Oracle uses AI, data, and the cloud to free enterprises to focus on business

Ovum view

Summary

Oracle's annual global event, OpenWorld, brings high expectations of announcements about new capabilities to the vendor's infrastructure, platform, and applications solutions clients. This year, Oracle's overarching theme – the infusion of automation across its portfolio – did not break the cycle. Oracle announced the rollout of its Gen 2 cloud infrastructure, brought new focus to the Oracle Autonomous Database and analytics at the platform level, and is expanding the range of artificial intelligence (AI) capabilities baked into its applications, paired with expanded data-as-a-service options and conversational interfaces. Oracle's strategy is simple, albeit it based on complex technology: it is making its technology solutions smarter and easier to use to free enterprises' time and resources to focus on their own core businesses.

Apps infused with AI alongside platform automation delivers cost saving efficiency while enabling revenue-adding effectiveness

Following last year's announcement of the Oracle Autonomous Database, alongside the earlier launch of Oracle Adaptive Intelligent Apps and the more recent acquisition of DataScience.com, the growing wave of AI capabilities Oracle offers has made this white-hot technology a key feature for the vendor. The problem with white-hot technologies is that they tend to come with hyped-up, unrealistic expectations about what they can achieve. Oracle CEO Mark Hurd put forward his view that emerging technologies such as AI are "features, not solutions." This view is indicative of the approach taken by Oracle to offering AI – and other new technology such as blockchain – capabilities to its customers as integrated features available as part of broader solutions. The Oracle Autonomous Database (now for both transactional and data warehouse use cases) at the platform level and Adaptive Intelligent Apps at the applications level are perhaps the best examples of this, offering automation of work at a scale and speed beyond the capabilities of human users, helping reduce operating costs for enterprises while opening new opportunities to add business value.

I have categorized this approach as offering efficiency benefits in the form of cost savings, while helping free time and resources to effectively grow the business. IT departments have long committed most of their resources to "keeping the lights on," managing a vast estate of, as Hurd put it, "Lego bricks" that represent the myriad IT capabilities on offer to enterprises. Using AI to automate large amounts of this humdrum, repetitive work that – while keeping the business running day to day – provides little additive business value is what delivers those efficiency benefits. Focusing on the Oracle Autonomous Database, its ability to self-manage, including updating and patching, frees database administrators from that manual labor to focus on making data available as a valuable enterprise resource. It also has benefits for the security of the enterprise by helping ensure that the latest versions of the software are in use – notably without necessitating planned downtime, a trick I've suggested is like trying to change the tires on a moving car.

Oracle's Adaptive Intelligent Apps continues to expand its range of machine learning-powered capabilities for Oracle's applications portfolio. Starting its offer in the CX space, with solutions for common enterprise requirements such as next best offer and product recommendations, Adaptive

Intelligent Apps have now come to ERP and HCM. During OpenWorld, numerous senior Oracle executives discussed the use of AI in applications to augment users' experience with more insight and automate away tasks that are not value adding. This approach brings efficiency savings, but critically the injection of AI capabilities into enterprise applications' processes, which run quietly in the background, are where the value-adding effectiveness use cases – those that focus on adding revenue or enhancing profitability – are found.

Buying AI as an embedded capability is not the only option Oracle offers

The Autonomous Database and Adaptive Intelligent Apps are firmly at the "buy" end of the build-versus-buy spectrum; this is not, however, the conclusion of Oracle's AI offering. Earlier this year, Oracle acquired DataScience.com, adding a solution designed to serve those enterprises interested in building their own AI capabilities. DataScience.com offers a platform that provides the much-feted data scientists with access to the open source tools and computing resources necessary to support their work, but in a more governed way that helps make IT's job of supporting them easier. Oracle's growing ability to address enterprises' requirements regardless of the type of AI they are interested in is an emerging advantage in the market.

Making smarter applications easier to use with Digital Assistant

The Oracle Digital Assistant was unveiled at OpenWorld and is representative of a trend that continues to make steady progress in the world of enterprise IT: consumerization. This trend started with the revolution that was user-selected smart devices in the enterprise and their integration with corporate standards via BYOD policies. It has more recently surfaced with advances in self-service analytics that brought more "human" UIs and a visually driven approach to working data. Breaking into core enterprise applications like ERP, however, has – so far – made little progress. Oracle Digital Assistant is a conversational digital assistant that aims to change that. There is no reason to suggest that "talking" to ERP is impossible; in fact, dealing with common processes via a conversational interface is a long-overdue advancement in the way users work with applications.

The Oracle Digital Assistant will allow users to interact with ERP, SCM, CRM, and HCM in this way, providing a platform and the tools required to build AI-powered assistants that can interact directly with those applications. Importantly, Digital Assistant supports popular conversational interfaces in the workplace such as Slack and WeChat, along with more consumer-focused products such as Amazon Echo and Google Home. In Ovum's view, as bots and digital assistants continue to gain traction in our work and home lives, open integration between them will be essential – the user may only deal with one interface, but behind the scenes multiple interactions will be required to deliver information and take action.

Data makes automation work

During OpenWorld, Oracle announced its acquisition of DataFox, a cloud-based AI data engine business that delivers B2B data to inform enterprise decision-making. Oracle has made substantial headway in the data-as-a-service business with its Data Cloud portfolio, backed by the acquisitions of BlueKai, Datalogix, and Moat, and the delivery of data to customers is a business in its own right. However, where DaaS gets even more interesting is when that data is used to enrich enterprises' own first-party data in, for example, CRM applications; this is a fundamental differentiator for Oracle AI Apps. Machine learning, which powers the overwhelming majority of realistic enterprise AI use cases,

lives and dies by the data it runs on. Limited data? Limited results. For machine learning, more is more (assuming it is of sufficient quality). Augmenting enterprises' own data with curated, web-scale data sets substantially improves business outcomes by expanding the breadth and depth of the data sources available to machine learning. The acquisition's rationale is further expanded as the Data Cloud has primarily been focused on B2C data sources. While that team has been developing greater B2B capabilities, DataFox brings an AI-curated set of B2B sources into the fold and, in particular, adds insights into private companies whose activities are harder to uncover.

In the immediate term, we expect the DataFox acquisition to be used primarily for enriching customers' own CRM data, surfacing relevant signals such as changes in intent that influence buying decisions or reveal new prospects. In the future, its additive potential as the DataFox AI engine and data is combined with other Oracle AI and data assets is exponential.

Dig deeper into data by simplifying, connecting, and scaling analytics

Not all data analysis can be entirely automated, and analytics solutions still have a substantial role to play in allowing users to work with data outside of embedded capabilities found in other enterprise applications. Oracle Analytics Cloud was discussed under the labels of simplify, connect, and scale – three of the key challenges any veteran of analytics and business intelligence will be familiar with. They are the obstacles that need to be overcome to start leveraging data across the enterprise, particularly serving a much broader consumer base who are not technical experts and require point-and-click and natural language access to data and analytics capabilities.

The theme of embedding AI and automation across Oracle's portfolio is a major component of how these challenges are being overcome. For example, simplifying the process by which enterprise users get from raw data to discovering useful and preferably actionable information is achieved by embedding machine learning into the Analytics Cloud to auto-create recommendations and visualizations. Driving easier data connections with machine learning-augmented data profiling, transformations, and automated suggestions improves the data used by analytics. Or using the cloud as a vehicle allows deployments of analytics at scale to much larger audiences, switching users on and embedding it in their go-to apps, rather than provisioning traditional services.

Oracle categorized its approach in these solution areas as augmented analytics, a natural complement to the requirements it is aiming to serve – a larger, less technical user audience that requires a guided analytical experience that delivers useful intelligence from data using the latest techniques while shielding those users from its complexity.

Appendix

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Ovum Consulting

We hope that this analysis will help you make informed and imaginative business decisions. If you have further requirements, Ovum's consulting team may be able to help you. For more information about Ovum's consulting capabilities, please contact us directly at consulting@ovum.com.

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