Oracle illuminates its Analytics Cloud: The sleeping giant awakens

FEBRUARY 5 2019

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Oracle has shed light on Analytics Cloud, which is the second largest business inside the company, albeit with a market profile that doesn't truly reflect that, in our opinion. The offering is set for enhancement, which will result in more augmented analytics functionality.

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Summary

Oracle Analytics Cloud is one of the fastest-growing businesses within the company. Yet many organizations outside of the offering's customer base aren't aware of its capabilities, which run the gamut from AI-enabled data prep to augmented analytics such as natural language queries, voice-activated questions and chatbots, capabilities that management says buyers are looking for. Oracle Analytics Cloud also embraces more classic forms of business intelligence such as pixel-perfect reporting and OLAP-based analytics. Moreover, the offering is set for further enhancement in 2019, which will result in additional augmented analytics functionality among other developments..

451 TAKE

BI and analytics stacks have come back into vogue, driven by corporate requirements for governed and trusted insights, which are only possible if data management capabilities are baked into the platform. Oracle Business Intelligence Enterprise Edition (OBIEE) – which is still in use by a large number of customers – was one of the first breed of traditional BI stacks to address this requirement. Oracle Analytics Cloud is, in many ways, its successor, even though it does integrate with OBIEE so is also complementary. Enterprise business intelligence capabilities are built into Oracle Analytics Cloud, along with data visualization and discovery, with the strategic intention of providing organizations with the best of both worlds: freedom of analysis within a governed framework. It will be interesting to see how certain aspects of the Oracle Analytics Cloud evolve. For instance, although the company already has a preview of a stand-alone data catalog, known as the Oracle Data Catalog Cloud, within its Big Data Management portfolio, Oracle may draw on it to bolster Analytics Cloud's existing cataloging capabilities, which we think would be a good move. Similarly, we wonder whether Oracle will tap into other areas of its analytics portfolio to beef up the offering. We'd welcome additional advanced analytics given the increasing need for data science in enterprises, for example.

Context

Oracle is seeking to raise the visibility of its Analytics Cloud, which (it might surprise some to discover) is already the second largest segment in Oracle's PaaS business after Data Management and, moreover, rolls up to company founder, chairman and CTO, Larry Ellison. Oracle markets its Analytics Cloud as a single platform to meet enterprise-wide analysis needs, as well as those of teams or departments and individuals. Oracle crafted its Analytics Cloud to address the often-conflicting requirements of providing self-service and flexibility of analysis while delivering trusted and governed insights within a platform.

As one might expect, Oracle's primary strategy is to run its Analytics Cloud on the Oracle Cloud platform, but it can access data from any cloud platform (Microsoft Azure and Amazon Web Services, for example), as well as on-premises data sources. In addition, the offering supports augmented analysis, and in so doing embraces the trend toward infusing AI and machine learning into analytics to make certain processes easier – particularly for users who are not analytically savvy. Furthermore, Oracle created its Analytics Cloud for application developers, too, so this audience could use it to create third-party analytics apps, and for embedded analytics. App developers can also import their own custom visualizations, data connectors and functions into Oracle Analytics Cloud as part of the company's overarching strategy to make it open and extensible.

Additionally, Oracle Analytics Cloud supports 'what if' planning and scenario analysis, so could also be used as a corporate performance management environment, as well as a BI stack. Enterprise Edition integrates Oracle Planning and Budgeting and Oracle Essbase to address this requirement, while Standard Edition supports Essbase only (see below).

Features, functions

Oracle Analytics Cloud is composed of three layers: a data and model catalog, data preparation, and data analysis and collaboration. The data and model catalog operates as one place to collect, search, explore and curate data. This layer is designed to provide a self-service environment while simultaneously supporting the enterprise semantics needed for trusted data definitions, for instance. The Data Preparation layer is the place where users prepare enriched, shareable and reliable datasets. An analyst could use it for a one-off data prep project or tap into functions such as a workflow in order to make the data prep standardized and repeatable.

Oracle has infused AI and machine learning into the data preparation process to guide individuals through it and enrich data automatically – and in so doing enables users to get to insights faster. 'Smart' data prep in Oracle Analytics Cloud includes machine-learning-driven data enrichment and transformation. Semantic profiling to provide recommendations capable of handling certain nuances in text-based data sources is also available – the offering has built-in support for more than 30 semantic types. It also comes with an embedded knowledge base to handle more than 20 types of data enrichment.

The data analysis and collaboration layer is where exploration and data discovery occur using natural language processing (NLP), visualization and storytelling. Oracle has introduced natural language search via text, voice and chatbots to underpin the offering's support for augmented analytics, which is an ongoing focus. Natural language generation to complement NLP is set for significant enhancement later in 2019.

Oracle Analytics Cloud houses other capabilities that fall under the augmented analytics banner, including automated recommendations and chart creation. For instance, it will recommend a map as the most appropriate graphic depiction of data, based on the data the user is wrangling. Oracle Analytics Cloud supports some 30 or more visualizations. However, individuals can incorporate others, if required, such as those from the popular D3.js JavaScript library.

Oracle Analytics Cloud will also interpret a user's words and generate the most appropriate visualization from a voice-based query or command and a text-based one. For instance, an individual could type 'Show me sales by category and segment,' and it will bring back a set of visualizations to display this information, which the user could refine by adding a time, for example. 'Top 10 customers in 2015,' is another example of Oracle's NLP-based augmented analytics in action.

It is also worth pointing out that the Day by Day mobile app in Oracle Analytics Cloud Enterprise Edition also houses machine-learning-based analytics. The mobile app presents insights, data and visualization according to variables, such as an individual's interest and current location, with the aim of constantly improving and, therefore, becoming more pertinent to each user's requirements as it learns. Furthermore, the metadata from user interactions is also employed to improve the content shown to users when they ask a question.

Packaging, cloud strategy

Oracle Analytics Cloud comes in three flavors: Standard Edition, Essbase Edition (built on the company's longtime Essbase OLAP engine) and Enterprise Edition. Each edition can either be purchased using a subscription or Bring Your Own License. Oracle says that 90% of customers use Enterprise Edition, which has the most functionality. Enterprise Edition essentially houses all the features in Standard Edition – which is used for visualization and data discovery primarily – plus other capabilities: a semantic model for query federation across multiple data sources, a remote data connector to hook into specific on-premises sources, and the Day by Day mobile app. The generation of customized reports based on rules and schedules (report bursting), dashboards and pixel reporting are also available in Enterprise Edition.

The company sees four roads to data and cloud analytics that are also reflected in customer usage. These deployment options are designed to support organizations' migration from existing on-premises offerings, such as the company's OBIEE traditional BI stack, as well as address cloud-averse companies such as those in financial services and government, which prefer to keep data on-premises.

Oracle Analytics Cloud can be used for a cloud-first strategy, where all data and analytics are in the cloud. It can be used for analytics in the cloud while keeping all data on-premises – or for a 'keep and combine' approach involving data residing in the cloud and on-premises, while the analysis is carried out in the cloud. The other option – known as 'move and improve' – involves moving all corporate data to the cloud and analyzing it there.

Competition

Oracle Analytics Cloud is seeking to go toe-to-toe with Microsoft (Power BI), Tableau and Qlik in particular, in our opinion. Why? All three vendors' offerings are popular for BI and analytics. Moreover, they address many of the same areas as Oracle's offering, including visual analysis and discovery, machine-learning-driven data prep, and augmented analytics in the form of natural language queries. We also think SAP, IBM, MicroStrategy and OpenText Analytics Suite are competitive because they are targeting some of the same types of users and use cases, and, moreover, are often incumbent in enterprises, which remain a heartland for Oracle, too.

Additionally, we wonder whether Oracle Analytics Cloud will encounter Sisense, Yellowfin and Looker Data Sciences because these vendors also espouse a BI and analytics platform strategy, as well as Infor/Birst, Domo, Chartio, GoodData and AWS QuickSight in cloud BI bake-offs. Prophix, Board International, Jedox and Unit4 Prevero are also competitive, in our opinion, because they specialize in supporting BI and CPM uses in the same environment – a capability also on offer within IBM Planning Analytics and SAP Analytics Cloud. Oracle is seeking to differentiate its Analytics Cloud from other BI and analysis environments by playing up its semantic layer and other platform characteristics to support governed and trusted analysis.

Finally, it's interesting to note that Oracle uncharacteristically didn't acquire any functionality but created Oracle Analytics Cloud using an internal development strategy involving the integration of AI and machine learning from the get-go, which separates it from other vendors that have sought to make their analytics platform 'smart' and 'intelligent' using tuck-in acquisitions.

SWOT Analysis

STRENGTHS
Oracle has extensive experience and a very long heritage in catering to enterprises' BI and analysis requirements, which the firm is putting to good use within its Analytics Cloud.

WEAKNESSES
Although Oracle Analytics Cloud covers all the bases, it isn't a particularly innovative offering because it lacks a standout 'wow' feature that could make it a market disruptor. Moreover, organizations that don't want to run the Oracle Cloud, on which Oracle Analytics Cloud is deployed, won't entertain it.

OPPORTUNITIES
Existing Oracle customers are the low-hanging fruit, although any organization looking for a single platform for classic and emerging BI involving augmented analytics is likely to consider it.

THREATS
BI and analytics platforms are back in fashion, which makes Oracle Analytics Cloud on trend while also exposing Oracle to a variety of competitive offerings – many of which are more visible than its own.