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# Magic Quadrant for Business Intelligence and Analytics Platforms

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## VIEW SUMMARY

Data discovery capabilities are dominating new purchasing requirements, even for larger deployments, as alternatives to traditional BI tools. But "governed data discovery" — the ability to meet the dual demands of enterprise IT and business users — remains a challenge unmet by any one vendor.

## Market Definition/Description

The BI and analytics platform market is in the middle of an accelerated transformation from BI systems used primarily for measurement and reporting to those that also support analysis, prediction, forecasting and optimization. Because of the growing importance of advanced analytics for descriptive, prescriptive and predictive modeling, forecasting, simulation and optimization (see "Extend Your Portfolio of Analytics Capabilities") in the BI and information management applications and infrastructure that companies are building — often with different buyers driving purchasing and different vendors offering solutions — this year Gartner has also published a Magic Quadrant exclusively on predictive and prescriptive analytics platforms (see Note 1). Vendors offering both sets of capabilities are featured in both Magic Quadrants.

The BI platform market is forecast to have grown into a \$14.1 billion market in 2013, largely through companies investing in IT-led consolidation projects to standardize on IT-centric BI platforms for large-scale systems-of-record reporting (see "Forecast: Enterprise Software Markets, Worldwide, 2010-2017, 3Q13 Update"). These have tended to be highly governed and centralized, where IT production reports were pushed out to inform a broad array of information consumers and analysts. While analytical capabilities were deployed, such as parameterized reports, online analytical processing (OLAP) and ad hoc query, they were never fully embraced by the majority of business users, managers and analysts, primarily because most considered these too difficult to use for many analytical use cases. As a result, and continuing a five-year trend, these installed platforms are routinely being complemented, and in 2013 were increasingly displaced, in new sales situations by new investments, and requirements were more skewed toward business-user-driven data discovery techniques to make analytics beyond traditional reporting more accessible and pervasive to a broader range of users and use cases.

Also in support of wider adoption, companies and independent software vendors are increasingly embedding both traditional reporting, dashboards and interactive analysis, in addition to more advanced and prescriptive analytics built from statistical functions and algorithms available within the BI platform into business processes or applications. The intent is to expand the use of analytics to a broad range of consumers and nontraditional BI users, increasingly on mobile devices. Moreover, companies are increasingly building analytics applications, leveraging new data types and new types of analysis, such as location intelligence and analytics on multistructured data stored in NoSQL data repositories.

## BI and Analytics Platform Capabilities Definition

For this Magic Quadrant, Gartner defines BI and analytics as a software platform that delivers 17 capabilities across three categories: information delivery, analysis and integration.

As a result of the market dynamics discussed above, the capability definitions in this year's Magic Quadrant have been modified with the following additions and subtractions to reflect our current view of critical capabilities for BI and analytics platforms.

### Capabilities dropped:

Scorecard: Most companies do not implement true scorecard/strategy maps using BI platforms



## STRATEGIC PLANNING ASSUMPTIONS

*This document was revised on 2 April 2014. The document you are viewing is the corrected version. For more information, see the [Corrections](#) page on [gartner.com](#).*

By 2015, enterprise buyers of BI platforms will predominantly purchase platforms that support both strong and broad business-user-accessible data discovery capabilities and IT-driven enterprise features for data reuse, governance, security and scalability.

By 2015, the shifting tide of BI platform requirements, moving from reporting-centric to analysis-centric, will mean the majority of BI vendors will make governed data discovery capabilities an expansion of, and the prime competitive capability for, their BI platform offerings.

By 2015, "smart data discovery," which includes natural-language query and search, automated, prescriptive advanced analytics and interactive data discovery capabilities, will be the most in-demand BI platform user experience paradigm, enabling mainstream business consumers to get insights (such as clusters, segments, predictions, outliers and anomalies) from data.

By 2016, 25% of net-new BI and analytics platform deployments will be in the form of subscriptions to cloud services.

## EVIDENCE

Gartner's analysis and placement of vendors in this document is based on a combination of a survey of reference customers conducted in October 2013 with 1,935 company respondents; a detailed RFP questionnaire completed by vendors; vendors' responses to a detailed set of Gartner product and go-to-market questions; Gartner analysts' product research; vendor briefings and demonstrations; and insights gleaned by analysts from over 2,500 customer inquiries in 2013.

## NOTE 1 COMPANION MAGIC QUADRANT FOR ADVANCED ANALYTICS

Since 2006, Gartner has published a Magic Quadrant on BI and analytics (the name has changed slightly over the years) to evaluate vendors across the entire spectrum of BI and analytic capabilities but focused on their ability to provide traditional query and reporting (descriptive) capabilities. During the past few years, interactive visualization (diagnostic), predictive and prescriptive analysis has become more important to organizations, and this has been reflected in the vendors evaluated in the Magic Quadrant and their positions therein.

In 2013, Gartner's analytics research team decided that the scope of the Magic Quadrant had grown to cover multiple markets. Although the decisions were

— they implement dashboards. Also, most BI vendors report limited sales activity for their scorecard products. Scorecards are primarily delivered by corporate performance management (CPM) vendors (see "Strategic CPM as a Driver for Organizational Performance Management"). Therefore, we have included scorecards as a type of dashboard, rather than as a separate category.

Predictive Analytics: covered in the new "Magic Quadrant for Advanced Analytics Platforms."

Prescriptive Analytics: covered in the new "Magic Quadrant for Advanced Analytics Platforms."

#### Capabilities added:

- Geospatial and location intelligence (see the Analysis section)
- Embedded advanced analytics (see the Analysis section)
- Business user data mashup and modeling (see the Integration section)
- Embeddable analytics (see the Integration section)
- Support for big data sources (see the Integration section)

## The 17 Categories

### Information Delivery

**Reporting:** Provides the ability to create highly formatted, print-ready and interactive reports, with or without parameters.

**Dashboards:** A style of reporting that graphically depicts performances measures. Includes the ability to publish multi-object, linked reports and parameters with intuitive and interactive displays; dashboards often employ visualization components such as gauges, sliders, checkboxes and maps, and are often used to show the actual value of the measure compared to a goal or target value. Dashboards can represent operational or strategic information.

**Ad hoc report/query:** Enables users to ask their own questions of the data, without relying on IT to create a report. In particular, the tools must have a reusable semantic layer to enable users to navigate available data sources, predefined metrics, hierarchies and so on.

**Microsoft Office integration:** Sometimes, Microsoft Office (particularly Excel) acts as the reporting or analytics client. In these cases, it is vital that the tool provides integration with Microsoft Office, including support for native document and presentation formats, formulas, charts, data "refreshes" and pivot tables. Advanced integration includes cell locking and write-back.

**Mobile BI:** Enables organizations to develop and deliver content to mobile devices in a publishing and/or interactive mode, and takes advantage of mobile devices' native capabilities, such as touchscreen, camera, location awareness and natural-language query.

### Analysis

**Interactive visualization:** Enables the exploration of data via the manipulation of chart images, with the color, brightness, size, shape and motion of visual objects representing aspects of the dataset being analyzed. This includes an array of visualization options that go beyond those of pie, bar and line charts, including heat and tree maps, geographic maps, scatter plots and other special-purpose visuals. These tools enable users to analyze the data by interacting directly with a visual representation of it.

**Search-based data discovery:** Applies a search index to structured and unstructured data sources and maps them into a classification structure of dimensions and measures that users can easily navigate and explore using a search interface. This is not the ability to search for reports and metadata objects. This would be a basic feature of a BI platform.

**Geospatial and location intelligence:** Specialized analytics and visualizations that provide a geographic, spatial and time context. Enables the ability to depict physical features and geographically referenced data and relationships by combining geographic and location-related data from a variety of data sources, including aerial maps, GISs and consumer demographics, with enterprise and other data. Basic relationships are displayed by overlaying data on interactive maps. More advanced capabilities support specialized geospatial algorithms (for example, for distance and route calculations), as well as layering of geospatial data on to custom base maps, markers, heat maps and temporal maps, supporting clustering, geofencing and 3D visualizations.

**Embedded advanced analytics:** Enables users to leverage a statistical functions library embedded in a BI server. Included are the abilities to consume common analytics methods such as Predictive Model Markup Language (PMML) and R-based models in the metadata layer and/or in a report object or analysis to create advanced analytic visualizations (of correlations or clusters in a dataset, for example). Also included are forecasting algorithms and the ability to conduct "what if?" analysis.

**Online analytical processing (OLAP):** Enables users to analyze data with fast query and calculation performance, enabling a style of analysis known as "slicing and dicing." Users are able to

sometimes connected, the evaluation process that most clients followed for "traditional" BI capabilities had become separate from that used to evaluate "advanced" analytic capabilities. Hence the team decided it was time to introduce an additional Magic Quadrant on advanced analytics platforms.

The new "Magic Quadrant for Advanced Analytics Platforms" covers the diagnostic, predictive and prescriptive components, but assigns most weight to the predictive.

The present "Magic Quadrant for Business Intelligence and Analytics Platforms" encompasses all four components — descriptive, diagnostic, predictive and prescriptive — but allocates more weight to the descriptive and diagnostic.

Some vendors have offerings that qualify them for inclusion in both Magic Quadrants.

## 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

navigate multidimensional drill paths. They also have the ability to write-back values to a database for planning and "what if?" modeling. This capability could span a variety of data architectures (such as relational, multidimensional or hybrid) and storage architectures (such as disk-based or in-memory).

### Integration

**BI infrastructure and administration:** Enables all tools in the platform to use the same security, metadata, administration, object model and query engine, and scheduling and distribution engine. All tools should share the same look and feel. The platform should support multitenancy.

**Metadata management:** Tools for enabling users to leverage the same systems-of-record semantic model and metadata. They should provide a robust and centralized way for administrators to search, capture, store, reuse and publish metadata objects, such as dimensions, hierarchies, measures, performance metrics/key performance indicators (KPIs), and report layout objects, parameters and so on. Administrators should have the ability to promote a business-user-defined data mashup and metadata to the systems-of-record metadata.

**Business user data mashup and modeling:** Code-free, "drag and drop," user-driven data combination of different sources and the creation of analytic models, such as user-defined measures, sets, groups and hierarchies. Advanced capabilities include semantic autodiscovery, intelligent joins, intelligent profiling, hierarchy generation, data lineage and data blending on varied data sources, including multistructured data.

**Development tools:** The platform should provide a set of programmatic and visual tools and a development workbench for building reports, dashboards, queries and analysis. It should enable scalable and personalized distribution, scheduling and alerts of BI and analytics content via email, to a portal and to mobile devices.

**Embeddable analytics:** Tools including a software developer's kit with APIs for creating and modifying analytic content, visualizations and applications, embedding them into a business process, and/or an application or portal. These capabilities can reside outside the application, reusing the analytic infrastructure, but must be easily and seamlessly accessible from inside the application, without forcing users to switch between systems. The capabilities for integrating BI and analytics with the application architecture will enable users to choose where in the business process the analytics should be embedded.

**Collaboration:** Enables users to share and discuss information, analysis, analytic content and decisions via discussion threads, chat and annotations.

**Support for big data sources:** The ability to support and query hybrid, columnar and array-based data sources, such as MapReduce and other NoSQL databases (graph databases, for example). Support could include direct Hadoop Distributed File System (HDFS) query or access to MapReduce through Hive.

## Summary of this Magic Quadrant

The vendors' positions in this Magic Quadrant reflect a number of critical market trends that we expect to continue during the coming year and beyond:

The most notable change in this year's Magic Quadrant is that all the vendors in the Leaders quadrant have been moved to the left in terms of Completeness of Vision. This reflects the fact that no one vendor is fully addressing the critical space in the market for "governed data discovery" — in other words, platforms that address both business users' requirements for ease of use and enterprises' IT-driven requirements. The major dynamic in the market in 2013 was data discovery platforms' dominance of new-license expenditure, with ease of use remaining a top purchasing criterion. However, Gartner's inquiries and survey data suggest that, increasingly, companies would like to expand use and even standardize on data discovery platforms for their larger enterprise BI deployments but find that in many cases these platforms (from Tableau, Qlik and Tibco Software [Spotfire]) lack the necessary enterprise features in relation to governance, administration and scalability, among other things. At the same time, the incumbent Leaders, while strong in IT-led systems-of-record enterprise capabilities, have had limited success in delivering "good enough" data discovery capabilities for business users, despite favorable bundling and aggressive investments to enhance data discovery capabilities introduced in 2012. The existence of both systems-of-record reporting platforms and data discovery platforms can pose challenges for organizations attempting to govern, scale and support these different environments and pace layers (see "Applying Gartner's Pace Layer Model to Business Analytics"), with no single vendor fully addressing both.

The race is on to fill the gap in governed data discovery. The data discovery paradigm is in place and expanding, and it has disrupted traditional definitions of vision and execution. As a result, the current IT-centric BI and analytics platform Leaders, which currently "own" the installed base market share, but lack market growth momentum, are trying to change that by focusing their new product investment on business-user-driven data discovery and analysis. Microsoft, MicroStrategy and SAS have done a better job than the others of integrating their enterprise and

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.

new data discovery capabilities. At the same time, Qlik plans to release a completely rearchitected, enterprise-ready version of its platform, QlikView. Next in the latter half of 2014. Meanwhile, Tableau and Tibco (Spotfire) continue to focus on business users, but are also incrementally adding enterprise features with each new release. Notably, SAS has made one of the boldest moves of any vendor with its plans to replace its current enterprise BI platform (where it is integrated across the rest of its application and decision management stack) with Visual Analytics, a new data discovery environment, as its "go forward" BI platform. Importantly, SAS also plans to combine traditional report and dashboard development in the same user-friendly platform. Moreover, a number of Challengers and Niche Players have road maps and plans that reflect the same ultimate market objective. Next year, Completeness of Vision positions will in part be determined by which vendors achieve success in addressing this critical market requirement. In combination with this Magic Quadrant and Gartner inquiries, BI leaders should scrutinize the road maps of both data discovery and IT-centric vendors for their fit with growing business user and enterprise requirements as input into expansion, upgrade and/or switching decisions.

Beyond the race for the market's "white space," advances in self-service data integration, which includes automatic semantic identification and data model inference and discovery (for easier and faster information access and modeling), the automation and encapsulation of advanced analytics (to highlight and visualize important findings, correlations, clusters or trends in data that are relevant to the user), and exploration with natural-language query technologies, give us a view of the next generation of "smart" data discovery and data preparation. These innovations have the potential to expand access to sophisticated interactive analysis and insights to business consumers and nontraditional BI users — the approximately 70% of users in organizations that currently do not use BI tools or have statistical backgrounds. IBM and SAS are drivers of these new approaches, which contributed to their Completeness of Vision positions.

Cloud BI is becoming more acceptable as a deployment option, with 45% of respondents to Gartner's BI and analytics platform Magic Quadrant survey (compared with approximately 30% for each of the last four years) saying they would put their mission-critical BI in the cloud. BI vendors with cloud offerings are moving toward meeting critical market requirements for governed business-user-friendly platforms and to deliver strong product functionality, positive customer experiences and high business value to customers. Increasingly, traditional on-premises vendors are also prepared to support cloud BI. This is a significant shift, indicating that 2014 may be a tipping point for cloud adoption as data gravity shifts to the cloud. While most BI vendors now have a cloud strategy, many leaders of BI and analytic initiatives do not have a strategy for how to combine and integrate cloud services.

In a crowded market where a good percentage of the new vendors (and the data discovery features of existing vendors) at first sight resemble Tableau in terms of their offerings and approach, Panorama Software and Alteryx earn places in the Visionaries quadrant because each delivers a unique set of capabilities targeted at key buying requirements. The large number of vendors in the Niche Players quadrant with specialized strengths suggests opportunities for customers to find a match for their requirements beyond the largest vendors.

It is very likely that 2014 will be a critical year in which the task of making "hard types of analysis easy" for an expanded set of users, along with ensuring governance, scale and performance for larger amounts of diverse data, will continue to dominate BI market requirements. At the same time, the ability to bridge widely proliferating business user silos with enterprise deployments will be a crucial challenge for IT and BI vendors. With the added complexities introduced by new data sources (such as the cloud, real-time events and sensors, and multistructured data) and new types of analysis (such as link/network and sentiment analysis, and new algorithms for machine learning), new opportunities will emerge to build business value. Leaders of BI initiatives to identify and optimize these opportunities will be under more pressure than ever to deliver results.

This document presents a global view of Gartner's opinion of the main software vendors that should be considered by organizations seeking to use BI and analytics platforms to develop BI applications. Buyers should evaluate vendors in all four quadrants and not assume that only the Leaders can deliver successful BI implementations. Year-to-year comparisons of vendors' positions are not particularly useful, given the market's dynamics (such as emerging competitors, new product road maps and new buying centers), and clients' concerns have changed since our last Magic Quadrant, particularly since we are in the middle of a significant shift in this market. For guidance on the Magic Quadrant evaluation process and on how to use a Magic Quadrant, see "How Gartner Evaluates Vendors and Markets in Magic Quadrants and MarketScopes."

## Magic Quadrant

**Figure 1.** Magic Quadrant for Business Intelligence and Analytics Platforms



Source: Gartner (February 2014)

### Vendor Strengths and Cautions

#### Actuate

Actuate's product suite is used by application developers to deliver production reporting, ad hoc reports, dashboards, analytics and interactive content through the Birt iHub platform.

#### Strengths

Actuate released Birt iHub 3 in 2013 with a focus on simplifying design and development for developers that use the platform to build personalized customer-facing BI applications. The new iHub platform also delivers a consistent, streamlined interface and better integration capabilities across the entire product line: Birt, Birt Analytics (formerly Quiterian) and Birt Content Services (formerly Xenos).

Actuate has continued to expand its big data/cloud connectivity options to include Hadoop, HBase (via Hive), MongoDB, Cassandra and Cloudera Impala. These data sources can be combined with other sources, such as salesforce.com, Twitter, documents in archives, XML/Web Services and traditional relational database management systems (RDBMSs), into an encapsulated model called a Birt Data Object, a columnar in-memory database optimized for performance and interactive analysis. Birt Data Objects are deployed on the iHub, where they can be cached to retrieve data in real time, and where they serve as a secure centralized data conduit for analytics, scorecards, reports, dashboards and interactive visualizations.

Reference customers rate functionality, report design complexity and ease of use for end users as their main reasons for selecting Actuate. Large-scale production reporting, Actuate's heritage, remains the most extensively used feature of the platform, with a large percentage of users consuming static reports. Of the vendors in this Magic Quadrant, Actuate ranks highest for the percentage of users viewing static reports, at 55%, which is 1.5 times the average for these vendors. Out of the 17 capabilities evaluated this year, reporting was the highest-ranked for Actuate and placed it above the average for vendors in this Magic Quadrant. Actuate is commonly used by developers to embed BI and analytic content into applications, and reference customers indicated that the capability of the development tools available within the platform to create and embed content is better than the average for vendors in this Magic Quadrant.

#### Cautions

Gartner's inquiries and the results of the survey conducted for this Magic Quadrant suggest that Actuate needs to address a broad range of customer concerns. Actuate's survey results this year showed deterioration in several key areas, compared with the previous survey. Customers ranked Actuate lowest of all the vendors in this Magic Quadrant for market understanding, which comprises breadth of use, ease of use and complexity of analysis supported by the platform. Customer experience has also degraded, with an overall rating below the survey average, driven by lower ratings this year for both product quality and support. Actuate is also the lowest-ranked vendor in this Magic Quadrant for sales experience, which could be driven in part by licensing costs; these remain a concern for Actuate's customers, with 45% of its reference clients indicating that the cost of the software was a factor limiting wider deployment. Moreover, Gartner inquiries suggest some customer dissatisfaction with Actuate's contracting process. However, despite a high cost perception, reference customers report an actual license cost per user that is lower than the survey average, so the low sales experience rating may be driven in part by a perception of high license costs that is inconsistent with customers' actual license expenditure.

Actuate's overall product capability score is below average, with below-average results in 15 of the 17 capabilities when each of them was evaluated independently (reporting and development tools were the only positive results). When asked about problems with the platform, 23% of the reference customers indicated that it was difficult to implement, which is almost three times higher than the average for vendors in this Magic Quadrant. Platform scalability concerns are also evident from this year's survey results with respect to both data and user volumes, with customers' concerns in these areas being 2.5 times the average for this Magic Quadrant. However, scalability expectations are high for Actuate, as its platform is commonly used for large enterprise deployments with above-average data volumes and has the highest average number of end users of any vendor in this Magic Quadrant.

Of the vendors in this Magic Quadrant, Actuate ranks highest for the percentage of users viewing static reports, but below average for every other category of user activity, including dashboard interaction, ad hoc analysis, and interactive visualization or discovery. Only 10% of Actuate's reference customers indicated that they use it for interactive visualization or discovery, which is 50% lower than the average for this Magic Quadrant and significantly lower than the previous survey rating of 17%; this indicates that customers may be adopting tools from other vendors for data discovery.

## Alteryx

The [Alteryx](#) platform offers unique capabilities for business analysts to manage and conduct advanced analytics using location data.

### Strengths

Alteryx enters the Visionaries quadrant this year due to high scores for innovation, market understanding and product strategy. It offers a platform aimed at information analysts that has strong data integration capabilities and embedded content from providers like D&B, Experian, the U.S. Census Bureau and TomTom. It also features a broad range of data querying and analytic capabilities, including integration with R and geospatial analytics. Instead of traditional reports or dashboards, business users get a workbench on which they can build — without IT intervention — information transformation and analysis workflows, using drag-and-drop functionality, from a library of analytic tasks.

Customers' main reasons for selecting Alteryx are its functionality, data access and integration, and performance; there was a very strong bias toward these in their responses, when compared with those for other vendors, indicating that they are highly valued product characteristics. According to the surveyed customers, Alteryx delivers business benefits in the top quartile, with the main benefit being the ability to expand the types of analysis offered in the organization. Product usability is also highly valued by Alteryx's target users — mainly business analysts using information without IT intervention. Users can create both simple reports and large complex reports from various data sources in shorter-than-average times; indeed, Alteryx customers reported among the lowest average report development times of any vendor in our survey. Alteryx's capabilities extend to the use of embedded data mining and predictive analytics, for which it has the highest adoption rate in this Magic Quadrant. Thanks to its strengths as an advanced analytics platform, Alteryx also appears in the "Magic Quadrant for Advanced Analytics Platforms."

In terms of functionality offered, Alteryx gets the highest capability and use scores for ad hoc reporting and querying, geospatial and location intelligence, the second-highest for support for big data sources, and the third-highest for business user data mashups and modeling. Hence, it is no surprise that Alteryx has the top product in this Magic Quadrant in terms of support for more complex types of analysis. Moreover, its capabilities do not come at the expense of usability — the customers we surveyed considered Alteryx's the third-easiest product to use; this makes for a remarkable combination of power and simplicity that is also the main driver of purchases by new customers.

Alteryx continued to form product partnerships during 2013, Tableau and Revolution Analytics being two important examples that complement Alteryx's platform while expanding the company's marketing and sales reach. Alteryx also added a new product to its portfolio: Alteryx

for Visual Analytics includes an output option for the Tableau data extract format, which is usable as input for data discovery processes. Alteryx natively provides predictive analytics using R in a drag-and-drop interface, and has also partnered with Revolution Analytics, so that customers can scale to high-data-volume predictive analytics. These partnerships have created opportunities for joint-marketing activities and potential business in the partners' much larger installed bases; they have also raised the market's awareness and been directly responsible for new deals. Alteryx also has partnerships with Cloudera, Hortonworks and Teradata, which are yielding mutual benefits. Moreover, in 2013, Alteryx initiated comparative marketing activities in competition with SAS Institute, for functionality, performance and pricing. Alteryx claims that this is having impact and creating sales opportunities in SAS accounts. Alteryx has released a free trial product — the Project Edition — to increase the awareness of potential customers.

## Cautions

Alteryx's platform supports a limited range of functionality on its specialized analytic capabilities. In traditional BI areas like reporting, dashboarding, OLAP and interactive visualization, customers awarded it the lowest overall scores and usage of any vendor in this Magic Quadrant. Alteryx also ranked at the bottom for BI infrastructure and administration. For metadata management it scored higher, but was still well below the average. Hence, Alteryx's platform is not usually considered the standard for BI and analytics, but rather a departmental solution for more advanced use cases. The platform's enterprise deployment score is below average, which also confirms its more limited use within organizations.

Alteryx's narrow (but very successful) set of capabilities, and the fact that the company is still small (but gaining traction) in the analytics space, make it an interesting target for acquisition. Such a move would generate minimal overlap with many of the other vendors in the BI and analytics space and could create a very attractive portfolio. Alteryx's existing partnership and product with Tableau are proof of this opportunity. From a development and marketing standpoint, their integrated offering could develop into a single-vendor solution without much of the transition pain usually involved in an acquisition. Customers planning to invest in Alteryx should factor in the possibility that a larger vendor may try to buy it in the future.

Alteryx's offering is viewed as a high-priced solution, with 67% of its surveyed reference customers claiming that the product's price is the main inhibitor of broader deployment — by far the highest percentage of any vendor in this Magic Quadrant (MicroStrategy is second with "only" 48%). Therefore, Alteryx's deployment sizes are the smallest of these vendors, with only 83 users on average, as compared with the average of 1,364. Other factors contributing to the company's small footprint are the target audience — often advanced information analysts and data scientists — and the use cases that it supports. Alteryx changed its product pricing structure in 3Q13 to offer less expensive options, and therefore an easing of this limitation seems likely in 2014. All the other potential inhibitors to broader deployment included in the customer survey received below-average responses, which reinforces the finding that the cost of Alteryx's software is the main deterrent.

Alteryx continues to expand its partners' networks and geographic coverage — increasingly successfully, now that Tableau's partners have discovered its product — in Europe, Southeast Asia and Australia, but it remains fundamentally linked to the U.S. The opening of a new office in the U.K. in early 2014 is another step in the right direction, but also a reminder of how much work remains to be done if Alteryx is to expand worldwide.

## arcplan

Arcplan's unified BI and performance management platform incorporates a complete set of BI platform capabilities, along with budgeting, planning and forecasting.

## Strengths

The breadth of this vendor's platform differentiates it from other pure-play BI vendors in this Magic Quadrant that lack an integrated planning capability. Arcplan's customers generally have a positive view of the company and include many global organizations with large, report-centric deployments. Arcplan's average number of users per deployment is 1,582, as compared with the average of 1,364 across all the vendors in this Magic Quadrant.

Customers select arcplan because of its functionality, ease of use for end users, product quality (stability, reliability and free from bugs) and integration with information infrastructure (databases and middleware). This last reason is most likely due to arcplan's strong support for SAP (more than 55% of arcplan's customers report having SAP as their primary ERP system, which is more than twice the survey average and only just below SAP (with 61% of SAP customers reporting they also use SAP ERP). Additionally, reference customers indicate that the integration with budgeting planning and forecasting capabilities is a major reason for selecting arcplan.

Arcplan is expanding beyond its deep heritage as a BI provider within the SAP installed base, not only by extending its BI platform and performance management capabilities, but also by extending its native support to other data sources. The platform provides native APIs for SAP NetWeaver Business Warehouse (BW), SAP Hana, as well as IBM Cognos TM1 and Oracle Essbase, to exploit the information in megavendors' systems — with the potential for a lower total cost of ownership (TCO). Positioned as a complementary front-end for information delivery,

arcplan's offering also supports systems such as Microsoft SQL Server and Microsoft SQL Server Analysis Services, and ones from Teradata and Kognitio, among others.

Arcplan customers report below-average three-year BI platform ownership costs, with particularly favorable implementation costs and ongoing administration and development costs. Platform improvements in Release 8, which launched in September 2013, such as the introduction of a design and deployment concept (which arcplan calls "Design Once — Run Anywhere") focus on optimizing TCO for multiplatform and mobile deployments. The release of a new HTML5 client, as well as enhancements to the arcplan Application Designer, are designed to further improve time to market, development time and TCO in multidevice environments.

### Cautions

Arcplan is considered the BI standard by only a quarter of its survey respondents (a percentage in the bottom quartile), which positions arcplan as a niche solution for most of its customers, which most likely use its offering for financial planning. A substantial part of arcplan's business is linked to SAP — 55% of its reference customers indicate that SAP is their ERP standard — and sales and marketing efforts from SAP for BusinessObjects and CPM products are competitive threats to arcplan's short-term and midterm sales prospects, even though SAP Hana may also act as an accelerator of arcplan's growth as another source of data. In fact, arcplan is certified for SAP Hana — it is one of the first vendors certified for SAP Hana MDX, which confirms its commitment to the SAP platform. To enhance its long-term viability, arcplan must continue to expand its go-to-market and product development focus outside the SAP installed base as SAP attempts to increase the attractiveness of its own BI and CPM offerings.

Arcplan customers are typically report consumers, with its reference clients recording one of the highest percentages of users in an information consumer role of any vendor in this Magic Quadrant. Conversely, arcplan's percentage of advanced user roles — such as power users, business user authors, analysts and data miners — is almost the lowest. These findings are supported by respondents' reported product usage, which shows the majority using the platform's parameterized reports and dashboards. Moreover, customers give arcplan below-average marks for dashboards, ad hoc analysis, interactive exploration and analysis. Although simpler descriptive use cases seem to lead to higher numbers of users, particularly of report consumers on arcplan systems, the company needs to deliver an enhanced information exploration experience and analytics capabilities that appeal to the growing and dominant interactive requirements of business users; otherwise, it could gradually lose competitiveness.

Overall, reference customers' score for arcplan's overall product capability is near the bottom of the vendors in the Magic Quadrant, for the second consecutive year. Its ad hoc query, search-based data discovery, geospatial and location intelligence, metadata management and business user data mashup/modeling capabilities were identified as particular weaknesses, with all of these ranking near the bottom. Arcplan's position in the Niche Players quadrant is partly due to its weaker scores relative to mainstream buying requirements. In addition to its product scores, arcplan's ratings for market understanding, including ease of use, breath of use and support for complex types of analysis, were well below the average for the vendors in this Magic Quadrant.

### Birst

Birst's BI platform is primarily a cloud-based offering. It includes a broad range of components, such as data integration, federation and modeling, a data warehouse with a semantic layer, reporting, dashboards, mobile BI and a recently announced interactive visualization tool.

### Strengths

Customers report deriving value from Birst deployments — they awarded it the second-highest overall score for achievement of business objectives of any vendor in the Magic Quadrant survey. Its platform can be used for BI content development and delivery or as a domain-focused packaged solution — Birst offers applications in areas like sales, marketing, and financial and supply chain analytics. The company is a Challenger and continues to thrive with strong growth, high survey scores for product strategy and overall positive feedback from customers. TCO is customers' main reason for selecting Birst, but functionality and implementation cost and effort are close behind. Product quality (stability, reliability and free from bugs), data access, and integration and ease of use for end users were also mentioned.

Across the board, Birst's customers reported a very positive experience with the company and its product. The platform's breadth of use is considered above average and several of its capabilities are rated in the top five among the vendors in the Magic Quadrant survey, such as BI infrastructure and administration (for which Birst is the survey's top vendor), reporting, dashboards, mobile BI, metadata management, and business user data mashup and modeling. Moreover, for sales experience, Birst received the highest overall score of any vendor, while its scores for customer experience, product quality and support were also near the top.

Even though Birst's customers highly appreciate its systems-of-record reporting and dashboarding, scores for the complexity of analysis supported and breadth of platform use were also above average. The ability to automate many of the steps associated with modeling and data warehouse creation — with automatic star schema and logical data model generation — with minimal expertise is another of the platform's strengths. Business users — or at least skilled business teams — can use it to create their own BI solutions with limited support from an

IT or enterprise BI team. At the same time, Birst's platform received the highest overall score in the Magic Quadrant survey for ease of use for business users. It also scored highly for ease of use (factoring in ease of development) — within the top quartile. Birst's tool also received the best score for the number of days required to create simple and moderately complex reports. The combination of strong business user and IT capabilities positions Birst to address unmet market requirements for governed data discovery, particularly in the midsize enterprise segment. Birst attained the second-highest percentage of customers (79%) reporting no limitations on broader platform deployment, which is another indicator of satisfaction with the platform. Moreover, the platform is considered the corporate BI standard by 66% of its customers — above the average of 55% — albeit in smaller organizations.

Birst's specialism in cloud BI is a strength since, of all the companies surveyed for this Magic Quadrant, 45% reported that they run their BI in a private, public or hybrid cloud or that they plan to do so during the next 12 months (up from approximately 30% one year ago). This shows strong momentum behind cloud BI that will benefit specialists in this space (which also include 1010data and GoodData). Interestingly, according to the Magic Quadrant survey, 8% of Birst customers run some of the platform's capabilities, such as data integration, on-premises, and 5% claim they have no plans for any cloud deployment (perhaps they are using Birst's on-premises appliance offering); this creates sales opportunities for Birst in customers that are not yet cloud-ready.

### Cautions

Birst's deployments are the third-smallest in terms of data volumes accessed in data repositories, at 393GB on average. The average data volume size of Birst's biggest queries is also below average, at 256GB. Moreover, Birst's average deployment size, of 444 end users, is far below the average (1,364) for vendors in this Magic Quadrant. These results suggest that Birst is used primarily by midsize enterprises and departments within large enterprises.

The number of employees in Birst customers is at the bottom of the survey results — the figures further indicate that Birst essentially sells to the midmarket. Hence, for larger data volumes, customers should consider validating Birst's technical "fit" by consulting references, examining technical proofs and proofs of concept, or holding workshops to assess potential scalability and performance problems.

From a product perspective, Birst's Microsoft integration came bottom of the survey results. Moreover, Birst's work in the data discovery space has only just started, and in terms of features and market awareness is behind specialists in this area, such as Tableau, Qlik and Tibco. Since those companies are entering the cloud BI arena, Birst needs to invest in improving its new interactive visualization component; otherwise, it risks seeing competitors match its cloud capabilities and outpace it in data discovery.

Birst's business is still mainly focused in the U.S.; its presence worldwide remains spotty. Sales in Europe and other areas outside the U.S. account for only a small share of the company's revenue. Birst has made an effort to add partners and cloud data centers in regions such as Asia/Pacific and Latin America, but a broader geographic presence will take time to build.

### Bitam

Bitam offers an integrated enterprise performance management platform combining BI, financial planning, and strategic planning in a unified solution suite. Bitam's customer base is heavily concentrated in Latin America, though expansion into Western Europe (particularly Spain), North America and Asia continued in 2013.

### Strengths

Over half of Bitam's reference customers indicated that functionality and ease of use for end users were their primary reasons for choosing this vendor. Bitam's platform is used primarily for reporting and dashboards, with high percentages of end users using both with high levels of satisfaction. Bitam ranks highest of all the vendors in this Magic Quadrant for overall product quality and above average for many of the 17 individual product capabilities. When asked about product problems, 75% of Bitam's reference customers indicated they had experienced none, which is better than the survey average of 56%. Similarly, when asked about limitations on wider deployment, 63% indicated that no barriers exist, compared to the survey average of 49%.

The current version of Bitam's platform, G7, was enhanced in 2013 to include social BI capabilities that enable users to contribute insights and enhance analytic content. Collaboration is one of Bitam's top-rated product capabilities among customers, according to the survey results, in which it scored better than twice the survey average. Additional enhancements include in-memory server capabilities and Action Intelligence, which recommends actions based on predefined rules and tracks outcomes for each recommendation.

Bitam has continued to expand its cloud offering, KPI Online. In fact, the vast majority of new business opts for Bitam's cloud offering, rather than on-premises deployment. Bitam expects this to continue and continues to invest in cloud computing initiatives, including the creation of prebuilt vertical-market solutions that appeal primarily to the small or midsize business (SMB) market, which is most receptive to cloud deployment options.

### Cautions

Bitam has a satisfied customer base that rates both platform and vendor highly, judging from responses to many of the survey's questions. However, neither are well known outside Mexico and Latin America, which is where its customers are concentrated. Bitam claims a high "win rate" when evaluated against other vendors, but it rarely appears as a BI solution candidate outside Latin America.

Although Bitam scored well in the survey overall, 9% of its surveyed customers identified software quality (stability and number of bugs) as a barrier to wider deployment, which was above the survey average of 5%. When asked about platform problems, 6% mentioned inability to support a large number of users, as compared with the survey average of 2%. Bitam customers also have a worse-than-average view of Bitam's future, when compared to responses from the customers of other vendors, which may indicate concern about Bitam's ability to compete in a global BI market.

Most of Bitam's customers are SMBs or regional divisions of larger organizations, with a lower-than-average number of end users working with data volumes, which are also below average. Among Bitam's reference customers, the data volume of their largest query averaged 259GB, as compared with the survey average of 492GB. There was a similar result for the size of data repositories accessed by Bitam's reference customers, with an average of 1,774GB, as compared with the survey average of 4,197GB.

### Board International

**Board International** delivers integrated and programming-free, BI and CPM capabilities, while emphasizing information consistency over ad hoc information exploration. The company was founded in Switzerland in 1994 and its core markets are in Europe. It plans to open additional offices in the Netherlands (Amsterdam), France (Paris), the U.S. and Asia/Pacific through direct subsidiaries.

### Strengths

One of the main trends in the BI market is the rise of data discovery tools that enable business users to model and blend data. Board, however, takes a different path, enforcing the definition and use of a consistent and formal semantic layer, supported by a mature in-memory OLAP engine, while capitalizing on the integration of performance management and BI. This submarket of centralized and often IT-driven BI and performance management delivery is large enough to support Board's growth and enables it to compete in a less crowded space.

Board's product is mainly selected for its ease of use for end users. For this it achieved a score in the top quartile in the Magic Quadrant survey, with an above-average percentage of users identified as report consumers and one of the highest percentages of users accessing static reports — consistent metrics for a structured, semantic-based BI platform. Implementation cost and effort and functionality were also often mentioned by customers as reasons for adoption.

Board offers below-average report development times. Its scores for ease of use for developers and business users are among the top five in this Magic Quadrant, with customers also reporting above-average benefits from Board deployments. Additionally, customers praised Board's Microsoft integration, awarding it one of the best scores in the survey for this capability. Reporting, dashboards and ad hoc query capabilities achieved average results. For 2014, Board's product road map includes an advanced in-memory clustering option to help scale the product to large numbers of concurrent users, support for data entry, and analytic capabilities including time-series forecasting models and mobile BI support for Android.

From a sales perspective, Board gained traction in 2013, winning important customers in Europe and the U.S. in direct competition with larger vendors such as IBM, SAP and Qlik. At the product level, Board released two new versions with better enterprise support — scalable to more users, and with enhancements for corporate deployments — and a native mobile BI solution for Apple iPad and Microsoft Windows tablets.

### Cautions

Board still has one of the smallest average data volumes accessed (349GB) — second only to Targit — and one of the smallest average biggest-query data volume sizes (73GB). It also has the smallest deployment size, with an average of 234 end users (compared with the average of 1,364 for vendors in this Magic Quadrant). This may reflect its client profiles (relatively few large deployments), rather than a product issue. Only 4% of Board's customers — slightly less than the average — reported poor performance as a product limitation. Nevertheless, potential large customers should check Board's references and run scalability tests before committing to its platform.

Among the surveyed Board customers, breadth of use of the 17 BI capabilities tracked is relatively narrow, and below the average for vendors in this Magic Quadrant. This suggests its product is focused on traditional BI-report-centric content delivery, even though, unlike most other BI vendors, the product extends to and integrates traditional BI natively with performance management, budgeting and forecasting. Board's customer survey scores for this Magic Quadrant were below average for capabilities such as OLAP, metadata management, BI and administration, development tools, mobile BI, embedded analytics and geospatial and location intelligence, as was the overall weighted-for-use product score.

Board customers rate the quality of its support below the survey average and cite this as the biggest limitations to broader adoption. Software quality is also a concern. These are not new findings for Board — previous years produced similar feedback. Prospective customers should run a proof of concept with the company and ask for references to check for potential issues.

Board made good progress in 2013, with Version 8 of its product introducing self-service capabilities, end-user ad hoc analysis and point-and-click importation of data from relational databases, with integrated search across its entire platform. However, to respond to evolving market needs, Board needs to further develop capabilities that enable end users to derive their own insights without the need for IT support or centralized development — as this is where most of the market's growth will occur. Board must add a layer of flexibility on top of the tool's system of record, the source of curated information, as defined in Gartner's pace layer model. Without this option, users will revert to exporting information for analysis to spreadsheets or, worse from Board's perspective, complement the platform with data discovery capabilities from another vendor.

## GoodData

**GoodData** is a cloud BI and analytics specialist. It provides a range of front-end BI capabilities and packaged analytic applications that complement its comprehensive cloud and on-premises source data integration and cloud-based data warehouse platform.

### Strengths

GoodData is one of two cloud BI and analytics platform specialists in this Magic Quadrant. It was founded in 2007, and now has 275 employees worldwide and headquarters in San Francisco, U.S. Unlike the traditional BI platform vendors that provide front-end BI capabilities to complement data integration and a data warehouse, GoodData offers customers an end-to-end business analytics platform-as-a-service solution for data governance, data integration and data warehousing, as well as BI capabilities for reporting, dashboards, data discovery, interactive analysis and advanced analytics that are viewed by customers as highly extensible and embeddable.

GoodData has an extensive range of cloud and other data source connectors, which enable it to combine cloud and on-premises data sources. This makes GoodData particularly well suited to organizations and cloud/SaaS vendors creating customer-facing applications with data residing outside a firewall. Our survey found that GoodData's customers analyze one of the highest percentages of data from external sources, and have a significantly above-average number of users external to their organization (37%, as compared with the 15% average).

Our findings indicates that 54% of the companies that use GoodData consider it their BI standard — although these were smaller businesses in which IT skills are likely to be in short supply, which could explain why project deployment and data sizes were below the survey average. GoodData offers customers fast time to value and the prospect of offloading IT expenses related to infrastructure and labor-intensive, low-value tasks such as integration and migration. One of GoodData's particular advantages as a cloud specialist is that it regularly updates its service, reacts to security threats immediately, and performs all regression testing for customers, making migration of its platform less of a burden on their IT. GoodData's customers spend less time developing reports than the survey average; also, over half of them use GoodData's industry and domain templates for sales, marketing, service and social analytics that contain packaged data models, ETL and metrics, as part of deployments to further accelerate time to value. Moreover, GoodData's customers consider the migration experience extremely straightforward, which is to be expected, given its cloud model.

Customers choose GoodData for its functionality, ease of use for end users and developers, and ability to embed BI content (OEMs are an important part of GoodData's business and strategy), although once customers deploy the product, they rate its ease of use for developers below the survey average. Customers ranked GoodData's functional capabilities for dashboards in the top 10 of the vendors we surveyed. They also scored its interactive visualization, embeddable analytics, embedded advanced analytics and collaboration capabilities (GoodData is integrated with Yammer) above the average. Moreover, GoodData is one of only a few BI platform vendors to offer integrated social and content analytics as a key feature of its platform. The ability to analyze multistructured data is becoming increasingly important. Of the vendors in this Magic Quadrant, GoodData has the highest percentage of customers using the platform for social media monitoring (32%, compared with the survey average of 7%).

### Cautions

Customers rate GoodData's sales experience and support as above average, but its product quality as below average, lowering its overall score in the customer experience category. The same is true of GoodData's overall product capabilities, as GoodData continues to improve its front-end features. Specifically, customers rate GoodData as below average for many capabilities (when weighted for use), including reporting, ad hoc analysis, Microsoft integration, search BI, geospatial intelligence, OLAP, BI infrastructure and administration, metadata, business user data mashup, development tools and mobile BI, with an above-average percentage of users having no plans to deploy mobile BI.

Despite GoodData's promising OEM and reseller partner relationships and growing investments

to expand, the company's direct international sales channel is still a work in process in advance of the opening of a European data center later in 2014. Sales offices are in the U.S. and the Czech Republic. GoodData distributors and resellers offer support in Australia, New Zealand, Singapore, the U.K., Netherlands, Belgium, Brazil and Poland. Between GoodData and its partners, support is offered in the U.S. and the Czech Republic in multiple languages, including English, Czech, Russian, Spanish, Chinese and Vietnamese.

Despite the trend for making more complex types of analysis more accessible, which is the main driving force behind data discovery in particular and the market in general, GoodData's platform is used primarily for traditional BI reporting and dashboarding, use cases with below-average scores for supporting more complex types of analysis. As GoodData enhances its data discovery capabilities and more and larger customers become comfortable with cloud deployments, we expect this to change.

## IBM

IBM offers a complete range of enterprise-grade BI, performance management and advanced analytics platform capabilities, complemented by a deep services organization that is ready to implement them in solutions for any domain, industry or geography.

### Strengths

IBM is pushing new boundaries in the analytics space. A strategic objective to broaden and grow its portfolio in BI, analytics and performance management, coupled with support from IBM Global Services and a global presence, makes IBM the leading vendor for Completeness of Vision, although other vendors are closing in. High marks for sales strategy, product strategy, and industry and geographic strategies, bolster IBM's position on the Magic Quadrant.

With an average data volume accessed in data repositories of over 10TB, an average deployment size of 2,428 users (top quartile; the average for vendors in this report is 1,364), and the biggest queries accessed averaging 1,858GB (second only to MicroStrategy), the IBM Cognos BI platform handles some of the largest deployments evaluated in this Magic Quadrant. Further evidence of IBM's enterprise-ready credentials is that the platform earned an enterprise deployment score (for size of deployments and global pervasiveness across an organization) in the top three in our survey. Moreover, two of IBM's most highly rated product capabilities are metadata management and BI infrastructure and administration. Both are requirements for supporting large enterprise systems-of-record deployments, reinforcing IBM Cognos's strengths as a platform capable of supporting large deployments. IBM customers also rated its traditional BI capabilities for ad hoc reporting, dashboards and OLAP capabilities above the average.

After a first attempt to enter the data discovery market with IBM Cognos Insight, IBM is trying a radically new approach, which we refer to in this report as "smart data discovery." Watson Analytics — to be released in 2014 — allows business users to analyze data without any technical or statistical knowledge. When queried using natural language (for example, "Why are sales down in the East region?"), the cloud-based tool accesses datasets, correlates information and infers conclusions that are then presented in a visually engaging and streamlined interface accessible to business users of every skill level. The insights can be further refined through other questions. It uses natural-language query and other innovations developed from IBM's Watson project, as well as advances developed for IBM's SPSS Analytic Catalyst product that hide the complexities of advanced analytics. IBM is trying to use lessons learned from the Watson project to create a next-generation data discovery tool that may transform the paradigm of how information is used in organizations; indeed, if disruption occurs soon in this sector, it will probably result from innovations introduced with Watson Analytics. Customers and vendors alike should prepare for its potential impact. To further strengthen its position in the growing area of "smart systems," including "smart data discovery," IBM recently announced the creation of the Watson Business Group, entailing the allocation of 2,000 professionals, the investment of \$1 billion over the next few years, and the creation of an investment fund to foster the creation of a third-party application ecosystem.

In 2013, IBM significantly simplified the Cognos licensing model, reducing 28 roles to only two: BI Architect for system administration and BI User with full access via Web, desktop or mobile device to all the information exploration and reporting capabilities. Purchasing, license administration and even information consumption should become simpler. To date, Gartner has seen limited adoption of this new model, but IBM will increase its efforts to advance it in 2014. Customers should ask for pricing using the new two-role metric, to see whether it will result in a more favorable average license cost per user.

### Cautions

Unusually, IBM customers did not report clear reasons for selecting its platform, except for choosing IBM Cognos because it is their corporate standard. The lack of recognizable advantages over its competitors might compromise IBM's future in the BI and analytics space. Watson Analytics could be a response to this issue, as it represents a significant opportunity for IBM to differentiate itself, if it can integrate the capabilities with IBM Cognos to combine its strong enterprise features with innovative, business-user-oriented data discovery.

Customers identify several limitations that prevent broader deployment of IBM solutions. Cost of software is the main reason, cited by 40% of IBM customers — double the survey's 20%

average. IBM also scored near the bottom for sales experience. Gartner's inquiries have revealed frustration with IBM's sales and contracting, and high numbers of audits. Customers also identify poor performance, lack of ease of use for business users and developers, and poor support quality as inhibitors to wider adoption. An above-average percentage, 8.5% of IBM Cognos 10 customers, reported performance as a product limitation, compared with the market average of 4.6%. Results have nevertheless improved significantly from those for previous product versions, and could now be in part due to the platform's support for large datasets and deployments.

Many of IBM's product capability scores are below the survey average for this Magic Quadrant — those for geospatial and location intelligence, interactive visualization, embedded advanced analytics (unsurprising since IBM SPSS is a separate product for which integration with the IBM Cognos platform is a work in process) and embeddable analytics. It also takes 6.2 days on average to create a report using the platform (an average of simple, moderate and complex reports), compared with the survey average of 4.3 days — a result near the higher end in this Magic Quadrant. Support for more complex types of analysis beyond reporting scored below the market average, and IBM's score for ease of use for business users is near the bottom. We expect these perceptions to improve once Watson Analytics is generally available and widely deployed in IBM's installed base.

Overall, IBM's customers placed IBM in the bottom quartile for achievement of business benefits from its BI deployments — similar to most other IT-centric vendors. IBM is trying to skip a generation of data discovery tools and move into "smart discovery," but this approach may encounter unexpected technical challenges and could take some time for customers to realize its full potential. In the meantime, IBM must continue to invest in the usability and basic capabilities of its current product line, in order to overcome or at least mitigate some of the weaknesses identified in this Magic Quadrant.

## Infor

**Infor** Business Intelligence (BI) is part of an end-to-end platform that encompasses BI and performance management capabilities, both based on the MIS Alea product (also called MIS DecisionWare) acquired from Systems Union in 2006.

### Strengths

Infor, a new entrant to the Magic Quadrant, is investing significantly to enhance the attractiveness of its platform both inside and outside Infor's ERP installed base. Infor BI 10x includes an in-memory multidimensional OLAP database; Web frontends, such as Infor BI Dashboards/Motion Dashboards for data presentation and analysis; a feature-rich Microsoft Excel-based interface; a data integration tool; and a modeling tool. Infor BI Planning and Infor BI Consolidation offer data modeling and reporting, in support of a standard planning and financial consolidation process for a diversity of industries and domains. Infor Intelligent Open Network (ION), Business Vault and Workspace integrate BI content for Infor and non-Infor ERP customers. Infor BI is worthy of consideration by organizations looking for an integrated BI and performance management solution.

Infor BI offers out-of-the-box integration and packaged industry and domain-specific analytic solutions for Infor ERP applications. In addition, it is frequently deployed in the SAP ERP installed base, primarily as a result of the former MIS Alea's relationship with SAP. Infor is embedding Infor BI in its major ERP applications for operational reporting, which the company plans to sell to its approximately 70,000 customers. Some Infor partners resell Infor BI as their only product from Infor, while others also resell Infor ERP systems. In fact, 21% of Infor's surveyed customers reported using Infor BI in environments where Infor is the dominant ERP system (whereas only 2% of the overall survey respondents identified Infor as their dominant ERP system). Although Infor BI is optimized for Infor ERP, it is also used in the SAP installed base, with 37% of Infor's BI customers deploying the product in an environment where SAP is deployed as the primary ERP/transaction system (almost double the overall survey average of 20%).

Customers choose Infor BI for its ease of use by end users, functionality, data access, and integration with Infor and non-Infor enterprise applications. This is consistent with the finding that a high percentage of Infor BI customers also use Infor for their primary ERP/transaction systems. From a functional perspective, and in keeping with the MIS Alea product's in-memory OLAP heritage, OLAP is Infor BI's highest-rated capability, with above-average use. Moreover, more than half the survey respondents considered Infor to be their enterprise BI standard, although Infor's customers tend to be smaller in terms of number of employees (60% of the survey average).

### Cautions

Infor's strategy for BI is a work in process as the company continues to invest in product enhancements designed to make its product competitive with leading platforms, both within and outside its installed base. However, all of Infor's survey scores that contributed to its position on this Magic Quadrant were below average. For example, its scores for market understanding, (which includes ease of use, breadth of use and complexity of analysis), customer experience

(which includes product quality and support) and sales experience were near the bottom, when compared to other vendors. In terms of product capabilities, four out of the 17 were rated above average, 13 below average, and seven (mobile, interactive visualization, geospatial and location intelligence, embedded advanced analytics, business user data mashup and modeling, embedded analytics and support of big data) received scores in the lowest quartile. Customers use Infor mainly for static report viewing, parameterized reports and dashboards, and predictive analysis and data mining. However, when asked about platform problems, respondents put poor performance, difficulty of use and difficulty of implementation in the top quartile. Since only 50% of Infor's BI surveyed reference customers were on the latest release, and since Infor has an aggressive road map for Infor BI, we expect these results to improve next year, if Infor can execute on its plans. Infor will have to address these issues to make progress outside its ERP installed base.

Lack of a competitive mobile offering is another major challenge for Infor. Customers' survey responses show that Infor ranked in the lowest quartile for mobile use, and it received the lowest mobile BI capability assessment, with only a few customers indicating that they use this function. Moreover, 63% of Infor's reference customers — almost the highest percentage in the survey — indicated they have no mobile plan. The Infor 10x launch in July 2013 includes a new mobile app, Infor Motion, intended to improve BI content delivery to mobile devices.

Despite higher use of Infor's OLAP capability (45% of users, versus the survey average of 39%), Infor BI is used primarily for delivering reports to report consumers. OLAP excepted, Infor's respondents reported significantly lower satisfaction with, and usage of, dashboards, ad hoc analysis and interactive exploration, with the majority of Infor BI users primarily viewing static and parameterized reports. Customers looking for a broader range of analytic capabilities with strong ERP integration, particularly with Infor, should monitor the progress of Infor's execution on its BI road map.

## Information Builders

**Information Builders'** WebFOCUS BI and analytics platform offers a broad range of analytics capabilities with data integration and application support. It is particularly well suited to operational reporting and dashboards, and to building Web-based analytic applications that require low latency and multiple data sources with production-level scalability in environments without a data warehouse.

### Strengths

Information Builders' broad information management capabilities bolster its BI platform and provide differentiation from other pure-play BI competitors. Customers choose it largely for the strength of its data access and integration, overall product quality and large-scale, highly parameterized reporting functionality. Information Builders' reference customers reported almost double the survey average for size of deployment in terms of numbers of users, with almost two-thirds considering Information Builders their enterprise BI standard.

Customers are generally happy with Information Builders' high-touch approach to customers and emphasis on product quality, rating it above the survey average for sales experience and customer experience, including support and product quality. Despite a perception that Information Builders' software is difficult to implement, customers are generally pleased with the software, reporting below-average incidences of problems with it and no significant product-specific limitations on wider deployment.

Reference customers indicated that the percentage of their employees using Information Builders software was above the survey average, and they reported one of the highest percentages of users external to their organization. These findings, together with one of the highest scores for usage of parameterized reports and dashboards by report consumers and casual business users, underscores Information Builders' focus on and strength in operational BI deployments, particularly those delivered through extranets for customer-facing reporting applications.

Information Builders' reference customers reported strong BI functionality across the BI platform spectrum, awarding above-average or average scores for seven of the 17 capabilities, including reporting, dashboard, metadata management, and BI infrastructure and administration. Information Builders' customers predominantly make extensive use of highly parameterized reporting (involving, for example, interactivity via prompts, drilling or filters), the company's strongest area for consumers and casual users; they do so at a far higher rate than the survey average.

WebFOCUS is fully integrated with Information Builders' iWay integration platform, which provides adapters for multiple data sources, including NoSQL and unstructured data sources, as well as data federation, profiling and quality capabilities, geocoding, real-time search index management, business activity monitoring, complex-event processing, file-based integration and master data management. These capabilities make Information Builders a good fit for organizations without a data warehouse, and for operational reporting.

### Cautions

Information Builders offers a broad range of functionality across search BI, R-based predictive analytics, interactive visualization, and added social media, sentiment and text analytics, all integrated with its core WebFOCUS and iWay platforms. However, adoption outside its core

reporting and dashboarding "sweet spot" is limited.

Although Information Builders offers a wide range of user-parameter-driven interactivity across reports and dashboards (including offline analysis support) within its InfoAssist product, and enabled by its Active Reports technology, it lacks a widely adopted data discovery offering; this limits its broader use and the platform's adoption for more complex types of analysis, and will ultimately limit broader market adoption. To address this concern, Information Builders is developing a new integrated data discovery capability within its InfoAssist analyst toolset, which is expected to be generally available in 2Q14. In addition to traditional data discovery features, Information Builders is planning new smart visualizations, such as automatic clustering of large datasets. It currently offers a thin-client approach using its rewritten HTML5 interactive visualization engine, which is used across all its clients and will support all platforms and mobile devices. Beyond internal development, Information Builders continues its OEM relationship with Advizor Solutions, which now includes Advizor's complete workbench, and it has integrated Advizor technology within its WebFOCUS portal to make it more easily accessible in broader BI and analytic deployments. However, adoption is limited. In this year's survey, reference customers still reported that less than 5% of their users performed interactive exploration and analysis of data on the platform, which is among the lowest percentages in the survey.

Customers again reported one of the narrowest uses of a platform of any vendor in this Magic Quadrant, with a focus on reporting, rather than analysis (for example, they identified OLAP as an area of weakness with limited use) and data discovery use cases. This may have contributed to Information Builders' low scores for achievement of business benefits (similar to other IT-centric vendors), since extensive use of data discovery and use of BI for more complex types of analysis appears to be related to the ability to derive business benefits from BI investments.

Information Builders' global presence has improved over the past few years, with the acquisition of a number of key customers around the world. However, despite an improving trend, its international presence outside the U.S., the source of most of its revenue, is uneven, compared with most of the Leaders.

## Jaspersoft

Jaspersoft sells an end-to-end, open-source, BI and data integration platform featuring a low-cost-of-ownership value proposition. It is often used to build embedded BI applications.

### Strengths

The Jaspersoft BI Enterprise Edition suite offers end-to-end BI capabilities through multiple products, including Jaspersoft ETL (a data integration platform including big data connectivity), JasperReports Server (reporting, dashboard, in-memory data discovery and multitenancy), JasperReports Library (open-source Java reporting engine), Jaspersoft Studio (Eclipse-based professional report designer) and Jaspersoft OLAP. Enhancements to the core products in 2013 included a new Web-based data discovery interface, HTML5 interactive visualizations using native big data/NoSQL connectors, data virtualization and blending capabilities, new REST/single-sign-on APIs for embedded content, and performance and feature advancements for the JasperMobile platform (a native application and SDK) for iOS and Android.

In early 2013, Jaspersoft introduced the first utility-based reporting and analytics BI server on Amazon Web Services (AWS), featuring a "pay as you go" hourly pricing model designed for rapid connectivity and BI content development against AWS cloud data sources such as Amazon Relational Database Service, Amazon Redshift and Amazon Elastic MapReduce. Over 500 customers signed up for the service in the six months following its launch on the AWS Marketplace, signaling market interest in a utility-priced cloud BI offering. Jaspersoft further expanded its presence in the cloud analytics space by offering the first open-source BI product in the Microsoft Windows Azure environment.

Organizations choose Jaspersoft primarily for its low ownership cost, compared with other BI platforms. License cost, implementation cost and effort, and TCO were selected by 50% of Jaspersoft's reference customers as the main reasons for choosing it; in fact, cost was more heavily weighted by customers than either functionality or ease of use for end users. Reference customers also rated Jaspersoft above average for sales experience and customer experience. Overall product quality and all aspects of support, including response time, time to resolution, and level of support staff expertise, received scores above the survey average as well.

### Cautions

Jaspersoft's overall product score, when weighted for extent of use for each of the 17 capabilities evaluated, is slightly below the average for vendors in this Magic Quadrant. Of the individual capabilities assessed, mobile and interactive visualization scored below the average, despite Jaspersoft investments in each during 2013; this might be the result of a lag in time to adoption or deployment to production.

Jaspersoft tends to be used narrowly in organizations against data volumes that are below the survey average. User activity most often involves parameterized reports and dashboards, with few users employing Jaspersoft for interactive discovery or visualization. Only 6% of Jaspersoft's survey customers indicated that they use it for interactive discovery or visualization, which is below the average for vendors in this Magic Quadrant (18%) and the second-lowest percentage among those vendors.

Reference customers rated Jaspersoft's embeddable analytics and embedded advanced analytic capabilities below the survey average, which is somewhat surprising given Jaspersoft's focus on making BI and analytic content easily embeddable within applications. This result could be because the survey results include only stand-alone reference customers and exclude OEMs, which form a significant segment of Jaspersoft's customer base and are where embedded BI and analytic content is more prevalent.

## Logi Analytics

[Logi Analytics](#) offers a single easy-to-use and embeddable platform that includes reporting, analysis and dashboards for both IT and business users, plus data integration. It changed its brand from LogiXML to Logi Analytics in 2013 to reflect the company's shift in direction to support more advanced types of analysis.

### Strengths

In 2013, LogiXML rebranded itself as Logi Analytics. Although the company's name has changed and its focus is moving toward more interactive and advanced types of analysis, it continues to deliver on its core value propositions of ease of use, rapid time to deployment, "embeddability" and lower cost, compared with the offerings of the traditional enterprise, open-source and emerging niche-market players with which it competes. It also has the advantage of generally higher customer satisfaction with the platform's ease of use, product functionality, support, sales experience and product quality.

Logi's BI platform is sold as a single platform, based on processor core or CPU, with no limitations on user numbers. The platform includes reporting, analysis and dashboards for IT and business users, plus data integration. In 2013, Logi enhanced its support for NoSQL systems like MongoDB and Amazon Redshift, and columnar stores like Vertica, and released a new product, Logi Vision, a business-user-oriented data discovery platform. Although this new product is an important step for Logi in expanding its portfolio of high-demand capabilities, it is separate from Logi Info, its core product, which addresses primarily IT-driven systems-of-record reporting, dashboard and interactive analytics. Initial content integration between the two products exists, but complete and seamless integration of metadata, process and workflow — which is on the road map for 2014 — will be required for Logi to address the combined and integrated requirements of enterprises that are increasing looking for governed data discovery, business-user-oriented capabilities that are also under IT control and governance.

Ease of use and low cost go hand-in-hand as key strengths for Logi. License cost and ease of use by developers (in addition to functionality) are the primary reasons why customers choose Logi. The company includes interfaces for business users and IT developers to create reports and dashboards. However, its IT-oriented, rapid development environment seems to be the most compelling feature for its customers. This environment features extensive prebuilt elements for creating content with minimal coding, while its components and engine are highly embeddable, making Logi a strong choice for OEMs. Of Logi's 1,200 customers, 300 sell the product on an OEM basis or embed it; 70% of those are SaaS/cloud vendors. Ease of use for developers has also translated into one of the shortest report development times of any vendor in the survey, which is a significant contributor to Logi's three-year cost-of-ownership results, which are among the lowest of any vendor in the survey.

Logi's solutions are often deployed as part of customer-facing applications. Logi's average deployment size has grown to over 1,250 users, as Logi Analytics' unlimited user license model makes such sizes economically viable. Of the vendors in the survey, Logi has among the highest percentages of external users using its product for externally-facing applications (34%, which is twice the average).

### Cautions

Logi Analytics competes in a sector increasingly crowded with low-cost, embeddable alternatives from open-source vendors, Microsoft and recently the emerging cloud BI platforms. Although Logi has received a fresh round of funding and gained strong momentum during the past three years, it remains small, with resources more limited than those of many of its competitors. Moreover, cloud vendors — Birst and GoodData — are emerging threats that target the same OEMs, particular cloud-based independent software vendors with a low-cost, fast-time-to-value, highly embeddable value proposition, backed by strong customer satisfaction.

Logi's sweet spot is static and parameterized reporting and dashboards, which are used by most of its customers. Logi's customers tend to have less complex deployments, in terms of users, data size, global deployment, and breadth and complexity of use, than its competitors; this is despite Logi having introduced real-time OLAP capabilities for in-memory analysis in 2011, interactive visualization and advanced analysis capabilities to the core Logi Info platform in 2012, and a new product for data discovery, Vision, in 2013. We expect Logi's customers to engage in more complex types of analysis as they increase their adoption of these new capabilities.

Logi's geographic presence, though growing outside North America, and particularly in Western Europe and Asia (where it has a growing stable of global OEM, reseller and system integration partners), is more limited than that of its larger competitors.

## Microsoft

Microsoft offers a competitive and expanding set of BI and analytics capabilities, packaging and pricing that appeal to Microsoft developers, independent distributors and now to business users. It does so through a combination of enhanced BI and data discovery capabilities in Office (Excel) 2013, data management capabilities in SQL Server, and collaboration, content, and user and usage management capabilities in SharePoint.

### Strengths

Of the megavendors, Microsoft has made the most progress toward delivering a combination of business user capabilities with an enterprise-capable platform. Microsoft delivered business-user-oriented data discovery and other BI capabilities in Excel 2013. It is enhancing these aggressively through its Power BI cloud offering by adding geospatial 3D, natural-language query generation, and self-service ETL with usage and trust ratings across internal and external data sources, as well as the ability to promote a personal PowerPivot workbook to an enterprise data source. These enhancements contribute to Microsoft's overall vision and make it a strong contender for addressing the requirements to bridge the divide between business and enterprise users.

Microsoft has made early investments in its cloud-based BI offering, Power BI. Microsoft's strategy is to use the cloud to increase adoption of its new and most competitive BI capabilities in Excel (starting with Excel 2013), and to accelerate enhancements to Excel to every six months. This strategy is designed to lower the cost of ownership of BI and to reduce deployment challenges stemming from customers needing to implement and manage Office, SQL Server and SharePoint for the full range of Microsoft's BI capabilities. This combination can be particularly attractive for organizations that choose to standardize on Microsoft for information management. However, the success of this strategy will depend in large part on continued acceleration in users' acceptance and adoption of cloud-based BI.

Microsoft's strategy for bundling BI into its most widely used products, together with its enterprise pricing, often gives it a compelling value proposition in terms of license cost for organizations that want to deploy BI to a wider range of users, or that want to lower their overall BI license costs by using lower-cost tools for basic functions. In the customer survey conducted for this Magic Quadrant, more Microsoft customers cited TCO and license cost as their main reasons for selecting Microsoft as a BI vendor than did those of most of the other vendors; this has been the case for each of the past seven years in which Gartner has conducted this survey.

Microsoft composite product score was above average across the 17 capabilities, when weighted for use. Microsoft customers appreciate its strong BI infrastructure and development tools. They also rated its reporting, ad hoc query, Microsoft Office integration, business user data mashup, embedded BI, collaboration, search BI and OLAP capabilities higher than the survey average. Importantly, unlike those of its megavendor competitors, Microsoft's customers rated customer experience (support and product quality) above the survey average. Moreover, Microsoft's success is also driven partly by its IT-oriented BI authoring tools within SQL Server, which are based on Visual Studio, a broadly adopted development environment. Microsoft customers rated its BI development tools as No. 1 in the survey, and its BI platform infrastructure as among the best, with a higher percentage of customers using both extensively. Furthermore, "wide availability of skills" is among the top reasons why customers select Microsoft more often than any of its competitors. While Microsoft's BI platform attracts small to midsize enterprises, it is also widely deployed in large enterprises as a standard. One of the highest percentage of customers in the survey reported standardizing on Microsoft's BI platform.

### Cautions

Although Microsoft's functional ratings have improved and it can offer a wide range of functions, it also has one of the highest percentages of users who say that absent or weak functionality is among the main reasons limiting broader deployment of its software. Mobile BI, interactive visualization and metadata management remain product weaknesses reported by customers. In particular, Microsoft lags behind most other BI vendors in delivering mobile BI capabilities, with some of the lowest results for mobile functionality and percentage use. Microsoft plans to offer HTML5 support that will enable browser-based viewing and exploration of reports from any device with an HTML5-capable browser. It also plans to use its cloud offering, Power BI, to deliver a Windows mobile app that offers a touchscreen-optimized mobile BI experience initially for Windows devices (support for an iOS version is planned for after the launch of Power BI). Latent demand for Microsoft's mobile BI is evident from the survey, with Microsoft's respondents including one of the highest percentages (51%) that plan to implement mobile BI in the coming year. Despite product enhancements, Microsoft BI is primarily used for static and parameterized reporting by report consumers. Although Microsoft has a broader range of users conducting more complex types of analysis this year than last, its support for more complex types of analysis and adoption by advanced users remains below the survey average.

Multiproduct complexity remains a challenge, now primarily for on-premises and hybrid deployments. Because Microsoft's BI platform capabilities span three different tools (Office, SQL Server and SharePoint) that also perform non-BI functions, the task of integrating components and building applications is left mainly to the customer. This "do it yourself" approach places more of the onus for BI solution development and integration of platform components on

customers, compared with the all-in-one, purpose-built BI platforms offered by most other BI vendors. Microsoft is depending on its BI cloud offerings to reduce deployment complexity, particularly for smaller companies lacking the necessary skills.

Although Microsoft's partner-driven sales model drives global growth for the company, Gartner's inquiries suggest that this approach often makes it difficult for customers to find their Microsoft sales representative. This causes frustration that may put downward pressure on Microsoft's sales experience scores, which, despite a favorable view of Microsoft's pricing, are below the survey average.

## MicroStrategy

MicroStrategy offers an enterprise-grade and organically grown end-to-end BI platform that is well suited to large and complex requirements.

### Strengths

MicroStrategy remains an industry benchmark in large BI deployments running on top of large enterprise data warehouses, and it is often viewed as the vendor of last resort when enterprise requirements are complex. The company invests continuously in scalability and performance enhancements for its full, natively developed and integrated portfolio, which enables it to support the largest average data volume accessed in data repositories, at 17TB (the market average being 4.2TB), and the highest average data volume size for the biggest query, at 2TB (the market average being 492GB). The average number of end users is more than double the market average (2,979 versus 1,364). Deployments serve, on average, 773 users per IT administration user — the highest score in the survey.

Customers identify functionality as one of the main reasons for selecting MicroStrategy's platform, and they awarded several capabilities almost the top score: mobile BI, reporting, dashboards, geospatial and location analytics, BI infrastructure, and administration and metadata management. Interactive visualization, OLAP and embedded advanced analytics also received above-average scores. MicroStrategy's composite product ratings are among the highest, both with and without factoring in its enterprise deployment score (the size and reach of deployments within enterprises), contributing to its position on the Ability to Execute axis. In particular, MicroStrategy is the market leader in terms of the breadth and depth of its mobile BI offering. The tool natively supports iOS and Android devices, and it offers advanced capabilities such as GPS-based context awareness, bar code scanning, transactions write-back and videoconferencing between users. This level of capability enables MicroStrategy to win deals and penetrate key accounts where mobility is a strategic requirement.

The cloud has been another area of strategic investment for MicroStrategy. Of the MicroStrategy customers surveyed, 19% already use cloud BI and another 15% plan to in 2014. MicroStrategy claims that the cloud offering is its most successful product ever in terms of revenue growth, with strong initial adoption in departments and lines of business in the MicroStrategy installed base. This trend is expected to continue for the next few years, given the global acceleration of cloud adoption — overall survey results show that existing and planned usage over the next 12 months rose from 30% in 2012 to 45% in 2013. Moreover, MicroStrategy's investments in cloud capabilities and its sales team's preparations to sell cloud place it ahead of the other Leaders in this area and will continue to propel the company forward.

In late 2013, MicroStrategy released an updated version of its visual data discovery engine. It now supports data blending between multiple ad hoc data sources, such as Microsoft Excel, and semantic layer-based data sources, such as the corporate data warehouse. It also enhances the user self-service capabilities, while maintaining IT-driven data governance. An equivalent free stand-alone product — MicroStrategy Analytics Desktop — has also been introduced to increase market awareness, foster adoption by individual business users and encourage eventual adoption of the corporate solution. In the absence of competing data discovery specialists, adoption both in MicroStrategy's installed base and beyond will be key. A scalable multiterabyte in-memory engine is also being developed in cooperation with Facebook, for release in 2014. This could differentiate MicroStrategy from direct competitors in the data discovery sector.

### Cautions

MicroStrategy's customers point to limitations that prevent them from expanding their deployments and which may, in the future, represent a genuine risk to this vendor. Cost of software heads the list, being identified by 48% of its surveyed customers (surpassed only by Alteryx, with 67%), although MicroStrategy supports the highest number of users per IT administration user of any vendor surveyed. Customers identified ease of use for both developers and business users as an ongoing concern. They also reported issues with software and support quality. MicroStrategy received the second-lowest result of any vendor in the survey for both of these criteria, which is worse than in previous years, when MicroStrategy hovered around the survey average.

MicroStrategy's platform requires, along with SAP's, the most days to create a new report: 7.9 on average (almost twice the market average and nearly four times that of the survey leader on this measure). The trend is confirmed at all levels of report complexity. A highly featured development environment often goes hand-in-hand with a steep learning curve for developers, but MicroStrategy will need to address this challenge, as ease of use will remain a key buying

driver. Moreover, although it is an early investor in Hadoop connectors, such as Cloudera Impala, MicroStrategy lacks more user-friendly and comprehensive advanced analytic capabilities, as well as unstructured data support. The existing integration with R and PMML is a start but, as previously in the data discovery sector, this remains a gap that could result in MicroStrategy lagging behind the upcoming generation of BI and analytics tools driven by big data and smart data discovery initiatives.

For the past few years, MicroStrategy has invested in areas loosely associated with its core business, such as access management and consumer-focused social apps, which, in our view, has created an ambiguous product portfolio and blurred the company's marketing message, without adding significant value to its current offering. In our opinion, although MicroStrategy's earlier and new research-and-development efforts have often created significant opportunities, these investments — unlike those in the mobile and cloud sectors, which have complemented its core business — have diverted sales, development efforts, and focus away from addressing critical market requirements for ease of use and data discovery in a more timely fashion.

## Oracle

Oracle has a wide range of BI and analytics-related technologies and products that customers use as a BI platform. They include Oracle Business Intelligence (BI), Oracle Exalytics In-Memory Machine and Oracle Endeca Information Discovery.

### Strengths

Oracle has long been a leader in information management. Oracle BI Server is the primary Oracle presentation and query engine. It provides optimized and federated query generation to heterogeneous data sources. It is aggregate-aware, with aggregate navigation determined by manual or automatic metadata configuration. It is often deployed to support large-scale, systems-of-record reporting and dashboard requirements. Endeca Information Discovery complements Oracle BI as a search-based data discovery platform, providing faceted browsing, search, self-service data mashups and interactive discovery-style analytics; but it has its own query engine and search-based presentation services, which can source from Oracle BI Server's semantic model. Oracle BI on Exalytics uses the Oracle TimesTen In-Memory RDBMS for performance optimization (TimesTen uses columnar storage compression).

Customers choose Oracle for its integration within solutions based on Oracle applications and technology. In particular, Oracle offers over 80 prebuilt analytic applications for Oracle E-Business Suite, PeopleSoft, JD Edwards, Siebel and other enterprise applications, including industry-specific packaged analytic applications. These analytic applications include prebuilt ETL, data warehouse models, KPIs, reports and dashboards. Oracle BI analytics optimizations with Oracle Essbase and the Oracle Hyperion Enterprise Performance Management platform enable customers to implement an end-to-end analytic process for financial budgeting, planning, consolidation and close processes. Oracle also has integration between Oracle BI, Oracle Complex Event Processing and Oracle Real-Time Decisions to support real-time event detection and analysis. However, the complexity of analysis conducted by Oracle customers who responded to our survey is less than that indicated by customers of most of the other vendors in the survey.

Oracle BI supports large-scale, traditional, IT-led BI deployments, with most Oracle BI deployments supporting traditional BI reporting and dashboarding. Oracle customers reported among the largest deployments in terms of numbers of users and data sizes, with 69% of the Oracle customers stating that Oracle BI is their enterprise BI standard.

Oracle has a large network of partners with products and implementation services, many of which offer implementation services for Oracle's information management and BI platform and analytic products. Oracle's large installed base of database products, middleware and applications presents an opportunity for these partners to bundle and sell BI solutions. However, a large number of service offerings does not guarantee uniformity, quality of service or competency across the multiple Oracle-BI-platform-related products.

### Cautions

Oracle's BI and analytics products are becoming the system of record (in pace layer terms; see "Applying Gartner's Pace Layer Model to Business Analytics") for large-scale, multi-business-unit and multi-geography implementations. Most of the use — almost 80% as indicated by the survey — is for parameterized and static reports and dashboards. Only 8% of the survey respondents indicated that they use Oracle for "interactive data discovery and exploration" (for other vendors, such as Tableau and Qlik, respondents indicated that over 90% of users employ interactive data discovery and visualization capabilities). These products, with larger interactive data discovery and exploration capabilities, are being sold to Oracle's installed base, given that Oracle has been late to fill this need (although it is working on initiatives to address this gap). This mix of vendors and technologies (as with the other IT-centric vendors that have had data discovery gaps filled by specialist vendors) may require more rigorous or complicated governance and support methodologies.

Although Oracle has a broad portfolio addressing a range of analytic requirements, configuring and supporting these products, often serving a large number of diverse users, requires IT program management and fairly sophisticated BI-related competencies. This may in part explain

why recent Oracle BI releases received scores for customer experience, including support and product quality, that were among the lowest. This impacted Oracle's scores and position for Ability to Execute. Beyond customer experience, Oracle's ratings for ease of use, sales experience and achievement of business benefits, remain a weakness; for the fourth year in a row they were among the lowest in survey (though the same has been true of most of the other megavendors).

Oracle's survey respondents indicated higher-than-average mobile use associated with Oracle BI platform products and applications, but Oracle was late to the market with the variety of mobile platforms it supports. There has been a large uptake of Oracle BI Mobile in the past two years (either as an option for Oracle BI Enterprise Edition or included with the Oracle BI Foundation Suite). Although Oracle now has a clearer strategy and product plan for mobile offerings, it might mean that customers, especially those with non-Oracle mobile infrastructures for their BI applications, should plan for switching or upgrade costs in the near future as Oracle brings to market its strategic mobile technology platform and capabilities based on the BI Mobile App Designer (introduced in August 2013).

Oracle's plan for BI cloud services is new and evolving (no service is yet in general availability). New Oracle BI platform-related cloud service products are planned to reach the market in 2014, but these will provide different development and usage experiences from its current BI platforms. The mix of capabilities will mean new customer experience, development and support requirements, which may introduce an additional IT support and training challenge.

## Panorama Software

[Panorama Software's](#) new product, Panorama Necto, combines social BI with enterprise features to deliver a unique and guided interactive and data discovery experience.

### Strengths

Panorama Necto, introduced in 2011, has replaced the NovaView platform. It combines social BI with enterprise features to deliver a unique, yet governed, guided data discovery experience. It features collaborative decision capabilities native to the analytic workflow and context-guided discovery with automatic pushing of relevant insights based on users' preferences and past behavior. Panorama has achieved stellar results across key Completeness of Vision measures, such as market understanding, with high marks for ease of use, breadth of use and enabling users to conduct complex types of analysis. Panorama also received high marks on critical satisfaction metrics for product functionality, support and product quality. Given Panorama's exceptional customer results, its unique and native social and collaborative-based data discovery experience, and top-ranking market understanding, we have moved it into the Visionaries quadrant this year.

The main reasons why customers choose Panorama's software are its ease of use for end users and developers and its functionality. Panorama's survey results again indicate the widest use of collaboration capabilities in this Magic Quadrant, which confirms that its native social and collaboration capabilities are central to what customers value about its product.

Panorama Necto continues to be used as a front end for OLAP databases — chiefly Microsoft SQL Server Analysis Services — via Multidimensional Expressions (MDX). Panorama Necto received the top score for satisfaction with its OLAP capabilities; it also has the highest usage of any vendor in the survey, with 95% of its customers reporting either some use or extensive use. However, Panorama is no longer just a Microsoft front-end tool. It has one of the top composite product scores, weighted for use and for enterprise deployment, with near-top scores for most of the 17 individual capabilities that we assessed in the customer survey (exceptions being reporting and geospatial intelligence). Because of its strong OLAP capabilities, customers use the product to conduct more complex types of analysis than was seen for most other vendors in the survey, but unlike traditional OLAP front-end tools, Panorama Necto offers deep OLAP-style analysis within an updated social and collaboration-based guided data discovery user experience.

An above-average score for customer experience (support and product quality), particularly in the area of support, is an improvement from the preceding survey. Although Panorama customers tend to be smaller companies that report smaller data volumes and user sizes (less than half the survey average in both cases), 70% of them consider it their enterprise standard. That said, highly rated enterprise and developer features (metadata, BI infrastructure and administration, and BI development tools), combined with unique business-user-oriented capabilities, put Panorama in a good position to satisfy the open-market opportunity for both, particularly for small and midsize enterprises.

### Cautions

Panorama Software relies heavily on Microsoft, with products optimized for Microsoft SQL Server, SharePoint, PowerPivot and Azure. Although this creates an opportunity to sell into Microsoft's large installed base of customers, and was a particularly attractive when Microsoft's BI capabilities were lacking, it is also increasingly a risk. Microsoft continues to improve its own BI offerings with a compelling cost-value proposition and road map. This is likely to narrow the opportunity for products that only complement Microsoft's information management stack.

Compared with its competitors, Panorama has a small direct sales team and a limited partner

program. This continues to pose challenge for Panorama if it is to generate awareness and gain traction in an increasingly crowded and competitive market. Also, Panorama Necto is a complete departure from the company's legacy product, NovaView. Changing the market's perception of its product as "just another Microsoft front-end OLAP tool" is a challenge for Panorama, given its limited resources.

Panorama's unique capabilities, exceptional customer satisfaction and lack of resources to capitalize on its differentiators, make it an attractive acquisition candidate for an organization looking for business-user-oriented capabilities. Any acquisition could cause disruption to customers.

Panorama's limited geographical presence remains a major issue. Although Panorama has support centers and distributors globally, its sales are concentrated in the Middle East, North America and Europe.

## Pentaho

**Pentaho** offers a comprehensive, open-source BI platform that delivers a full range of data integration and analytic capabilities.

### Strengths

Pentaho's BI platform delivers a full range of data integration and analytic capabilities, with three areas of focus: business analytics, big data analytics and embedded analytics. With version 5.0, released in 2013, Pentaho completely redesigned and rebuilt the platform, with a heavy emphasis on big data capabilities, including on-demand blending, data integration, advanced visualization and predictive analysis. The redesigned platform also enables developers to operationalize advanced analytics by integrating Pentaho Data Mining (Weka) or third-party PMML models into the core BI platform components.

Most of the more visionary Pentaho products introduced in version 5.0 were developed in Pentaho Labs, which was formed in 2013 with the goal of accelerating product innovation by rapidly prototyping emerging analytic capabilities with customers. Examples of innovative product features from Pentaho Labs in 2013 were the Adaptive Big Data Layer, Instaview and real-time analytics focused on integration with Storm and Splunk. Additionally, the acquisition of Webdetails provides Pentaho with new capabilities to develop innovative visualizations that will work natively within its environment. These investments have improved Pentaho's position on the Completeness of Vision axis in this year's Magic Quadrant.

Pentaho is chosen by organizations for its low license cost, functionality, ease of use for end users, and data access and integration capabilities. Overall, Pentaho's weighted product score, factoring in extent of use across the 17 individual capabilities, is slightly above the average for vendors in this Magic Quadrant. Pentaho is ranked above average for many individual product capabilities, including the quality of development tools, for which it ranked second-highest among the vendors in the Magic Quadrant survey. Pentaho's product capability improvements have shown strong momentum, with its above-average scores improving from six out of 15 last year to nine out of 17 this year. It should be noted that over 80% of the reference customers indicated that they were not running the latest version of the software, which could explain the below-average product capability scores for interactive visualization, business user data mashup and modeling, embedded advanced analytics and embeddable analytics, which were all key focus areas of the redesigned version 5.0 (the latest release).

### Cautions

Pentaho's score for customer experience, which comprises product quality and support, was slightly below average. Within the support category, Pentaho's level of expertise was scored among the lowest, which contributed to the company's marginally below-average overall score for support and customer experience. Pentaho needs to strike a balance between innovative development efforts and product support in order to maintain its loyal customer base, since its subscription model relies on support quality as well as the value of enterprise features. This will be particularly important as customers migrate to the new platform and seek support from Pentaho during the transition.

As in the previous Magic Quadrant, a higher-than-average percentage of users indicated that Pentaho's ease of use for end users and developers limit wider deployment. When asked about problems with the product, an above-average percentage also rated it difficult to use and implement. In addition, survey respondents identified performance as an area of concern, one that Pentaho will need to address as it implements larger deployments. However, only 20% of Pentaho's survey respondents were on the current version of its product, and it is possible that some of these issues and limitations were addressed in Version 5.0.

## Prognoz

**Prognoz**, which has a strong presence in Eastern Europe, offers a comprehensive range of BI, analytics and performance management capabilities, including integrated predictive and prescriptive modeling features.

### Strengths

Prognoz is a Russian company that was founded in 1991 as a spinoff from a local university. With over 2,000 employees, Prognoz has a strong presence in Eastern Europe and operations in Western Europe, Africa, Asia and North America. The mathematical and economics backgrounds of its staff are evident in the product's econometrics capabilities — analytics and statistics capabilities, performance management, scenario forecasting and optimization modeling are standard platform components. Although less well known outside its home market, Prognoz has delivered projects in over 70 countries and has a sizable number of high-profile reference customers, including worldwide financial agencies and over 50 national statistical offices.

Prognoz's platform has a broad range of functionality and received the highest score in the survey for breadth of use, which extends (beyond traditional BI) to CPM and predictive and prescriptive analytics. The components are highly integrated — a metric defined for a report can be used for predictive modeling, and a dashboard can easily lead to a simulation and modeling operation, for example.

Many of Prognoz's projects include customized deployments delivered by its consultants. Hence services represent a significant part of the company's revenue. To support this, the platform has evolved as a strong workbench for analytic application development. Prognoz also offers a range of vertical-market applications (or at least blueprints for project implementations) in areas such as finance (supervisory analysis for national banks) and government (customs analysis and risk management, data management for statistical offices and state budget analysis).

Prognoz's customers identified functionality (very strongly), ease of use for end users, and product quality (stability, reliability, free from bugs) as top reasons for adoption; it was one of the few vendors picked for its product quality. Additionally, 72% did not find any product limitations that prevent broader deployment, the third-highest percentage. Customers praised the company's overall product capabilities, awarding them the third-best score in the survey. Also rated in the top three were its Microsoft integration, interactive visualization, search-based data discovery, embedded advanced analytics, OLAP, metadata management and embeddable analytics. Customers also gave the platform's reporting, geospatial and location intelligence, and business user data mashup capabilities above-average scores.

### Cautions

The average data volumes accessed by Prognoz customers are below average, with the survey results showing 1.3TB accessed in data repositories and just 72GB for the average data volume size of the biggest query. But even with these relatively small data volumes, it is significant that not a single customer reported poor performance as a product limitation. This positive finding is reinforced by the average number of end users (2,471), one of the largest of the vendors in this Magic Quadrant.

Data discovery will most likely become the preferred information access capability for business users, but this area is still a work in progress for Prognoz. The company needs a more aggressive plan to roll out functionality. If it can do this with strong capabilities that are fully integrated with the remaining platform (to match all the other components), Prognoz will have a competitive advantage over many other vendors that deliver data discovery capability as a loosely coupled tool in their portfolios.

Although entrenched and very successful in Eastern Europe — a difficult market for most other vendors — Prognoz has yet to gain momentum in other markets, such as North America and Western Europe. In response to this issue, Prognoz is expanding its partner network, adding more staff at its offices around the world, and actively promoting its product outside its local market.

To grow faster abroad and become a truly worldwide player — a status the platform justifies in terms of the capabilities it offers — Prognoz needs more aggressive marketing and sales strategies. The addition of staff outside Russia, or even a relocation of management headquarters (as Qlik and SAP have done in the past) could add new perspectives and help it make the challenging transformation.

### Pyramid Analytics

**Pyramid Analytics'** Web-based BI platform, BI Office, is based on the Microsoft BI stack. It offers the full range of analytic capabilities, but focuses on more complex, in-memory and OLAP-based analysis and data visualization.

### Strengths

Founded in late 2008, well-funded and with around 90 employees, Pyramid Analytics is a Web-based BI platform that focuses on more complex, in-memory and OLAP-based analysis and data visualization, and targets customers using the Microsoft BI stack. This is the first time that it has met the inclusion criteria for the Magic Quadrant.

Customers choose Pyramid Analytics for its ease of use for end users, its functionality, and its integration with Microsoft's information infrastructure (database and middleware), which was mentioned as a selection reason by a higher percentage of Pyramid Analytics' users than any other vendor in the survey. Users mainly use Pyramid Analytics for complex ad hoc analysis, predictive analytics, data mining, interactive discovery and visualization discovery. Pyramid Analytics' product capability use scores for OLAP and geospatial and location intelligence

capabilities are in the top quartile.

Pyramid Analytics' product, BI Office, offers an integrated end-to-end platform with a common interface to address a range of descriptive, diagnostic, predictive and prescriptive enterprise analytics requirements. The suite incorporates: bioXL for ad hoc querying capabilities, data discovery/mashups and data visualizations; bioPOINT for dashboards, scorecards for KPIs and performance management; bioWRITER for report publishing, alerting and distribution; and bioMINER for predictive modeling, data mining, simulation and other advanced analytics capabilities, such as cluster and risk analysis. Content built in any module can be shared between any other component, and includes shareable business logic. Its Web-based, multitenant architecture makes it well suited to cloud-based BI and includes a recently released mobile delivery capability.

### Cautions

Only four of the 17 product capabilities and use scores from surveyed Pyramid Analytics customers were above average, with only geospatial and OLAP capabilities in the top quartile. Of the 13 below-average scores, seven were in the lowest quartile. Pyramid Analytics' product depends heavily on Microsoft technologies (for OLAP and in-memory capabilities and support for big data, for example), and around 65% of its customers use Microsoft SQL Server as their primary enterprise data warehouse or enterprise data repository. This Microsoft-centric strategy could put the company at risk as Microsoft continues to enhance its own BI platform aggressively.

In common with those of many emerging vendors, Pyramid Analytics' reference customers report that they use its software for relatively small sets of data and for smaller groups of users than is the case with the customers of other vendors in this Magic Quadrant. Pyramid Analytics' reference customers averaged 749GB, compared with the survey average of 4,179GB, although all its customers deploy data in OLAP cubes that are often compressed. Pyramid Analytics' deployments averaged 154 users, compared with the average of 1,364 for vendors in this Magic Quadrant. This indicates that its customers are mostly small or midsize businesses and departments of multinational corporations.

Pyramid Analytics launched its mobile capabilities only recently, in November 2013. Our customer survey found that Pyramid Analytics ranked among the lowest vendors for mobile BI use and functionality, but its customers showed a high level of interest in mobile BI deployment, with 39% planning to deploy mobile BI in the next 12 months. Product quality also appears to be a concern for Pyramid Analytics' customers, as they awarded it below-average product quality scores, and an above-average percentage identified product quality as a limitation on broader deployment. Pyramid Analytics released the fifth version of BI Office in November 2013; it contains new features and improvements, which could serve to address customer feedback.

### Qlik

Qlik's QlikView product has become a market leader with its capabilities in data discovery, a segment of the BI platform market that it pioneered. QlikView is a self-contained BI platform, based on an in-memory associative search engine and a growing set of information access and query connectors, with a set of tightly integrated BI capabilities.

### Strengths

Qlik has embarked on one of the boldest strategies of any vendor to address enterprises' unmet need for a BI platform standard that can fulfill both business users' requirements for ease of use and IT's requirements for enterprise features relating to reusability, data governance and control, scalability, and so on. In the second half of 2014, Qlik plans to release a completely rearchitected product, QlikView.Next, featuring a redesigned interactive visualization user experience called Natural Analytics, to make it easier for users to discover and share new insights. Natural Analytics builds on the company's associative search capability and incorporates enhanced comparisons, collaboration, workflow, sharing and data dialogs, as well as enhanced insights from unique visualization techniques that Qlik acquired from NComVA in June 2013. QlikView.Next will also provide completely rearchitected enterprise server and administration capabilities, including reusable semantic intelligence and modeling that draws on its acquisition of Expressor Software, open APIs for extensibility, expanded data connectivity, and enhanced scalability and security features. By providing both business-user-oriented and IT-friendly capabilities, QlikView.Next has the potential to make Qlik a differentiated and viable enterprise-standard alternative to the incumbent BI players.

Customers choose QlikView for the intuitive interactive experience it offers; this is most often deployed in dashboards, where it enables business users to freely explore and find connections, patterns and outliers in data without having to model those relationships in advance. In particular, QlikView's associative search enables users easily to see which query results are related, to compare them, and more importantly to identify which data elements are not related, without having to write complex SQL. Users can also filter data using search capabilities. The percentage of QlikView customers that choose the platform because of its ease of use for end users is in the top two of all the vendors surveyed; an above-average percentage also select QlikView because of its ease of use for developers. QlikView's ease of use is coupled with an above-average score for the complexity of the types of analysis that users can conduct with the

platform, and an above-average score for the breadth of functionality used. As a result, Qlik received one of the highest scores for market understanding of any vendor in the Magic Quadrant survey. In common with those of other stand-alone data discovery vendors, Qlik's customers also report achieving above-average business benefits. This powerful combination of advantages has been a key driver of data discovery success for vendors in general, and for Qlik in particular.

Qlik's customers also have a positive view of QlikView's composite functional capabilities, which, weighted for use, were rated above the survey average, including above-average individual scores for dashboards, interactive visualization, search-based data discovery (rated No. 1), geospatial intelligence, business user data mashup, collaboration (a score near the top), big data support (also near the top) and mobile BI. As a result of a high degree of satisfaction with its mobile functionality, Qlik has among the highest percentage of users deploying, piloting or planning to deploy mobile capabilities in the next 12 months.

Qlik's above-average scores for ease of use for developers, particularly when compared with traditional IT-centric enterprise vendors, has resulted in better-than-average implementation costs, IT developer costs and overall three-year BI platform ownership costs per user. The perception that QlikView offers a relatively low cost of ownership, when compared with other vendors' products, is also evident from the high percentage of customers that choose QlikView because of its implementation cost and associated effort, as well as its TCO.

Qlik has been successfully expanding its reach and awareness beyond its traditional stronghold of Europe (it was founded in Sweden) to North America, as well as to the growing regions of Asia/Pacific and Latin America. The partner channel is more important to Qlik than to any other BI platform vendor except Microsoft, particularly in comparison to its stand-alone data discovery competitors. The partner channel will be particularly important to Qlik's growth after the introduction of QlikView.Next, given the expectation that partners will use the platform's planned improved openness to build new QlikView.Next-based solutions.

### Cautions

The enterprise-readiness of the current release of QlikView remains a work in process. Despite QlikView being deployed in multiple departments and around the world, only half the QlikView customers we surveyed identified QlikView as their enterprise standard. This is far below the figures of most other incumbent BI vendors, whose customers report standardization rates of over 70%. QlikView received below-average customer survey scores for enterprise features such as metadata management, BI infrastructure and embeddable analytics. Additionally, customers and implementers continued to express concerns about QlikView's facilities for managing security and administering large numbers of named users. Although user deployment sizes and average data sizes continue to increase, they are around the survey average.

Customers most often select QlikView for its ease of use for end users, particularly in terms of its interactive dashboards and when compared with the offerings of the incumbent IT-centric vendors. However, in terms of visual-based interactive exploration and analysis capabilities, user experience, and the time it takes for business users to gain proficiency in authoring, the current QlikView 11.x release is considered more limited than offerings from other stand-alone data discovery vendors. With QlikView.Next, Qlik is placing major emphasis on filling this gap.

Qlik plans for QlikView.Next to deliver the combination of business user and IT capabilities that is currently lacking in the market. However, QlikView.Next will be delivered more than a year later than expected, which creates opportunities for its competitors to narrow any gaps. Moreover, no major rearchitecting is without risks to both customers and vendor, especially when the latter is also facing a more intense competitive landscape, as is the case with Qlik. It is not unusual for initial "point versions" of major releases to take time to reach complete stability. In addition, adopting this major new release will require some degree of migration, which could delay some deployments that might otherwise have occurred in 1H14. During the extended period before QlikView.Next's arrival, its competitors are not standing still. Incumbent vendors, stand-alone data discovery players and new market entrants continue aggressively to build and enhance their data discovery features, to innovate and make progress (some quickly) toward narrowing Qlik's "land and expand" potential and, more importantly, toward addressing the big "white space" opportunity (to delight business users while still offering IT control) that Qlik plans to address with QlikView.Next.

Qlik's customer experience results remain mixed. QlikView earned positive scores for product quality, which led to an overall above-average customer experience score. However, support scores for QlikView were again just below the survey average. Similarly, sales experience continued to be rated below the survey average. We believe these results are partly influenced by Qlik's rapid growth, since both support and sales proficiency are strongly correlated with employees' length of service; high growth means a larger percentage of relatively new sales and support people. Moreover, Qlik's sales and support organizations are in transition from selling to and supporting departments to selling to and supporting strategic enterprise deployments. A successful transformation on both fronts is critical if Qlik is to fulfill its enterprise aspirations for QlikView.Next.

### Salient Management Company

Salient Management Company offers data discovery platform capabilities that it also packages into

applications for organizations in the beverage, consumer packaged goods (CPG), state and local government, and healthcare sectors.

### Strengths

Salient Management Company bolsters its general-purpose data discovery architecture with industry-specific solutions. With its in-memory model and visual data mining capabilities, Salient offers an unfettered drilling experience, giving users control over all relevant data. Although Salient offers attractive platform capabilities for building custom applications, over three-quarters of its customers use its packaged industry applications. Salient is one of the few organizations in the BI and analytics platform market that has equal depth in terms of software technology and the business acumen required to integrate this technology into the mainstream business decision-making processes of organizations in specific industries. In particular, Salient is strong in the beverage and CPG industries, especially for revenue management applications, such as those for sales forecasting and margin analysis. Recently, it has also made strides in the state government and healthcare sectors, delivering analytical solutions to identify medical care trends and performance across distributed healthcare networks, as well as potential instances of waste, fraud and abuse, particularly in relation to clinical, financial and insurance claims data.

According to the survey, customers choose Salient for its performance (drawing on its UXT in-memory technology), product quality (stability, reliability and free from bugs), ease of use (report development time is significantly shorter than average, especially for moderately complex, large and highly complex reports) and functionality. Additionally, Salient's search-based data discovery capability was ranked in the top three, which is significantly above average.

Customers also value the close relationship that Salient establishes with them. Salient ranked third-highest for overall sales experience in the Magic Quadrant survey and scored significantly above average in every other customer-support-related area, including overall customer support, level of expertise, response time and resolution time.

Salient's users are mostly business power users, but also include casual business users, content authors and analysts, data miners and data scientists doing moderately complex to complex analysis. Salient's customers identified write-back and constraint-based modeling functionality among Salient's key strengths. The ability to perform in scenario-modeling and support-planning-type use cases is less common in in-memory BI products, which tend to focus on ad hoc "slice and dice"-type interactions. In addition to handling complex calculations (for example, key performance metrics, productivity metrics, price elasticity and allocations), Salient users typically integrate multiple sources of data. According to the survey, they were more likely to perform ad hoc analysis, moderately complex analysis and data mining activities on data that has been joined from multiple data sources.

### Cautions

Salient Management Company's customers scored its technology and platform less well than in the survey conducted for the previous Magic Quadrant. This year, they scored 13 of the 17 capabilities as below average, with five in the bottom quartile, including dashboards, mobile BI and interactive visualization. The new drillable dashboards, reporting features and "storyboards" function released last year were intended to improve these areas; however, adoption appears to be limited so far, based on the survey results. In 2013, Salient made a major effort to improve its dashboard technology with the introduction of a graphics package for existing dashboards and the creation of native mobile apps for iPad and Android, which connect directly to UXT analytical datamarts and support both in-memory and offline caching information analysis. These capabilities have not yet been widely adopted by Salient's customers. The company plans to change this by increasing its efforts to sell these new features to its installed base in 2014.

Salient offers a data discovery architecture primarily for power users, not information consumers. Our survey of reference customers found that Salient's customer deployments have significantly fewer users overall than other vendors' (it is ranked in the lowest quartile). In addition, Salient's customers have fewer external users, and fewer users as a percentage of employees. Salient's efforts with its Collaborative Intelligence Suite 5.0, which represents a major shift in emphasis from individual analysis to a more collaborative environment in which each member of an enterprise has access to information, may have helped it achieve an above-average score this year for collaboration capabilities, and it may expand use of the platform to a broader set of users within organizations.

Salient is not very well known in the market. It is primarily a North American vendor, with a limited sales presence, a small partner ecosystem and few global resources. In 2013, however, it continued to build a network of partners to drive growth, and now that it has partners in the Middle East, Asia, Latin America, Africa and Australia, its efforts to increase its market recognition are gaining momentum.

### SAP

SAP's BusinessObjects BI Suite delivers a broad range of BI and analytic capabilities through a semantic layer best suited for large IT-managed deployments that require robust governance and administrative capabilities. Companies often choose SAP as their enterprise BI standard, particularly if they also standardize on SAP for ERP applications.

## Strengths

SAP's BI customers reported an average deployment size three times the survey average, with over 80% identifying SAP as their enterprise BI standard. Over 60% of its surveyed customers use SAP as their primary ERP system, which indicates a strong stack-centric value proposition. This is underlined by 20% of its reference customers — among the highest percentage in the survey — indicating that integration with enterprise applications was their main reason for selecting SAP as a BI vendor.

SAP has been investing heavily in SAP Lumira to establish a presence in the rapidly growing data discovery market where demand is high for BI tools that empower business users to self-serve without being restricted to a centrally governed semantic layer and IT-managed content. Lumira has been the focus of aggressive product development (including some "smart data discovery" features) and marketing efforts, which are expected to continue, with functional enhancements planned for both the desktop and cloud versions, along with the release of Lumira Server, which will run natively on the SAP Hana platform.

SAP is widely used to embed BI content, but is not widely used by customers to embed advanced (predictive and prescriptive) analytic content. However, this capability is a key strategic aim for SAP, with both Hana and KXEN, which it acquired in 2013, at its core. Its intention is to expand the reach of its BI and analytics to make advanced analytic content accessible at the point of consumption for end users by embedding it into purpose-built packaged applications powered by Hana, or bundling it with SAP's Business Suite applications. The release in late 2013 of SAP InfiniteInsight (based on the acquired KXEN product), which is bundled with SAP Predictive Analysis, confirms SAP's strategic direction and commitment to embedded and accessible advanced analytics and smart data discovery by combining the capabilities of Hana, KXEN and Lumira in a single platform that delivers sophisticated (in some cases, automated) predictive and prescriptive analytic capabilities to a broad range of business users.

In 2013, SAP continued to expand its BI Customer Success initiative, which is aimed at improving its overall customer experience in response to years of poor survey results in this area. In addition to a focus on product quality and reliability, the most notable aspects of the initiative are a new BI Customer Success website and an expanded online curriculum of BI-specific courses available through its openSAP training portal, which have been well received and used by customers and SAP's large network of partners. These efforts appear to be benefiting SAP's customer experience survey ratings, which have improved overall from the previous survey. Although still below this year's overall Magic Quadrant vendor average for customer experience, customers running SAP BusinessObjects BI 4.1 noted improvements, which indicates a positive trend in terms of customer experience for SAP's recent releases.

## Cautions

Customers rated SAP third-lowest overall for market understanding. This includes ease of use and support for complex types of analysis, where it came second lowest. Additionally, 25% of SAP's reference customers indicated limitations on wider deployment in terms of ease of use for business users, the second-highest percentage of any vendor in this Magic Quadrant. SAP customers use SAP BusinessObjects BI primarily for reporting; the number that use it for interactive discovery or visualization was well below the average for vendors in this Magic Quadrant. While SAP has reported significant activity in terms of Lumira software downloads, Gartner has yet to see evidence that Lumira is gaining traction and being adopted in production as a data discovery tool. SAP will have to continue to invest in and evolve its data discovery capabilities in order to convince customers that Lumira is a viable option, compared with the strong leaders in this competitive sector.

Before the release of version 4.1, SAP customers upgrading from BusinessObjects 3.x to 4.0 in 2013 encountered issues during the migration, and this was clearly indicated in the survey results when reference customers were asked about migration difficulty. Overall, SAP was rated more difficult than the survey average for migration difficulty; customers using BusinessObjects 3.1 rated it the most difficult of all the products in the survey, and many customers on version 4.0 also rated their migration experience more difficult than the survey average. It should be noted, however, that references who have migrated to SAP BusinessObjects 4.1 rated the migration experience better than the survey average, indicating improvement in this area for SAP's most recent releases. This should benefit customers who have yet to upgrade to the latest version of SAP BusinessObjects.

SAP's reference customers rated it third-lowest overall for sales experience, and 42% identified cost as a factor limiting wider deployment. This theme has become more prevalent in Gartner's dealings with clients (including contract reviews), with customers raising concerns about being pushed by SAP's sales team to increase capacity, add functionality in new bundles, or move to the Hana platform, which would result in increased license cost structures. This has frustrated customers who expect upgrades to be included in the software maintenance cost. SAP needs to address this concern with more transparent pricing and improved communication of upgrade requirements and upselling and cross-selling proposals, so that customers can make more informed buying decisions.

Although SAP offers a broad range of BI and analytic capabilities, seamless integration of these across the product stack remains a work in progress. There have been improvements in this

respect, particularly with the integration of individual products within the SAP BusinessObjects BI platform (Web Intelligence, Explorer, Dashboards and Crystal Reports), but SAP has more work to do to integrate newer products, such as Lumira, Predictive Analysis and KXEN, fully into its BI and analytic portfolio. SAP is positioning Hana as the strategic database and in-memory platform that will enable much of the advanced analytics functionality delivered by Lumira, Predictive Analysis and KXEN, but this has generated some concern among SAP NetWeaver Business Warehouse and SAP BusinessObjects customers, who perceive a lack of clarity about the level of investment and product development effort that SAP will commit to traditional BI platforms and products in the future.

## SAS

SAS's analytics portfolio spans platforms for BI, performance management, data warehousing, in-memory databases, data integration, data quality, decision management, and content and social analytics, with a core strength being advanced analytics. SAS also offers industry- and domain-specific analytic applications built on its product portfolio.

### Strengths

SAS's analytics portfolio spans platforms for BI, performance management, data warehousing, in-memory databases, data integration, data quality, and content and social analytics. However, unlike most other BI platform vendors, SAS's core strength is in its advanced analytical techniques, such as data mining, predictive modeling, simulation and optimization, for which it is acknowledged as a Leader in "Magic Quadrant for Advanced Analytics Platforms."

Historically, SAS tools have been used primarily by power users, data scientists and IT-centric BI developers. That this remains the case is shown by SAS customers placing it above any other vendor in the Magic Quadrant survey in terms of support for complex types of analysis, but giving it one of the lowest scores for ease of use. During the past five years, SAS has been investing heavily in revamping its user experience to change this situation and encourage more mainstream user adoption. In 2012, SAS released Visual Analytics, a business-user-oriented data discovery and BI platform targeted at less technical and analytically sophisticated users. The product uses SAS's Lasr Analytic Server, an in-memory server for large-scale data analysis, and, uniquely, merges easy-to-use production reporting with an intuitive interactive and visual data exploration experience differentiated by advanced analytic visualizations that expose insights such as correlations, clusters and forecasts to users without statistical expertise. Unlike the other incumbent leaders in this market, SAS has made a bold strategic decision to make Visual Analytics its "go forward" BI platform and the front-end reporting and analysis tool for all its analytic applications. This strategy not only unifies SAS's historically unintegrated front-end tools; if successful, it will also place SAS in a strong position to defend its installed base against stand-alone data discovery vendors and, more importantly, to address both business user and systems-of-record analytics requirements from a single business-user-friendly platform. This aggressive and unmatched strategy is part of the reason for SAS's favorable Completeness of Vision position.

SAS also differentiates itself from most other BI platform vendors by productizing and selling industry- and domain-specific advanced analytic applications that are focused on specific business problems and built using many of its technology platform products. This enables it to sell "value," rather than components.

Data access and integration and the ability to support large volumes of data are the main reasons customers choose SAS, according to the survey. In fact, while SAS deployments support a below-average number of users, its data volumes are among the highest in the survey. Moreover, its support for content and social analytics differentiates it from most other BI vendors. SAS's recent efforts regarding its Lasr Analytic Server, in-memory database, Hadoop and grid computing analytics are likely to reinforce this differentiation. Availability of skills is also identified as a strength, owing to the existence of a wide and loyal base of users, many of whom have built careers around SAS products. A broad sales and service ecosystem, with a low turnover of direct sales staff, is probably also responsible for above-average survey results for sales relationship, despite concerns, identified both in the survey and during Gartner's other inquiries with customers, about the cost of SAS software.

### Cautions

SAS customers consider its software among the most difficult to use and most difficult to implement, with ease of use for business users being identified as a limitation on broader deployment by a higher percentage of customers than for any other vendor. SAS customers also report one of the highest average number of days required to create a report. Additionally, their reported three-year BI platform ownership costs were among the highest of any vendor in the survey. Furthermore, customers scored SAS's product quality and support below the survey average. Replacing SAS's multiple power-user-oriented tools with Visual Analytics should help to improve customers' perception of SAS's ease of use, but improving product quality and support must become SAS's imperative.

Although SAS has exploited its core competency in predictive analytics to encapsulate and automate advanced analysis for business-user-oriented guided data discovery in Visual Analytics, it will face competition from data discovery and BI and analytics platform vendors with

leading-edge data discovery capabilities, such as Tableau and Tibco. It will also face competition from others, such as IBM (with Watson Analytics), Alteryx, and emerging startup vendors that are rethinking the data discovery exploration paradigm to expand their user bases as they try to create a similar smart (advanced-analytics-driven), data discovery experience.

Despite SAS's success as a Leader in the predictive analytics space, the company still faces a challenge to make it onto BI platform shortlists, unless customers already use its other advanced analytic capabilities and require integration and leverage of skills. Reference customers identified cost and poor ease of use (No. 1 in the survey) as the most common factors limiting further adoption, and they also awarded low scores for achievement of business benefits. It is significant that fewer than 40% of SAS's reference customers — compared with 50% last year — indicated that SAS was their company's BI platform standard. SAS plans for its aggressive strategy for Visual Analytics to elicit positive results in the future.

SAS's reference customers rated functionality used in traditional BI areas (reporting, dashboards, OLAP, interactive visualization and so on) lower than for most of the other BI Leaders. Exceptions were the scores for ad hoc query, Microsoft Office integration, BI infrastructure, development tools, metadata, embedded advanced and embeddable analytics, and support for big data, as clients are aggressively using SAS BI for these.

## Tableau

Tableau's highly intuitive, visual-based data discovery, dashboarding, and data mashup capabilities have transformed business users' expectations about what they can discover in data and share without extensive skills or training with a BI platform.

### Strengths

Tableau offers an intuitive, visual-based interactive data exploration experience that customers rate highly, and that competitors, large and small, try to imitate. Customers remain extremely happy with Tableau (for the fourth year in a row), particularly with its core differentiator — making a range of types of analysis (from simple to complex) accessible and easy for the ordinary business user, whom Tableau effectively transforms into a "data superhero." Tableau's strong market understanding — as defined by meeting dominant and mainstream buying requirements for ease of use, breadth of use and enabling business users to perform more complex types of analysis without extensive skills or IT assistance — and competitive differentiation continue to increase its momentum, even though it operates in an increasingly crowded market in which most other vendors view it as a target. The company's initial public offering in 2013 provided the resources to enable it to fulfill more of its product and market expansion plans.

Tableau has a focused vision with an evolutionary road map for enabling users to meet enterprise requirements for reusability, scalability and embeddability. The company's consistently strong results on key product satisfaction and customer experience measures, combined with high growth, put it in a good position to keep gaining market share and traction in the market's unoccupied space, in increasingly large enterprise deployments, as buyers increasingly demand both enterprise and discovery and visualization capabilities from their BI platforms. Tableau's strong survey results for customer satisfaction, coupled with its market momentum, are behind its dominant Ability to Execute position. Surveyed customers identified ease of use for end users and developers, and functionality, as their main reasons for choosing Tableau. In fact, 73% selected Tableau's product for its ease of use for end users, which places it among the top two vendors in the survey. A high percentage of users also said they chose its platform because of its low cost to implement; Tableau customers reported one of the lowest implementation costs per user of any vendor in the survey. Moreover, Tableau earned one of the top aggregate, weighted average product scores (even when adjusted for enterprise deployments); above-average ratings for reporting and ad hoc query; and a ranking of No. 1 or No. 2 for dashboards, business user data mashup, geospatial intelligence, mobile and interactive visualization capabilities; it also has one of the highest percentages of users actively deploying mobile BI in the survey. Tableau 8.1, the latest release, adds R integration and prediction bands to existing forecasting capabilities. More business-user-oriented, advanced analytics are planned for future releases, which should add to the types of analysis users can conduct without advanced analytic skills.

Tableau provides purpose-built, business-oriented data mashup capabilities with data connectors that use Tableau's VizQL technology. Direct query access has been a strength of the platform since the product's inception. Customers report average deployment sizes in terms of users, with data volumes among the best in the survey as a result of Tableau's direct query access. Tableau offers a broad range of support for direct-query SQL and MDX data sources, as well as a number of Hadoop distributions, native support for Google BigQuery, and support for search-based data discovery platforms, such as Attivio. Tableau's columnar, in-memory data engine, which can be used as an alternative to, or in, hybrid mode with its direct query access, enables fast performance on large and multisource datasets and on complex queries, such as very large multidimensional filters.

Customers rate Tableau above average for customer experience (support, product quality). Moreover, despite frequent new product releases requiring customers to upgrade, Tableau customers gave it one of the lowest scores for migration complexity (lower means easier); over 90% of its surveyed customers were on the latest release of the software. Tableau's new cloud

offerings, collectively called Tableau Online, build on its customer-facing offerings and have the potential to expose substantially more users to Tableau products — and thereby increase Tableau's momentum — than its traditional direct channels could.

### Cautions

Although Tableau's average user count continues to grow and was above the market average in this year's customer survey, its products are often used to complement an existing BI platform standard; only 42% of its customers considered it as their BI standard. For organizations that deploy multiple tools, this can present challenges in terms of governance, consistency and skill silos. Given the success of Tableau and other interactive-visualization vendors, traditional BI platform vendors with substantial installed-base market shares but lacking in growth momentum, including IBM, Microsoft, MicroStrategy, SAP and SAS, are aggressively investing in their own data discovery capabilities to reverse the trend. Moreover, new shoots of innovation relating to the automation of advanced analytics are emerging from vendors like IBM (Watson Analytics), which could threaten the dominance of the Tableau-based data discovery paradigm. These vendors are integrating and bundling data discovery capabilities with their platforms for free, or at low cost, to meet their customers' requirements for ease of use by business users proactively and, more importantly, to defend their installed bases from Tableau and other data discovery vendors. Although these efforts have had limited success to date, the stakes are high for the incumbent vendors that are losing new license purchases to data discovery vendors such as Tableau. At some point, these BI platform vendors are likely either to become innovative enough or simply "good enough" to satisfy their existing customers, or to make acquisitions to fill the gap. This could threaten the "land and expand" growth strategy that Tableau has so far relied on for adoption as a complementary vendor.

Tableau's customers report a below-average sales experience, which includes the entire sales life cycle from presales activities to contracting, pricing and the ongoing sales relationship. Gartner's inquiries reveal that customers often view Tableau as inflexible in contract negotiations and complain that its 25% annual maintenance fee is higher than those of most other vendors. Although Tableau's license costs per user are below the survey average (particularly as customers increase their user numbers), the cost of the software was identified as limiting broader deployment.

Although customers report that they employ Tableau for a broad range of uses, the company lacks traditional BI platform capabilities, such as production reporting. Customers needing capabilities spanning systems-of-record reporting and interactive dashboards and visualization from a single tool are unlikely to choose Tableau as their enterprise standard. Similarly, Tableau's user ratings for enterprise features such as metadata management and BI infrastructure are below the survey average. Although Tableau does offer its Data Server product to facilitate data reuse and governance, this suggests that Tableau's ability to satisfy the combination of business user requirements and IT requirements for enterprise governance and manageability is still a work in process, and the race to secure this market "white space" remains open and highly competitive.

Tableau continues to expand its international presence, but the majority of its customers are likely to be large (often international) companies located in North America. Tableau has opened sales offices in Europe and Asia (for example, Singapore) and introduced support in Asia; it also plans further global sales expansion with live, time-zone-appropriate support in local languages.

### Targit

Targit's Decision Suite offers a comprehensive and user-friendly BI platform. It appeals to a wide range of end users with a holistic product philosophy focused on ease of use and a consistent user experience.

### Strengths

Targit's product offers a well-integrated set of capabilities combining analytics, dashboards, reports, alerts and mobile delivery designed to drive operational effectiveness through closed-loop decision cycles aimed at accelerating time to results. These capabilities are aligned with the key tenets of the decision cycle on which Targit bases its platform, namely "observe, orient, decide and act." Decision Suite 2013 introduced a more streamlined interface that takes the basic principle of delivering an integrated BI experience to the next level by increasing continuity across the platform's various tools and thereby reducing the need for users to move between different tools and environments.

Targit introduced new self-service BI and analytics features in 2013, building on Xbone, which it added in 2012 to deliver in-memory visualization capabilities to end users. Targit has added NoETL functionality to Xbone, which enables nontechnical users easily to drag and drop local data files into Xbone's columnar/in-memory environment for visual exploration and analysis. Targit also introduced some social BI features in the Decision Suite 2013, including the ability for users to share content and collaborate with the addition of Dropbox and Google Drive integration; it also added speech recognition capabilities that give the user the ability to use natural language to search for existing BI content or to ask exploratory, ad hoc questions interactively.

Customers choose Targit for functionality and ease of use for end users, as indicated by

approximately 50% of the company's surveyed reference customers. Targit's customer experience score was above the average for vendors in this Magic Quadrant, with customers indicating satisfaction with product quality and support. The high support rating confirms the effectiveness of Targit's efforts during the past year to improve significantly on its previously lower scores in this area.

### Cautions

Although Targit does offer an easy-to-use, integrated BI platform, its surveyed reference customers rated Decision Suite significantly below average for overall product capability (weighted for extent of use), with each of the 17 individual capabilities evaluated scoring below average. Targit had the third-highest percentage of customers pointing to absent or weak functionality when asked about problems with the platform, which is consistent with its below-average product capability ratings.

Reference customers' survey responses place Targit in the bottom quartile for market understanding, which could explain why 15% of them indicated they have decided to discontinue, or are considering discontinuing, use of the product in the short term. Targit has announced a vertical go-to-market strategy with specific industry practice leads to address this issue. It should also be noted that only 28% of the surveyed reference customers were running the latest version of Targit's software, so their opinions of it may improve as they become familiar with the many new capabilities and improvements introduced to the product in 2013.

Targit is tightly connected to Microsoft customers, with 71% of its respondents indicating that Microsoft was their primary ERP vendor and 79% that it was their enterprise data warehousing vendor. Although this concentration differentiates Targit from other vendors and can be viewed as a strength, the sole focus on a specific customer base also introduces risk, particularly given Microsoft's focus on BI innovation and ongoing releases of more powerful, easy-to-use self-service BI products.

Targit is the enterprise standard for 80% of its reference customers, but came bottom in the survey for average data volume accessed, and had the second-lowest average number of users; these findings indicate that Targit primarily operates in the SMB market. Reference customers indicated that the average size data repository used with their Targit deployments is 185GB, compared with the survey average of 4.2TB. Given the relatively low data volumes being accessed and the small average deployment size, it is a concern that over 14% of the reference customers indicated poor performance as a problem with the platform, which is higher than the average for the surveyed vendors. However, since only 28% of Targit's surveyed reference customers were using the latest version of its software, it is possible that its ratings will improve as more customers move to Decision Suite 2013 and benefit from its performance improvements.

### Tibco Software

[Tibco Software](#) is one of the early leaders in the field of data discovery, with a flexible, easy-to-use platform for user-driven information exploration and analysis. It is also used for publishing interactive and visual dashboards, building predictive models and authoring analytic applications.

### Strengths

Together with Qlik and Tableau, Tibco Software sets the data discovery benchmark that traditional BI vendors are trying to emulate. Its strategy to evolve differs from those of its point solution competitors — Tibco is aggressively extending its product functionality through both acquisitions and in-house development, and strengthening the touchpoints with other core capabilities in the company's portfolio, including real-time business operations.

Pursuing an ambitious strategy that dates back to 2012, Tibco has integrated product capabilities from three acquired companies with Spotfire: process monitoring and event stream analysis from StreamBase Systems, geospatial analytics from Maporama Solutions, and real-time KPIs and enhanced user experiences on mobile devices from Extended Results. Cloud capabilities were also added, as a result of internal development. Thus, Tibco is positioning Spotfire as a data discovery platform capable of real-time and bidirectional integration with business processes. Tibco is trying to anticipate where the market is heading, and is aggressively laying foundations for a BI and analytics platform capable of collecting and monitoring events, analyzing trends and exceptions, predicting, optimizing and prescribing actions, and sharing insights and comments, all with a simple-to-use information exploration interface. Time will tell whether organizations are ready to invest in and benefit from this broad vision.

Functionality and ease of use for end users are two strong reasons for selecting Tibco, according to our survey. Reference customers also rated the product's quality (stability, reliability and free from bugs) as above average. The platform's capabilities are ranked high for interactive visualization and embedded advanced analytics. Search-based data discovery, embeddable analytics, collaboration, support for big data and enterprise-deployment-readiness also scored above the average. Moreover, Tibco ranks third for the ability to enable users to perform complex analyses, while maintaining ease of use. This is a key combination that has driven the success of data discovery tools, including Tibco Spotfire, and is a major strength supporting future growth.

Tibco Spotfire's average deployment size, at 1,476 users, has grown and is above the survey average. Although its average size of data repositories accessed is below the survey average, the average size of its biggest query, at around 1TB, is more than double the survey average. These findings, together with the fact that only 1.5% of its surveyed customers reported poor performance as a problem (well below the survey average), indicate that Tibco has an opportunity to increase its footprint in current deployments and to compete for larger, more-data-intensive ones.

### Cautions

The positive results Tibco achieved for the time required to create a simple report (the third-shortest in the survey) are typical for a data discovery tool, but the fact that Spotfire struggles to create a large complex report from various data sources poses a challenge (it takes an average of 8.7 days to do this, according to the survey, which is longer than the survey average). As it adds more capabilities to the platform — especially those from acquisitions — Tibco must invest in maintaining or improving its usability, particularly for developers.

In terms of product capabilities, dashboards were unexpectedly rated average, whereas we would expect them to be a strength, given that Spotfire is one of the leading data discovery tools. Other platform capabilities, such as BI infrastructure and administration, development tools and metadata management, were rated below the survey average; these are enterprise features that remain a work in process as Tibco works to enhance its enterprise-readiness.

Tibco's customers identified two main product limitations to broader deployment: support quality, which is a concern for 6% of customers (slightly above the vendor average in this Magic Quadrant), and cost of software, which is seen as a problem by 31%. Tibco has introduced a new pricing model to address this concern.

Although Tibco has relatively good geographic presence, reports received by Gartner indicate that in some areas its local support and sales staff do not cover Spotfire adequately, and that the product does not receive the same level of sales focus in all geographies. This may be one reason why, in many areas outside North America and the major markets of Europe, customers' shortlists for data discovery tools seldom include Tibco. The company must keep working hard to raise its awareness in the market and should expand Spotfire's local support and sales teams.

### Yellowfin

Yellowfin offers an end-to-end, business-user-friendly BI and data integration platform. It has native collaboration and social BI capabilities, as well as enterprise features to facilitate data governance, reuse, control and extensibility.

### Strengths

Founded in 2003, Yellowfin provides an end-to-end BI and data integration platform aimed at providing a set of business-user-friendly capabilities with enterprise features for data governance, reuse, control and extensibility. Key areas of development focus are mobile BI delivery, collaboration and storytelling, location intelligence and embedded BI. Although some very large companies use Yellowfin's product, our survey indicates that its customers tend to be SMBs (among the smallest companies in the survey), of which 64% consider it their BI standard.

Collaboration is a key differentiator and strength for Yellowfin. Yellowfin's latest release features an enhanced storyboard, a fully integrated and interactive PowerPoint-like presentation and collaboration module, and a unique new timeline feature that records a user's specific activities and interactions in real time. Similar to Facebook's Timeline, Yellowfin's BI version is a searchable, personalized, chronological catalog of an individual user's activity within Yellowfin. Users can see which reports they have created or viewed over time, their discussions, plus any alerts and notifications. Yellowfin's customers reported using its collaboration features more extensively than did those of most other vendors, and it is ranked among the top vendors, confirming that customers value this differentiator.

Embeddability is another of Yellowfin's strengths. The company has over 200 OEM partners, and its content syndication capabilities also enable customers to embed fully interactive reports and dashboards into any third-party Web-based application via a YouTube-like JavaScript API. Customers gave Yellowfin high marks for embeddable analytics and reported above-average use.

Most customers use Yellowfin's product for systems-of-record reporting, dashboards and mobile delivery of BI content, and Yellowfin received strong functional ratings in these key areas. Yellowfin's customers reported using its product more narrowly in relation to traditional BI use cases, and they tend to conduct less complex types of analysis with it. Yellowfin's plans for greater emphasis on data discovery features may help it expand its use for more advanced types of analysis.

Yellowfin has over 600 direct customers, which have the option to deploy its platform in the cloud or on-premises. A large percentage of its customers — 68%, as compared with the 45% survey average — are either deploying or planning to deploy Yellowfin's software through a private, public or hybrid cloud.

### Cautions

Yellowfin is a privately held startup with a global presence; it has offices in Australia and the

U.S. and offer local-language support in Japanese, Italian, French, Spanish, Malay, Korean and Portuguese. A strong channel focus has been key to its growth and remains key to its go-to-market strategy. However, Yellowfin is best known in Asia — there is limited awareness of it elsewhere. The smallness of Yellowfin's direct sales team and of its partner and support network (the latter is expanding but remains small relative to those of more established vendors) represent a challenge for Yellowfin at a time when it needs to establish itself in an increasingly crowded market.

Product quality issues are a concern for Yellowfin's reference customers, according to the survey. They reported unreliability or bugs as the main problem with the software. Also, a larger percentage of customers than for any other vendor identified software product quality as a limitation on broader deployment. In addition, customers rated Yellowfin's product quality and ease of use for developers, which often go hand-in-hand, below the survey average. It is not uncommon for startups like Yellowfin to experience rapid growth and to have short release cycles in order to introduce innovative new functions intended to raise awareness and differentiation. This can adversely affect product quality. Yellowfin needs to address this problem before it limits its growth.

Yellowfin's surveyed customers reported choosing Yellowfin for its ease of use for end users, license cost, and implementation cost and effort. They reported average license costs, across all deployment sizes that were less than the survey average. They also reported shorter-than-average times to create a report. However, Yellowfin's actual ease of use ratings were just below the survey average, and its cost of implementation per user was reported as just above the survey average.

## Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants and MarketScopes as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant or MarketScope may change over time. A vendor's appearance in a Magic Quadrant or MarketScope 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

Infor

Pyramid Analytics

Yellowfin

### Dropped

None

## Interesting Vendors That Did Not Qualify for Inclusion

A number of interesting vendors participated in the Magic Quadrant process, with most identifying reference customers and providing information, but did not meet the criteria for inclusion in the Magic Quadrant graphic. These vendors fall into the following categories:

- Real-time process and operations intelligence
- Hadoop-based data discovery
- Collaborative decision making, collaborative BI and collaborative performance management
- Integrated BI and corporate performance management
- Cloud BI
- New approaches to big data
- Search-based data discovery
- Link/graph-based data discovery
- Data discovery
- Other BI platform vendors worth considering

### Real-Time Process and Operations Intelligence

Analytics for data of different velocities (real time and batch) are an increasingly important driver of value from big data. Three high-profile acquisitions give an indication of the growing importance of real-time analytics that combine streaming data with historical data for a range of high-value applications (including operational intelligence, cybersecurity analytics, process intelligence and Internet of Things applications, such as preventive maintenance and asset optimization): Software AG has acquired JackBe; Kofax has acquired Altosoft; and Datawatch has acquired Panopticon Software. Moreover, companies like Splunk and Tibco Software (a Leader in this Magic Quadrant) have seen greater market traction for real-time analytics.

**Datawatch (Panopticon)**

Panopticon was included in Gartner's "Cool Vendors in In-Memory Computing, 2013." Datawatch, which acquired Panopticon in August 2013, provides data visualization for real-time business dashboards that support low-latency display of analytics based on streaming, in-motion data, in addition to static, historic data. Panopticon's low-latency capabilities are enabled by its unique internal architecture. An in-memory, OLAP-based StreamCube is associated with each graphical display object. The system processes new data as it arrives, selects the subset of important data, recalculates the relevant sections of the model, and refreshes the associated parts of the display immediately to boost performance. Customers select Panopticon for its functionality — low-latency dashboard, interactive discovery and visualization, and product quality. Before the acquisition by Datawatch, Panopticon focused on customers in capital markets and was seen as a niche application vendor with a relatively high cost per user (in the top 25% for three-year BI platform ownership cost), and the average number of end users per customer was extremely low (25). Since the acquisition, Datawatch has expanded into a variety of other markets and changed its pricing and licensing to be more in line with other data discovery solutions.

**Kofax (Altosoft)**

Kofax acquired U.S.-based Altosoft in February 2013 to add complementary BI, data discovery, process intelligence and embedded advanced analytics to its Smart Process application stack and TotalAgility business process management platform. While Kofax expands Altosoft's market opportunity to its installed base and exponentially increases Altosoft's marketing and awareness generation capabilities, Altosoft also operates as a wholly owned subsidiary and continues to sell the product via a separate sales force as a stand-alone BI platform. Altosoft offers a BI platform designed to provide rapid, code-free development for reporting, ad hoc analysis, interactive visualization and dashboard applications, with high performance through the use of a data integration and analytics engine (MetricsMart) that employs server-side, distributed in-memory and incremental preprocessing techniques. The majority of Altosoft's growing set of more than 500 customers, and particularly those in the healthcare and financial services sectors, select the platform because it offers a combination of traditional BI platform and data discovery, as well as business process intelligence (discovery and analysis) features, although it primarily competes in those markets to address traditional BI requirements. In addition, Altosoft competes by promoting its other operational intelligence functions, such as data mapping, real-time metrics, outlier identification, user-defined alerts and incident management features. In Insight 5.0, its latest release, Kofax (Altosoft) has added continuous simulation predictive analytics for process intelligence and has rewritten the platform to support 100% HTML 5, eliminating previous Microsoft Silverlight dependencies. Altosoft, which first shipped products in 2006, has key OEM partnerships, including with NTT Data (for healthcare), SCI Solutions (healthcare) and Albridge (mutual fund industry). Altosoft's solution also offers a traditional on-premises option and a SaaS-based option, which can be deployed in a hybrid configuration to enable data to be collected and prefiltered behind a customer's firewall, and then use MetricsMart with dashboards and reports in the cloud. Reference customers indicated that they selected Altosoft for its product functionality, data integration capabilities, and ease of use for developers and end users.

**Software AG (JackBe)**

In August 2013, Software AG acquired U.S.-based JackBe and its Presto real-time intelligence and analytics platform. Presto enables business users quickly to mash up live data feeds in real time from multiple sources, including other BI systems, into operational metrics and KPIs. Mashups are exposed on dashboards and often integrated in a portal or delivered on mobile devices in support of applications such as real-time data center monitoring, sales and service performance, and program management. Software AG has integrated Presto with BigMemory, its in-memory data grid, to hold large amounts of data in memory for real-time analytics. Data can come from live streaming events or databases, data warehouses, Microsoft SharePoint, or any service that has a Java or Web API. In addition to adding interactive visualizations and continuing to sell Presto as a stand-alone real-time visual analytics platform, Software AG is integrating the product, along with its recent acquisition of Apama, into its Intelligent Business Operations (IBO) Platform. IBO combines an in-memory fabric; continuous, historical and process analytics; and decision capabilities to identify real-time revenue opportunities, continuously optimize operations and continuously manage risk.

**Splunk**

Splunk provides a scalable analytic platform that is used primarily for event and machine (for example, IT and Web logs in ASCII format) data analysis. Splunk has seen its use cases expand beyond IT operations and security to include business analytics. Splunk's flagship product, Splunk Enterprise, provides real-time and historical analytics for machine-generated data. Splunk Enterprise supports the ability to perform data mashups across structured data in relational databases and machine-generated data. Splunk's new product, Hunk, can analyze and visualize batch data stored in Hadoop. Both products support an Open Database Connectivity (ODBC) interface that enables delivery of machine data to visualization tools. Splunk can be considered a complement to a BI platform when organizations want to use new sources of data for analytics, or when a mashup of structured and unstructured data is required. Although Splunk did not meet this Magic Quadrant's inclusion requirements for BI platform capabilities, and did not identify reference customers for the survey, we include it here because of the market's general interest in it, its proven analytics use cases, and its intention further to support business analytics, Web and digital intelligence, big data analytics and Internet of Things analytics use cases.

## Hadoop-Based Data Discovery

The ever-increasing amount and diversity of data has given rise to the need for and use of NoSQL databases, such as Hadoop, to store and manage large amounts of data economically. However, the rarity and the specialized nature of the skills needed to generate MapReduce queries and find insights in these new sources of data have inhibited mainstream adoption. Platfora, Datameer, Karmasphere and the newcomer Eligotech are Hadoop-centric data discovery vendors whose tools are designed to address this challenge. These companies are banking on Hadoop supplanting the data warehouse as the primary data management repository and platform within enterprises. We believe that, for the foreseeable future, Hadoop and other NoSQL data stores are more likely to complement the systems-of-record data warehouse. As a result, vendors including database and data warehouse suppliers (such as IBM, Microsoft and Oracle), BI companies accessing Hadoop through Hive and Hbase, others (like Birst) that autogenerate MapReduce queries and transform the results into relational schemas, and Hadoop distribution vendors themselves are attempting to make SQL more accessible and "performant" against Hadoop to fill the complexity gap and make Hadoop fit within, rather than replace, the existing information management environment.

### Datameer

Datameer, which was founded in 2009 by some of the original contributors to Apache Hadoop, provides self-service analytic capabilities for big data. The company provides an integrated environment with a Hadoop repository (customers can pick their own distribution); point-and-click data integration; a spreadsheet interface with prebuilt functions for data cleansing, transformation and analysis; a visual drag-and-drop environment to build and deliver dashboards and infographics; prebuilt applications capable of performing automated analytic processes (such as building a customer segmentation or finding correlations between products); and drag-and-drop machine learning and predictive analytics. By using native Hadoop MapReduce queries, instead of translating SQL through Hive, the product is able to handle large data volumes and use unstructured and semistructured information from data sources such as mainframes, databases, file systems, social media and weblogs. Although relatively young, the company has strong reference customers and has built an interesting network of technology partners.

### Eligotech

Netherlands-based Eligotech released its Hadoop-based data integration and search-based data discovery platform in 2Q13. Its core product, Harpoon, hides the complexity of Hadoop by enabling users to search, navigate and analyze data directly via a Google-like interface. Data can be imported from any relational database and from data sources of any structure. While the platform offers a set of visualizations, the extensible platform is built on top of Hadoop APIs and provides a full set of REST APIs to support integration with external applications, such as the workflow management systems and BI tools on which organizations may have standardized.

### Karmasphere

Karmasphere offers a cloud-based big data analytics solution with which to explore unstructured data along with traditional data. Karmasphere Studio is offered in Professional, Client and Analyst editions. Karmasphere Studio Analyst Edition incorporates support for Hive, the data warehouse infrastructure built on top of Hadoop, to provide a simplified, organized and SQL-like interface for ad hoc analysis of big data, and self-service and collaborative capabilities. The analytics workspace gives teams access to data in a role-based, secure and collaborative environment. Since 2011, Karmasphere has had strategic partnerships with Apache (Hadoop distribution), AWS, Cloudera and IBM. Its next release, version 2.0, is planned to provide features to connect Hadoop with popular visualization platforms, such as Microsoft Excel, Tibco Spotfire and Tableau, as well as to out-of-the-box analytics templates for user behavior, customer churn, website optimization and recommendation applications.

### Platfora

Platfora, which was founded in 2011, made its big data analytics platform generally available in March 2013. It provides tools that enable business analysts to directly access the Hadoop file system without needing specialized skills to write custom MapReduce, Hive, Pig or SQL queries, and then to expose the raw data in memory "data lenses" so that users can identify and explore the data in their Hadoop clusters. Platfora also provides business user tools for visualizing data in dashboards and in autorecommended best-fit interactive charts for data discovery. Platfora plans to extend the platform with additional embedded advanced analytics capabilities, such as event series, to enable users to identify entities of interest and their relationships (such as which customers bought product X and then product Y) within a certain time period, and then to iteratively segment them in order to find further patterns in their behavior.

## Collaborative Decision Making, Collaborative BI and Collaborative Performance Management

Collaborative decision making and collaborative BI offer great potential to finally close the gap between BI and decision making by facilitating intelligent collaboration, sharing and capture of the interactive decision process to enable more transparent, high-quality decisions. Many BI vendors in this Magic Quadrant, such as Microsoft, Panorama, Qlik, Tableau and Yellowfin, include collaboration and storytelling as key features of their products. Decisyon offers a collaborative decision-making

platform that was built as such from the ground up, along with integrated BI and performance management. As a result, it is taking an innovative approach.

### **Decisyon**

Decisyon was founded in Italy in 2005. With a fresh round of funding and a new group of seasoned BI professionals, Decisyon has positioned itself to expand beyond its traditional European customer base, with a focus on North America. Decisyon did not meet the inclusion criteria for this Magic Quadrant, but its core product, Decisyon 360, is a unique collaborative decision-making platform with embedded data integration (supporting both structured and unstructured data), workflow, intelligent social and collaboration, analytics, planning and execution. Underpinning its differentiated approach is a smart social and data environment known as the Social Workspace, where users collaborate on data, tasks, decisions and analytic content, with native and integrated mobile workflow, planning and execution as part of the BI and analytics and performance management process. Decisyon offers its Decisyon 360 platform for the development of custom collaborative BI and performance management applications. It also sells packaged solutions for operational BI and planning and intelligent manufacturing operations, and a SaaS-based social CRM product that provides social media intelligence and is extensible into enterprise social customer care and marketing. Partners have also built solutions for the banking and financial services, telecom, life sciences, pharmaceutical, retail and automotive industries using the platform. Decisyon's software can be deployed on customers' premises or in the cloud, as a complement to enterprise BI and performance management platforms when analytics and performance management-centric collaboration and social capabilities are required, or as a complete end-to-end solution for enterprise collaborative BI and performance management.

## **Integrated BI and Corporate Performance Management**

### **Adaptive Insights**

Adaptive Insights (formerly Adaptive Planning) is a cloud-based BI and CPM vendor. It was founded in 2003 as cloud-based CPM vendor for midsize and large companies. In 2012, it acquired myDIALS to deliver an integrated suite of BI and CPM capabilities. Adaptive Discovery (previously the myDIALS Performance Management Platform) is a cloud-based, highly interactive data visualization and dashboarding system. The platform features unified financial and operational analytics with built-in, business-user-oriented statistical capabilities for identifying trends as well as integrated "what if?" modeling and impact analysis. Adaptive Discovery is now being sold to Adaptive Insights' more than 1,900 customers, as well as through its additional distribution OEMs and worldwide channel partners. Integration of the two companies appears to have been relatively seamless, as Adaptive Discovery (myDIALS) was fully integrated with the Adaptive Suite before the acquisition. Twelve reference customers responded on behalf of Adaptive Insights, and indicated that they selected the product for its functionality, ease of use for end users, and data access and integration capabilities. This is no surprise, given Adaptive Insights' strategic partnerships with salesforce.com, Workday and NetSuite — key cloud application providers. Adaptive Insights' marks for customer experience (product quality and support) remain favorable, with high ratings, and it also scored well for achievement of business benefits and ease of use.

### **Jedox**

Jedox, a company based in Germany, offers a BI platform with integrated planning and forecasting capabilities and writeback functionality for budgeting and planning. It integrates well with Microsoft Excel through add-ins available with both the free and the premium products. This makes it popular with finance departments, with over 1,100 organizations using the premium product. The premium product includes Web and mobile clients, as well as ETL and OLAP capabilities with an accelerator that uses graphics processing units to deliver performance beyond the capabilities of traditional in-memory technology. Jedox was rated highly by reference customers for its Microsoft integration and OLAP capabilities, with most indicating that they use these capabilities extensively. Overall, Jedox is used fairly narrowly within organizations against small data volumes, which suggests that it is usually deployed departmentally and with spreadsheets serving as the primary data source. Thirty-nine percent of the company's surveyed customers indicated that Jedox was their enterprise BI standard, which shows that many of its customers use its software to complement an existing BI platform.

## **Cloud BI**

### **1010data**

1010data is a U.S.-based company that provides an integrated database and spreadsheet-like UI for self-service big data analytics. The product is cloud-based, although it can also be delivered on-premises. The database component offers very fast queries on billions of data rows, and 1010data appears as a Challenger in "Magic Quadrant for Data Warehouse Database Management Systems." The spreadsheet-like UI will look immediately familiar to information analysts and can be used without IT support to create calculations, filter data, and apply statistical functions and predictive modeling. 1010data has been successful in, for example, the financial services, retail, CPG and telecom industries, and it is expanding into other vertical markets.

### **Chartio**

Many of the BI platform vendors in this report offer "free" (with user and data size limitations) cloud versions of their platforms, with which users can upload data and begin to create visualizations and

explore data. Chartio is a startup, founded in 2011, that delivers an alternative, low-cost, cloud-based instant BI solution. It offers a U.S.-based self-service, cloud BI offering, for which it claims a rapid time to deployment (in minutes) for direct, multisourced data integration, dashboards and chart creation. As with most cloud-based BI offerings, users can connect to a range of data sources both on their premises and in the cloud (for example, Oracle, Google BigQuery, Google Analytics, Microsoft SQL Server, Microsoft Windows Azure, Amazon Redshift, Heroku and salesforce.com) via a drag-and-drop interface from a Web browser. Users can then explore data and create charts using the platform's drag-and-drop interface or via native SQL queries optimized for a range of major databases. Since Chartio is a relatively new player, customers appear to be using the platform for very small numbers of users (fewer than 50 on average) and very small datasets. If customers continue to find value in the platform, versus a range of cloud-based, low-cost alternatives (including the free but limited versions of major BI platforms), usage would be expected to spread and deployment sizes to grow. The Chartio customers that Gartner surveyed said they chose the platform because of its implementation cost and effort, and its ease of use for end users and developers.

### New Approaches to Big Data

Handling an exponentially growing volume of data is not a new problem for BI professionals. Rather, this challenge has simply become more pronounced and has been given a new name, "big data." Vendors such as SiSense are trying to find new ways to address this challenge.

#### SiSense

SiSense delivers an integrated solution, Prism that includes an analytics database, ETL functionality, and capabilities for end-user visualization and analysis. SiSense's ElasticCube technology enables a nontechnical user to build a terabyte-scale data warehouse in minutes using drag-and-drop ETL that can support large numbers of users on a single commodity server without preaggregation of data or manual performance tuning. SiSense also claims innovations in "in-chip analytics" as significant scalability enhancements over in-memory analytics; it provides a columnar data store on commodity hardware in which calculations are performed entirely inside the CPU, without having to copy data from RAM to CPU and without the associated performance bottlenecks. SiSense also accelerates query response via a feature it calls Crowd Accelerated Analytics, which is intended to overcome limitations with traditional caches. With Crowd Accelerated Analytics, each query leaves a trail of Query-Crumbs, which are collected in a recycle bin. When a new question is asked, the Query-Crumbs are reused. SiSense claims that the more queries there are, the faster the response is. SiSense Prism can be deployed on-premises or in the cloud. The 20 SiSense customers that participated in the Magic Quadrant survey responded overwhelmingly that they purchased the platform because of its ease of use for developers, for its performance, and for its ability to support large amounts of data, although the actual data volumes reported by customers were below the survey average. SiSense has offices in New York, U.S. and Tel Aviv, Israel, and received a fresh round of venture funding in April 2013.

### Search-Based Data Discovery

Natural-language query technology will become increasingly important means of delivering analytics to mainstream business users. Microsoft Power BI, IBM Watson Analytics (still in the development) and BeyondCore are interesting options, as is the vendor profiled below, DataRPM.

#### DataRPM

Data RPM offers a search-based data discovery platform whose natural-language BI uses algorithms to automatically facilitate and expand data discovery to nontraditional BI users. Its computational search engine significantly reduces the need for traditional data modeling by automatically discovering and inferring semantics and entity relationships in diverse data. Any user can use Google-like natural-language query to discover and analyze the indexed data visually. Results can be shared with other users or embedded in other business applications and websites. The platform can be deployed on-premises or in the cloud. Based in Northern Virginia, U.S., DataRPM recently received a round of seed funding.

### Link/Graph-Based Data Discovery

Large datasets have structure and relationships between entities in the data that can be inferred algorithmically. All data within and often external to an enterprise is related in some way, but these relationships are often obscured when data is separated in different data repositories. Vendors that visually represent the links or relationships in highly dense data (link- or graph-based data discovery) are addressing this challenge by providing new ways for users to easily find hidden and relevant patterns in data. Ayasdi, Centrifuge and SynerScope are three such vendors.

#### Ayasdi

Ayasdi was founded in 2008 at Stanford University. Ayasdi's Iris product uses its proprietary topological data analysis technology to enable business users to automatically find hidden insights in large, complex datasets without building models or writing algorithms, queries or code. Iris can ingest a range of structured and unstructured data sources; merges the results of hundreds of algorithms applied to data to automatically discover significant relationships across entities and nodes; and provides capabilities to visualize data and interact with it at different resolution levels in order to drill into subsets of the network to expose patterns in extremely dense and highly dimensional data. The product also has open APIs to operationalize findings in business applications or for use with existing

BI tools. Ayasdi's customers use the product for a broad range of applications, including fraud detection, process optimization, risk identification and customer segmentation.

### **Centrifuge**

Centrifuge, which was founded in 2007, provides a link-based data discovery platform that is particularly useful for finding hidden patterns in large, multistructured, complex and often seemingly unrelated datasets. Its fully browser-based platform has the ability to ingest and unify structured and unstructured data (such as Hadoop data, documents, Web-based data and machine data), perform interactive link analysis and visualization (path identification, link-ups, bundling, animated temporal views and geospatial views), as well as capabilities that let users share and publish findings. Centrifuge grew out of the intelligence and defense communities and has expanded into federal civilian agencies and law enforcement; it is also building a commercial customer base in the financial services, life sciences (pharmaceutical), healthcare, cybersecurity and supply chain sectors. Partners include Splunk, YarcData, MarkLogic and a number of major Hadoop distributions.

### **SynerScope**

SynerScope, which was founded in 2011, released its two core products, Marcato and Legato, in 2012. Marcato is a visual analysis platform that represents networks and relationships between entities in data, so that users can identify hidden patterns without specialized skills. Entities are things such as people, places, products, transactions, events, companies, claims, policies, emails, social interactions, sentiment and files. Legato ingests data, generates metadata from both structured and unstructured files, and loads data into an in-memory database for fast interactive analysis. SynerScope can work with many leading databases; notably it is an SAP partner and integrates with SAP's Hana in-memory database. SynerScope's initial customers are using the product for claims analysis and fraud detection in the insurance industry, as well as for analytics of mobile phone calls and cybersecurity.

### **Data Discovery**

#### **Advisor Solutions**

Advisor Solutions is a Bell Labs spinoff with headquarters in Chicago, U.S. It specializes in interactive data visualization and predictive modeling and provides a fully in-memory data discovery engine for advanced information exploration. By making extensive use of color to identify information items and employing a library of sophisticated visualizations, the tool delivers highly interactive dashboards that appeal to business users looking to find correlations, spot trends and uncover insights hidden in their data. Advisor has long been in partnership with Information Builders, which offers its product on an OEM basis and specializes in the higher education, healthcare and fund-raising sectors. Advisor is repositioning its product as a high-end discovery tool, bridging the gap between basic information exploration and advanced analytics.

### **Other BI Platform Vendors Worth Considering**

A number of other small vendors may be worthy of consideration, depending on requirements, although they did not meet the criteria for inclusion in this year's Magic Quadrant.

#### **Cubeware**

Cubeware is a German company, founded in 1997, that now has over 100 employees and operates in several European countries, the U.S. and Asia. It provides an OLAP tool, deployable in a short time frame, and specializes in the extraction and delivery of information from ERP systems from SAP and Microsoft. Through MDX connectivity, it can expose information from OLAP sources such as IBM Cognos TM1, Oracle Essbase, Microsoft Analysis Services, Infor PM OLAP, SAP NetWeaver Business Warehouse, SAP Hana and Exasol EXASolution, as well as relational data sources; it integrates with Microsoft SharePoint and SAP NetWeaver Portal for delivery. Recently, Cubeware has been investing in integration with R in order to evolve from a traditional BI platform into a more comprehensive business analytics solution.

#### **Dimensional Insight**

Dimensional Insight (DI), based in Burlington, Massachusetts, U.S., delivers end-to-end BI and data integration capabilities through its Diver Solution platform using on-premises, on-demand SaaS or hybrid deployment options. DI has extensive industry-specific experience in the healthcare, manufacturing and supply-chain-driven sectors. A growing percentage of companies employ purpose-built BI solutions specifically for use in these sectors. Several new purpose-built applications were delivered in 2013, including DI Meaningful Use Compliance Advisor and DI Surgery Advisor for healthcare providers, and DI Program Advisor for tracking key program metrics for sales and support teams. DI has made additional investments to enhance its core BI platform with the introduction of DI DiveTab, which extends its existing mobile BI capabilities, and DI Teamer, which enables BI collaboration. Reference customers cited product functionality, low cost of ownership, and ease of use for end users as their main reasons for selecting the platform. DI was rated highly for all 17 product capabilities, with particularly high scores for reporting and dashboard development. Customers also rated DI highly for sales experience and customer experience, which is a result of the company's deep commitment to its customers' success.

#### **Dundas Data Visualization**

Founded in 1992, privately owned Dundas Data Visualization started out as a charting-engine company, whose OLAP, chart, map and gauge components for ASP.NET, SSRS, SharePoint and Windows Forms were purchased by Microsoft in 2007. Dundas has since evolved into a dashboard vendor, based in Toronto, Canada, and made its first release in 2009. The company offers interactive visualization functions with its Dundas Dashboard product, with a rich set of APIs and a built-in C# scripting engine. Dundas has reported double digit-sales increases since 2009. Dundas is included in Gartner's "Who's Who in Interactive Visualization for Analysis and Dashboarding." For this Magic Quadrant, Dundas's reference customers reported average user count and data volume of 450 users and 450GB. They chose Dundas for its functionality, implementation cost and effort, license cost and ease of use for end users. Major user activities included using Dundas's dashboard and interactive and visualization data discovery capabilities. Dundas's road map includes continued enhancement of its HTML5/mobile technology to improve its mobile adoption.

#### **eQ Technologic**

eQ Technologic (eQ), based in Orange County, U.S., delivers BI capabilities through eQube Business Intelligence (eQube BI), a component of its eQube enterprise software infrastructure platform. It is used primarily in the product life cycle management (PLM) domain in the aerospace and defense, automotive, high-tech and consumer goods industries. It is sold both directly to customers and via partnerships, such as those with Siemens PLM Software, which markets and resells eQube-BI as Teamcenter Reporting and Analytics. eQube-BI is used primarily for rapid prototyping and iterative development of in-memory cubes that can be developed without the need for a data warehouse or datamart. Customers have the option of using the eQube-BI cubes developed during the prototyping process to build a data warehouse, if needed for other applications. Reference customers identified data access and integration, integration with enterprise applications, and integration with information infrastructure as their main reasons for choosing eQube-BI (70% of these respondents). Data integration and the ability to create a single view of data combining several disparate data sources in-memory is a clear strength of eQube-BI, but responses to our survey indicated that the product is difficult to use for both developers and end users, with both identified as factors limiting wider deployment.

#### **iDashboards**

iDashboards is a U.S.-based company, founded in 2003, that focuses on the delivery of easy-to-consume dashboards. Its product, which was built as a no-coding solution, provides a dashboard development framework, drag-and-drop content authoring and an extensive array of graphical components to accelerate the creation of visually engaging BI dashboard content. Information can be placed on top of images (for stock control in warehouses or store layouts, for example), can trigger alerts when thresholds are met, or can be embedded in portals like Microsoft SharePoint to create compelling applications. It can be consumed on mobile devices and deployed in a cloud-based environment, and it is currently embedded in solutions from over 80 OEMs.

#### **InetSoft**

InetSoft is headquartered in the U.S. It is a dashboard and reporting vendor with over 3,000 OEM and enterprise clients in many geographies, and it has support centers in the U.S. and China. It sells both directly and through more than 200 OEMs. InetSoft's reference customers reported that average user count and data volume of 400 users and 250GB. InetSoft's major improvements in 2013 included a Hadoop connector, collaborative BI functions like annotations, shared bookmarks for visualization settings, and search capabilities across dashboard and report metadata. In addition to a paid version of its software, the company offers a free download for evaluation and individual use. Companies select InetSoft for its low license cost, functionality, product quality (stability, reliability and freedom from bugs) and ease of use for developers.

#### **Jinfony Software**

Jinfony Software is a U.S.-based company, founded in 1998, that delivers JReport — a Java-based BI platform, originally developed for embedding in third-party applications by OEMs. Over time, the product has evolved into a general-purpose platform intended for use by end-user companies. It is also optimized to be scalable and fault-tolerant. The current version (JReport 12) features improvements to dashboards, interactive visualization and mobile capabilities, and support for big data sources — MongoDB, Hadoop through Hive, and Amazon Redshift. Although it did not meet all the inclusion criteria for this Magic Quadrant, Jinfony had strong customer participation in the associated survey, with over 45 responses. Jinfony's product strengths are its embedding capability, through its customizable architecture for integration with host applications, and a high-performance reporting engine (JReport).

#### **Lavastorm Analytics**

Lavastorm Analytics is a Massachusetts, U.S.-based company, founded in 2002, that specializes in fraud management, business or process assurance, and auditing, although its product can also be used in other areas where ad hoc information exploration is a key requirement. The company provides a tool that enables business users to work, in a graphical interface, on building analytic workflows that connect to multiple data sources, integrate and transform data, apply analytic models, output reports and integrate with external tools such as Tableau, QlikView and Tibco Spotfire for further information visualization. The workflows built are similar to visual ETL scripts, but instead of

IT experts working in structured processes to load the corporate data warehouse, it is handled by business users and can be used for ad hoc analysis of disparate data sources — from spreadsheets to data warehouses. Due to the company's background in the telco industry, it can support large data volumes, perform complex analysis and operate in demanding operational environments. The product is offered in different editions, with desktop and server options, ranging from a free version for an individual user analyzing file-based data to a corporate setup for handling terabytes of information.

### Phocas

Phocas, which is headquartered in the U.K., offers a subscription-based BI platform and aims its products directly at business users. Defined integration with many major ERP and CRM systems — including those of Epicor Software, Microsoft (Dynamics) and Infor — are specific strengths. Customers select Phocas for its ease of use for end users, functionality, and data access and integration. However, average deployments of Phocas are for less than 250GB of data and around 90 users. The named-user subscription license is term-based (typically three months' notice is required for cancellations). Clients rate Phocas's interactive exploration and analysis of data, and ad hoc query, in the top quartile. The product has over 950 customers throughout Europe, Australia and North America, and is available in major European languages and Chinese.

### SpagoBI Competency Center

SpagoBI is a completely open-source BI suite supported by the SpagoBI Competency Center, a working unit of the Italy-based Engineering Group consultancy. Many of SpagoBI's 250 customers use vertical applications that were built on the product by the SpagoBI Competency Center and its partners. A new major release (4.x) was distributed in 2013 with a new UI, self-service BI capabilities, and support for several big data and NoSQL data sources, such as Hive, HBase, Cassandra and Hadoop. According to the surveyed reference customers, SpagoBI is most commonly used for reporting, dashboards and simple ad hoc analysis. It should be noted, however, that only a small percentage of them were on the current version, which is more conducive to advanced analysis with its enhancements in big data connectivity and self-service visualization capabilities; more complex use cases may follow as more users migrate to the 4.x series. SpagoBI is often used to deploy purpose-built applications for midsize data volumes, often for noncritical applications; only 36% of the surveyed customers identified SpagoBI as their standard enterprise BI solution. When asked about product problems, several customers indicated difficulty with implementation and use, and they identified ease of use for developers and end users as factors limiting wider distribution; this situation may improve as users upgrade to the latest release.

### Strategy Companion

Strategy Companion, a privately held vendor, has focused on delivering Microsoft SQL Server Analysis Services-based BI solutions to its customers since it was founded in Taiwan in 2001. It now has 2,100 customers, up nearly 10% from the preceding year. The company has also added support for relational, Microsoft Excel, Microsoft Access and Microsoft xVelocity in-memory data sources. In 2005, the company moved its headquarters to Irvine, California, U.S.; it also has regional offices in China, Taiwan and the U.K. Over 40 software and service providers have offered Strategy Companion products on an OEM basis. The company's Analyzer Enterprise provides zero-footprint browser-based reporting, analytics and dashboarding capabilities for internal corporate users. SaaS and OEM offerings are available for external users. Analyzer Mobile supports tablets and smartphones in Apple, Google and BlackBerry mobile ecosystems; it is based on HTML5 and capable of detecting the mobile device and optimizing the interface accordingly. Customers choose Strategy Companion for its TCO, license cost, and implementation cost and effort. Data from our survey shows that the number of end users is about average and its overall product is rated above average. Customers mainly use the company's personalized dashboards and interactive and visualization data discovery capabilities.

### Zucchetti

Italy-based Zucchetti delivers BI capabilities through its InfoBusiness platform to approximately 6,000 customers, many of which also use its ERP and HR solutions. In fact, 80% of customers using Zucchetti for BI are integrating it with either Zucchetti ERP or Zucchetti HR; only 20% are using it as a stand-alone BI platform. With only a small number of survey responses from Zucchetti, we have insufficient data to discern clearly why customers choose this vendor, how they use its platform and what problems they have encountered. However, based on Gartner's other research, including study of vendor materials, briefings and demonstrations, it is evident that the InfoBusiness platform is targeted at descriptive use cases, offering easy-to-use reporting, personalized and parameterized dashboards, and some ad hoc analysis capabilities to consumers. The platform also integrates collaboration capabilities into BI content, enabling users within an organization to share insights and analysis. Zucchetti is focused on raising awareness of its full range of BI capabilities to a wider audience and expanding beyond its enterprise application customer base, as well as outside Italy, so as to be recognized as a stand-alone BI vendor capable of competing against international BI solutions.

## Inclusion and Exclusion Criteria

To be included in the Magic Quadrant graphic, software vendors had to meet all of the following criteria:

Each had to generate at least \$15 million in total BI-related software license revenue annually.\*

In the case of vendors that also supply transactional applications, each had to show that its BI platform is used routinely by organizations that do not use its transactional applications.

Each had to deliver at least 12 out of the 17 capabilities in the BI and Analytics Platform Capabilities Definition (OEM components from other vendors were not included).

Each had to receive a minimum of 30 survey responses from customers that use its platform in a production environment.

\* Gartner defines total BI-related software license revenue as revenue that is generated from appliances, new licenses, updates, subscriptions and hosting, technical support and maintenance. Professional services revenue and hardware revenue are not included. See "Forecast Analysis: Enterprise Application Software, Worldwide, 4Q13 Update" and "Market Share Analysis: Business Intelligence, Analytics and Performance Management, 2012."

## Evaluation Criteria

### Ability to Execute

Vendors are judged on their ability and success in making their vision a market reality. In addition to the opinions of Gartner's analysts, the ratings and commentary in this report are based on a number of sources: customers' perceptions of each vendor's strengths and challenges, as gleaned from their BI-related inquiries to Gartner; an online survey of vendors' customers conducted in October 2013, which yielded 1,935 responses; a questionnaire completed by the vendors; vendors' briefings and demonstrations of their BI products, strategy and operations; and an extensive RFP questionnaire inquiring how each vendor delivers specific features that make up the 17 critical capabilities (see "Toolkit: Business Intelligence and Analytics Platform RFP Template and Vendor Questionnaire").

### Ability to Execute Criteria

- \* **Product/Service:** How competitive and successful are the goods and services (the 17 capabilities) offered by the vendor in this market, and how extensively are they used?
- Overall Viability:** What is the likelihood of the vendor continuing to invest in products and services for its customers? Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood of the individual business unit continuing to invest in the product, offer the product and advance the state of the art within its product portfolio.
- \* **Sales Execution/Pricing:** Does the vendor provide cost-effective licensing and maintenance options? This covers the vendor's capabilities in all presales activities and the structure that supports them. It also includes deal management, pricing, negotiation and contracting, presales support and the overall effectiveness of the sales channel.
- Market Responsiveness and Track Record:** Can the vendor respond to changes in market direction as customer requirements evolve? This covers the ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customers' needs evolve and market dynamics change. New license growth and existing market share also factor into this ranking.
- \* **Customer Experience:** How well does the vendor support its customers? How trouble-free is the software?

\* These criteria are scored partly or wholly on the basis of input from the Magic Quadrant customer survey.

**Table 1.** Ability to Execute Evaluation Criteria

Criteria	Weighting
Product or Service	High
Overall Viability	High
Sales Execution/Pricing	High
Market Responsiveness/Record	High
Marketing Execution	Not Rated
Customer Experience	High
Operations	Not Rated

Source: Gartner (February 2014)

## Completeness of Vision

Vendors are rated on their understanding of how market forces can be exploited to create value for customers and opportunity for themselves. The Completeness of Vision ratings and commentary in this report are based on a number of sources: Gartner analysts' opinions; customers' perceptions of each vendor's strengths and challenges, as gleaned from their BI-related inquiries to Gartner; an online survey of vendors' customers conducted in October 2013, which yielded 1,935 responses; a questionnaire completed by the vendors about their BI strategy and operations; vendors' briefings and demonstrations; and an extensive RFP questionnaire inquiring how each vendor delivers specific features that make up the 17 critical capabilities (see "Toolkit: Business Intelligence and Analytics Platform RFP Template and Vendor Questionnaire").

When determining Completeness of Vision for the "offering (product) strategy" criterion, Gartner evaluated key trends that will drive business value in 2014 and beyond:

### Different approaches to pervasive, but governed use:

Demand for easy-to-use tools has already fueled tremendous growth in data discovery. However, the ability to control and govern these deployments at enterprise scale will be an important buying requirement, if data discovery is to fully displace rather than just complement the current IT-centric BI deployment and content development model. Vendors will need to successfully deliver both to gain and to maintain leading market positions. We see the trend for making complex types of analysis accessible to mainstream and nontraditional BI users continuing, if not accelerating, as data discovery capabilities and other approaches deliver new insights to mainstream business users. These will increasingly enable them to move beyond passive consumption of static information and into more active analysis — they will be able to conduct more advanced types of analysis without resorting to IT or data scientists for assistance.

Beyond data discovery, we expect natural-language processing query and analysis (text and voice) to become more a mainstream requirement to broaden use, while automated semantic discovery and self-service data integration will reduce the time users spend on data preparation. Moreover, useage of more business-user-accessible advanced analytics and analytic visualizations (or smart data discovery) that automatically discover and highlight patterns and findings in data for non-data scientists will expand. Moreover, better decision making remains a key reason why organizations invest in BI platforms. The integration of collaboration and social capabilities in BI platforms in support of collaborative decision making, as well as the continued integration of BI with performance management, will optimize decisions and performance outcomes.

### Different deployment models:

Most BI vendors have announced a cloud strategy, either via their own cloud offering and data centers (Birst, GoodData, Microsoft, MicroStrategy and SAS, for example), and/or by integrating with cloud platforms (such as those of AWS, Microsoft Azure and RackSpace). Credit in terms of vision was given for advanced cloud capabilities relating to integration with a range of cloud data sources; support for hybrid deployments enabling integration of on-premises and cloud data; migration support from on-premises deployments to the cloud; and the ability to adjust capacity via self-service.

Embedding BI content and encapsulating advanced analytics (such as recommended courses of action) in applications or within a business process at the point of user decision making will also help to expand the benefits of analytic-driven insights to nontraditional BI users.

Mobile BI investment continues, with most vendors able to repurpose online content for mobile devices; however, credit in terms of vision was given for advanced mobile capabilities (such as GPS, writeback, camera integration and content authoring).

### Different types of data source and analysis:

The fastest-growing kind of data is that delivered via real-time event streams, emitted by sensors, machines, people and transactional business systems. It has significant potential for business value and transformation across most industries in terms of analytic applications' ability to use this data. Credit in terms of vision was given to vendors that support this growing trend.

The ability to find patterns, correlations and insights across new sources of multistructured data using new types of analysis, such as graph or link analysis and various forms of content analytics, will become a mainstream requirement as companies try to innovate and find operational efficiencies across business processes that use data. Capabilities that enable the collection, storage, management, correlation, organization, exploration and analysis of multistructured data will come into play here.

Existing and planned products and functions that contribute to these trends were factored into each vendor's score for product vision.

## Completeness of Vision Criteria

**\* Market Understanding:** Does the vendor have the ability to understand buyers' needs, and to translate those needs into products and services? Ease of use, breadth of product use and the types of analysis users conduct with the platform — all key buying criteria — factor into this rating.

**Marketing Strategy:** Does the vendor have a clear set of messages that communicate its value and differentiation in the market? Is the vendor generating differentiated awareness? Is the vendor's awareness going up or down?

**Sales Strategy:** Does the vendor have the right combination of direct and indirect resources to extend its market reach, including an innovative partner strategy, differentiating and attractive licensing/buying models, or sales models? Are the packaging and pricing model contributing to an extension of market reach?

**Offering (Product) Strategy:** Does the vendor's approach to product development and delivery emphasize differentiation and functionality that map to current and future requirements, based on 15 'Vision' criteria? These criteria are summarized by the key trends described above.

**Vertical/Industry Strategy:** How well can the vendor meet the needs of various industries, such as financial services, life sciences, manufacturing and retail?

**Innovation:** Is the vendor focusing its resources, expertise or capital to address key market requirements for competitive advantage? Is the vendor investing in and delivering truly unique and in-demand capabilities? Is the vendor setting standards for innovation that others try to match?

**Geographic Strategy:** How well can the vendor meet the needs of locations outside its native country, directly or through partners?

*\* These criteria are scored partly or wholly on the basis of input from the Magic Quadrant customer survey.*

**Table 2. Completeness of Vision Evaluation Criteria**

Evaluation Criteria	Weighting
Market Understanding	High
Marketing Strategy	High
Sales Strategy	Medium
Offering (Product) Strategy	High
Business Model	Not Rated
Vertical/Industry Strategy	Medium
Innovation	High
Geographic Strategy	Medium

Source: Gartner (February 2014)

## Quadrant Descriptions

### Leaders

Leaders are vendors that are strong in the breadth and depth of their BI platform capabilities, and can deliver on enterprisewide implementations that support a broad BI strategy. Leaders articulate a business proposition that resonates with buyers, supported by viability and operational capability to deliver on a global basis. Smaller vendors, which may lack strong scores for geographic or vertical/industry strategy, may still be Leaders due to the strength of their market understanding, capabilities and road maps (to enable business users more easily to find relevant insights in data), market momentum, and excellent execution on key product, customer and sales experience measures.

This year, we have moved the entire Leaders quadrant to the left on the Completeness of Vision axis, reflecting the currently unoccupied "governed data discovery" segment. Although all vendors are seeking to achieve the ultimate goal of providing both engaging business-user-oriented capability and enterprise features that enable IT governance and control, none has yet achieved this. Bridging this chasm will be crucial to achieving leading market share, mind share and momentum in the BI market.

### Challengers

Challengers are well positioned to succeed in the market. However, they may be limited to specific use cases, technical environments or application domains. Their vision may be hampered by a lack of

coordinated strategy across the various products in their platform portfolios, or they may lack the marketing efforts, sales channel, geographic presence, industry-specific content and awareness of the vendors in the Leaders quadrant.

### Visionaries

Visionaries have a strong and unique vision for delivering a BI platform. They offer depth of functionality in the areas they address. However, they may have gaps relating to broader functionality requirements. Visionaries are thought-leaders and innovators, but they may be lacking in scale, or there may be concerns about their ability to grow and provide consistent execution.

### Niche Players

Niche Players do well in a specific segment of the BI platform and analytics market, such as reporting, dashboarding, collaboration, embeddability or big data integration, or have a limited capability to innovate or outperform other vendors. They may focus on a specific domain or aspect of BI, but are likely to lack depth of functionality elsewhere. They may also have gaps relating to broader platform functionality or have less-than-stellar customer feedback. Alternatively, Niche Players may have a reasonably broad BI platform but limited implementation and support capabilities, or relatively limited customer bases, such as in a specific geography or industry. In addition, they may not yet have achieved the necessary scale to solidify their market positions.

### Context

Readers should not use this Magic Quadrant in isolation as a tool for vendor selection. Gartner has defined the BI and analytics market broadly. We include a variety of products that span a range of buyers and use cases, such as decision management suites, interactive dashboards, and tools that are better for integrated planning. Consider this Magic Quadrant to be more of a summary of Gartner's research on this market. When making specific tool selection decisions, use it in combination with our Critical Capabilities, Survey Analysis research, and Strengths, Weaknesses, Opportunities and Threats (SWOT) publications, as well as our analyst inquiry service.

### Market Overview

Gartner's view is that the market for BI and analytics platforms will remain one of the fastest-growing software markets. The compound annual growth rate for the BI and analytics space is expected to be 7% through 2017 (see "Forecast: Enterprise Software Markets, Worldwide, 2010-2017, 4Q13 Update"), driven by the following market activity:

Continued investments in data discovery and large governed data discovery deployments as vendors introduce suitable offerings. Since a greater percentage of purchasing and usage within organizations will be driven primarily by business-user-oriented data discovery requirements (in order to compete and remain relevant to customers), the majority of current IT-centric vendors will continue to shift the focus of their new product investment and platform emphasis from IT-authored production reporting to governed, business-user-driven data discovery and analysis. As a result, data discovery will displace IT-authored static reporting as the dominant BI and analytics user interaction paradigm for new implementations by 2015. IT-authored, systems-of-record reporting will not disappear, but it will account for a smaller percentage of overall analytics use. Leading BI vendors will shift the emphasis of their new product investment from IT-authored production reports to business-user-driven data discovery and analysis tools or risk being marginalized by data discovery vendors that are investing to become more enterprise-capable. At the same time a larger percentage of data discovery deployments will expand overall user adoption beyond today's figure of around 30%, which will drive market growth.

One of the more time-consuming aspects of building BI applications is the data preparation activity. Market trends and corresponding vendor product development that will do for ETL what data discovery did for BI are underway, creating the potential to make BI content and application development far more productive and agile, and thereby drive greater use.

Enhancements in, and greater integration of, collaboration and social capabilities and the sharing of BI content and analysis will also drive more pervasive use and higher business value from BI investments.

Integration of BI and performance management linking planning and execution is another trend driving value and use.

Although mobile BI remains an important interest area, actual production deployments (judging from our customer survey data for this Magic Quadrant) are relatively flat, with opportunities for growth, since most organizations are primarily repurposing existing content for delivery on mobile devices. This remains a key area for future growth and expansion of the user base and deployments.

Growth in cloud BI has the potential to generate demand in new and transient line-of-business applications, including packaged applications and industry analytics services that integrate industry data with analytics tools and analysis sold to users as an integrated service.

Organizations will invest in embedding traditional BI content (reports and dashboards), interactive analysis, and prescriptive analytics applications and business processes that deliver optimized recommendations and courses of action to nontraditional BI users at the point of

decision or action (increasingly mobile), to further extend the pervasiveness and benefits of BI and analytics.

The last 10 years of analytics investment and value were driven primarily by customer-oriented companies or the "Internet of People." The next 10 years will be driven by investments in applications that use the "Internet of Things." The fastest-growing kind of data is real-time event streams, sensors and machine data, and events generated by people and transactional business systems. These new applications, combined with insights from other new (multistructured) data types, together with new types of analysis, will generate the next major wave of analytics investment and business transformation.

Potential inhibitors to market growth include general fatigue with big data hype, with the reality of deployment challenges (given the tools' immaturity) causing these technologies to slip into the Trough of Disillusionment on Gartner's Hype Cycle. This is projected to slow the growth of the BI and analytics platform market. In addition, there could be a backlash because of the U.S. National Security Agency/Edward Snowden affair, which might also affect the cloud (see "Predicts 2014: Business Intelligence and Analytics Will Remain CIOs' Top Technology Priority").

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