order to reach a wider range of users.

ThoughtSpot is defined by its search-driven user experience, its ability to answer analytically complex questions with personalized and relevant answers, and its deployment of augmented analytics at scale.

In 2020, ThoughtSpot released its SaaS Cloud offering with automated personal onboarding and a new search engine and personalized experience, ThoughtSpot One. It also added monitoring capabilities to SpotIQ, which automatically tracks, proactively alerts and explains changes to key business metrics for business users. Additionally, it added ThoughtSpot Modeling Language and an in-product integrated development environment, as well as ThoughtSpot DataFlow for faster no-code data ingestion when bringing data into memory.

Strengths

- Search and AI at scale: Given ThoughtSpot's use of search and NLP as the primary interface for querying data, questions can be posed by typing or speaking. ThoughtSpot supports analytically complex questioning of extremely large amounts of data (often billions of rows). SpotIQ, ThoughtSpot's augmented analytics capability, discovers anomalies and correlations and performs comparative analysis of data points without the need for coding.
- Consumer-centric vision: ThoughtSpot's vision is to drive adoption by giving business users the power and ease of use of consumer search and social

applications. Its technology learns from collective behavior, intelligence, social signals and networked, cataloged insights to provide users with the most relevant search suggestions, answers, and related and autogenerated insights.
- Market recognition as a search specialist: Despite ThoughtSpot's relatively small size, awareness of its search-based value proposition is high. This vendor is shortlisted by most of the customers who use Gartner's client inquiry service when prioritizing search, NLP and augmented analytics features.

Cautions

- Complementary cost barrier: ThoughtSpot's software typically complements other ABI platform products initially, as it does not cover the full spectrum of requirements at a level that enables it to fully replace visually driven ABI platforms. In a market where value for money is often prioritized, organizations are increasingly willing to accept "good enough" (but improving) search, NLP and augmented analytics from their enterprise-standard ABI vendor, rather than add another platform from a different vendor.
- Limited global reach, ecosystem and user community: ThoughtSpot has substantially expanded its global ecosystem of system integrators and grown its solution marketplace. However, relative to the Leaders in this Magic Quadrant, ThoughtSpot has a limited international presence, a limited number of partner-implemented deployments and a limited, but growing, user community.
- Requirement for IT setup: Successful implementation of ThoughtSpot's software requires data preparation and mapping of data in advance. This typically demands IT skills and effort. However, ThoughtSpot's new SaaS offering, along with some automation of modeling when connecting directly to cloud databases, has the potential to reduce this requirement. Also, some prebuilt models for common applications from vendors such as Salesforce and Workday are on its roadmap.

TIBCO Software

TIBCO Software is a Visionary in this Magic Quadrant, one with mature product capabilities. Its TIBCO Spotfire offering 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 offers strong capabilities for analytics in dashboards, interactive visualization, data preparation and workflow. The Spotfire A(X) Experience represents an augmented, focused approach that enables Spotfire users to use data science techniques, geoanalytics and real-time streaming analysis in easily consumable forms, such as NLQ, NLG and automatically suggested visualizations.

TIBCO has recognized the collision of capabilities and roles across data science and analytics, and this recognition is driving its vision for “hyperconverged analytics.” TIBCO continues to fulfill this vision by improving its support for Python data functions and streaming data sources directly within the platform. Spotfire Mods is a new development framework that enables rapid creation of lightweight add-ins, bringing new interactive visualization and user interface capabilities to the Spotfire analysis environment. Mods look and feel like native Spotfire functionality to all users. Mods work in any environment and can be easily shared across teams and organizations.

Note: During our research for this Magic Quadrant, TIBCO Software announced that it had entered into an agreement to acquire Information Builders. The acquisition was due to complete in the first quarter of 2021. As a result, product and company integration plans were not developed and available to share with Gartner in time for consideration in this Magic Quadrant. Consequently, representing the two as one entity is not warranted, nor would it be useful to readers at this point. TIBCO Software and Information Builders are therefore represented separately in this Magic Quadrant.

Strengths

- Product capabilities for advanced analytics: TIBCO Spotfire features ML-based data preparation capabilities for building complex data models. An end-to-end workflow is accomplished in a unified design environment for interactive visualization and for building analytic dashboards. Analysts and citizen data scientists have access to an extensive library of drag-and-drop advanced analytic functions, with some automated insight features. Capabilities from Statistica are fully integrated with Spotfire, along with the existing TIBCO Enterprise Runtime for R (TERR) engine and the embedded Python engine.
- Scalability and enterprise readiness: TIBCO Spotfire analytics have been optimized for scaled, secure deployment by very large, geographically distributed organizations. The Spotfire platform has modern automated administration capabilities and the same service-oriented architecture is used in the cloud, on-premises and in hybrid deployments.
- Vision for data and analytics market convergence: TIBCO’s hyperconverged analytics efforts focus on utilizing its product strengths across data visualization, data science, streaming analytics and new Spotfire Mods in order to deliver more

real-time and tailored insights. The benefits are realized via strong purpose-built vertical analytics applications in, for example, the pharmaceutical and energy industries.

Cautions

- Limited market momentum: TIBCO has less momentum than many competitors in this market. The Spotfire product was one of the original disruptors of the traditional BI sector, along with products from Qlik and Tableau, but it now accounts for 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.
- Market presence: There is relatively little perception of TIBCO as a significant player in the modern ABI platform market. In Gartner's opinion, outside certain fields (notably oil and gas and pharmaceuticals), Spotfire is seldom a standard platform for organizations. This means there is a smaller user community and fewer experienced staff available to hire who have skills in deploying and using Spotfire.
- Perceived high cost of software: TIBCO's customers continue to identify pricing and contract flexibility as a concern with the platform, according to Gartner Peer Insights reviewers. In this regard, they score TIBCO below the average.

Yellowfin

Yellowfin is a Visionary in this Magic Quadrant. Although it is a small and geographically limited vendor, its product innovation is among the strongest in the market.

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.

In 2020, Yellowfin continued investment in its dashboard canvas approach by adding Code Mode for developers. It also enhanced its augmented analytics to provide contextualized insights, and enhanced its API features to enable citizen developers to compose analytics capabilities.

Strengths

- Innovative product vision: Yellowfin's product vision is both expansive and innovative. Yellowfin offers automated alerting based on improved ML algorithms in its Signals module, which also provides contextual analytics. Its microservices-based architecture and Code Mode enable composability with other applications, enabling it to turn analytic insights into operational actions.
- 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. As such, openness is key to its offering. 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, Tableau and Qlik reports, dashboards and apps into long-form data story content.
- Comprehensive product functionality: Overall, Yellowfin offers one of the top-scoring products in terms of functionality. Its capabilities span data preparation, Mode 1 reporting with scheduled distributions, Mode 2 visual exploration and augmented analytics. Its data transformation module provides connections to data science models. All capabilities are accessed via a browser-based interface.

Cautions

- Weak natural language support: Yellowfin's NLQ capability is still only a roadmap item (planned for 2021). Users' control of NLG is limited. Automated insights lack explainability (except for driver analysis) and cannot consume R or Python, which is a shortcoming when drawing on the work of data science teams.
- 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 searched for on gartner.com. The size of an ABI platform's user community greatly influences its likelihood of selection — and in Yellowfin's case, the community is small.
- Minimal geographic presence: Although its product supports nine languages and is used internationally, 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, however, slowly increase its number of employees during 2020, unlike some of its competitors.

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

- Amazon Web Services
- Google (Looker)
- Infor

Dropped

- Looker — now included as Google (Looker)
- Birst — now included as an Infor offering
- Dundas
- Logi Analytics
- Salesforce

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:
- ABI platform software supports IT-enabled analytic content development. It is defined by a self-contained architecture that enables nontechnical users to autonomously execute full-spectrum analytic workflows, from data access, ingestion and preparation, to interactive analysis and collaborative sharing of

insights. ABI platforms are increasingly differentiated by augmented analytics capabilities.
- 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 2020.

In line with Gartner's Magic Quadrant methodology, the number of vendors covered was 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 2020 edition of this Magic Quadrant (which included 22 vendors) 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 with native capabilities for NLQ, NLG and automated generation of insights. The platform features prepackaged and composable analytic applications, called RocketBots, that automate business analysis use cases. It also supports the ability to plug in third-party AI and ML frameworks such as scikit-learn and TensorFlow. AnswerRocket's platform can be run on-premises or in the cloud via major public cloud providers and a number of supported data management solutions. AnswerRocket did not achieve the top 20 ranking in Gartner's market momentum index that was required for full coverage in this Magic Quadrant.

- Dundas. The Dundas BI platform enables users to visualize data, build and share dashboards and pixel-perfect reports, and embed and customize analytics content. Dundas sells to large enterprises, but specializes in embedded BI, with the bulk of its revenue coming from OEMs that extend, integrate, customize and embed Dundas BI in their applications. Dundas did not achieve the top 20 ranking in Gartner's market momentum index that was required for full coverage in this Magic Quadrant.
- FanRuan. This 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 is adding cloud deployment and augmented capabilities, and plans to enter the North American and European markets. FanRuan did not achieve the top 20 ranking in Gartner's market momentum index that was required for full coverage in this Magic Quadrant.
- Incorta. When it launched in 2013, Incorta was primarily positioned as a provider of software complementary to the ABI platforms covered in this Magic Quadrant. It used its patented Direct Data Mapping functionality as a performance optimization layer, primarily enabling data analysis of complex ERP and CRP systems. However, Incorta's offering is increasingly being used as a full ABI platform in its own right, and thus becoming a competitive alternative. Incorta's addition of a cloud-based service in 2020 widened its reach to businesses of all sizes. Incorta did not achieve the top 20 ranking in Gartner's market momentum index that was required for full coverage in this Magic Quadrant.
- Logi Analytics. This vendor focuses solely on embedded analytics and application development teams. It offers a suite of embedded analytics development environments that includes Logi Composer for out-of-the-box embedded analytics, Logi Report for pixel-perfect and embedded operational reports, and Logi Info for building customizable analytics applications. Its Logi Composer product represents an evolution of its embedded self-service offerings, one that takes advantage of no-code and low-code approaches within a microservices architecture. Logi Analytics did not achieve the top 20 ranking in Gartner's market momentum index that was required for full coverage in this Magic Quadrant.

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 sales experience, the ability to understand buyers' needs, and pricing and contract flexibility.

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

Enlarge Table

Evaluation Criteria	***Weighting***

Product or Service	High
Overall Viability	High
Sales Execution/Pricing	Medium
Market Responsiveness/Record	High
Marketing Execution	NotRated
Customer Experience	High
Operations	High

Source: Gartner (February 2021)

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 analytic 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

Enlarge Table

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 (February 2021)

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 market segment (such as financially oriented BI), or are good at meeting the ABI needs of organizations using a particular cloud stack. But 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 2020 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 modern BI platform market grew by 19% in 2019, compared with 22% in 2018, to reach just over $6 billion. Pricing pressure and strong competition were broadly responsible for this small deceleration (see Market Share Analysis: Analytics and BI Software, Worldwide, 2019). As reported last year, 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 because the price per user is a fraction of what it was a decade ago.

Cloud ecosystems now dominate spending. For the first time, 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). The exception, Chinese vendor Tencent Cloud, has invested in Yonghong Tech and offers its Yonghong BI platform on an OEM basis. The presence of the major cloud ERP and CRM application providers is also an influencer of ABI platform selection considerations. On the one hand, cloud-led sourcing creates inevitable concerns about lock-in and unforeseen costs. On the other, the cloud vendors 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 in part 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 will fuel 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. Currently, the two remain discrete markets with different buyers, but that situation is likely to change.

The submarket for embedded ABI serves a different set of key buyers: software developers and product managers. Embedded ABI is applied when organizations want to create analytic extranet applications, monetize data or provide ABI within operational business applications. Additionally, independent software vendors use embedded ABI when they want to offer ABI capabilities within their software without developing services themselves. The market for embedded ABI is evolving as more self-service approaches (such as no code and low code) are applied. These are enabling noncoding citizen developers to extend the reach and connectedness of ABI (for example, to trigger workflow processes in operational apps) and even to self-publish composable applications (see Composable Analytics Shapes the Future of Analytics Applications).

Evidence

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

- 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), sales experience (pricing and

contract flexibility) and market responsiveness (value received). We considered reviews for modern ABI platform products posted from December 2019 to September 2020.

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.