Oracle Cloud: Ready for Enterprise Use

CIMdata Commentary

Key takeaways:

- *Oracle continues to make progress toward its cloud vision across their entire solution portfolio, including product lifecycle management (PLM).*
- *The company believes that artificial intelligence, machine learning, and advanced analytics are essential to survive in today's fast-paced global economy.*
- *Oracle is applying these intelligence technologies at the core of their database offerings, to enhance security, and in their applications to augment functionality and human intelligence.*

CIMdata attended Oracle's 2018 Modern Supply Chain Experience (MSCE) in San Jose, California on January 29-31, 2018. The MSCE is a large-scale business meeting focused on market influencers and decision makers with presentations by Oracle, its customers, and select partners. Over 3,000 people attended from around the world, and the partner pavilion included over 60 partners for Oracle's deep and broad portfolio.

Mr. Richard Jewell, Oracle Senior Vice President for Applications Development, claimed that Oracle's supply chain cloud was "Completely Architected for the Digital World." Mr. Jewell also stated during his session that Oracle was now running its business completely on their own cloud-native supply chain applications, having recently moved from their legacy on-premise applications. A key concept promoted by Mr. Jewell, adaptive intelligence, refers to enhancing applications so that they can learn from examples. Mr. Jewell went on to state that Oracle is hiring data scientists who are building this adaptive intelligence into their applications and helping to augment functionality and the intelligence of their human users. This move by Oracle is consistent with efforts by Infor and some other major enterprise application providers to make applications more intelligent. Mr. Jewell contrasted Oracle's approach with others who offer intelligence platforms that require companies to hire local data scientists to leverage effectively. CIMdata believes Oracle's approach offers the most benefit to the broad majority of application users. Other companies, like IBM with their Watson portfolio, are offering intelligence functionality that is disconnected from the enterprise application landscape. It is important to note, however, that most of Mr. Jewell's discussion about adaptive intelligence was still describing futures, not generally available solutions. One area of particular interest to the PLM Economy is adaptive intelligence NPD/NPI product optimization which, when realized, will help users learn from previous product development and launch efforts.

One highlight of the MSCE events was their inspirational keynote speaker. Previous meetings brought stars from the sports world. This year, Mr. Paul Hawkin, the Executive Director of the Drawdown Project, highlighted their efforts to understand what actions mankind can take to address climate change. The Drawdown Project is a global collaboration focused on mapping, modeling, and measuring the impacts of 100 different solutions to addressing this problem. The results were stark and, in many ways, surprising. The most surprising aspect of his work is that it has not been done before. The actions are well defined and the data necessary to do the analysis is available from the World Bank and other sources. While carbon sequestration and other technological solutions are top of mind for those concerned with these issues, other actions could actually have a bigger impact. For example, cows produce vast quantities of methane, a greenhouse gas 28- to 32-times more harmful than carbon dioxide. Changing their feedstock to certain types of algae could reduce their methane output by 70% to 90%. As

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intended, the session was thought provoking about the mother of all supply chains—planet Earth.

The day 2 plenary session featured Mr. Mark Hurd, Oracle CEO, who emphasized the foundational, transformational, and innovative opportunities offered by going to the cloud. To help make his case, Mr. Hurd relayed some troubling, but reasonable facts and figures. According to Mr. Hurd, the average on-premise application is over 20 years old. This number is consistent with recent CIMdata research on cloud-based PLM. Business-to-business IT spend is flat to up by only 1%. If companies want to grow faster they need to win back accounts from competitors. This slow growth contrasts with Mr. Hurd's claims about consumer IT spending growth of approximately 20%. To continue this contrasting picture, Mr. Hurd stated that half the companies that were on the Fortune 500 list in 2000 are gone, or dying, including big names like BlackBerry, Blockbuster, Borders, and Kodak. He also blamed his locale, Silicon Valley, for the death of one major company and the rise of a large global industry. He termed that region "Silicon Valley – Where Simplicity Goes to Die." Mr. Hurd made a strong case that the Valley "beat the hell out of IBM" at every level, making cheaper, more effective hardware and point solutions that bested IBMs offerings. What this did create, however, was heterogeneous computing environments that were extremely difficult to manage. This led to the rise of the systems integration business, which quickly grew from zero to hundreds of billions of dollars globally. Of course, given his talk was about the cloud, the audience knew where he was heading. Today's computing environments cannot meet growing security demands, and are too inflexible to meet the dynamic nature of global value chains. The answer? Oracle, is a company, according to Mr. Hurd, that can offer best of breed solutions in all categories that work in concert as a suite delivered via the Oracle Cloud. With their acquisition binge of the last decade plus, Oracle did indeed add many category-leading applications to their stable. But computing environments will remain heterogeneous from both an application and hosting model (on-premise and cloud) for the foreseeable future. CIMdata knows that Oracle is taking steps to support this heterogeneous world and Mr. Hurd's presentation, and the agenda overall, would have benefited from including their support for this world as well. In fact, later in the presentation, Mr. Hurd did make this point, talking about evolution strategies not requiring "rip and replace," so it was as much a matter of emphasis as content. How PLM-enabling solutions evolve and are replaced is a PLM research topic that is near and dear to CIMdata.

The PLM track included session on roadmap and vision, as well as a plethora of customer presentations. Based on the material presented, Oracle continues to work the PLM roadmap as defined at last year's MSCE and Oracle OpenWorld events, with one notable update. At last year's MSCE Oracle claimed that CAD data management on the cloud was ready for release. This year, it still showed up as to be delivered. In side conversations with Oracle staff it became clear that Oracle faced some of the same technical challenges that slowed other cloud PLM solution providers like Autodesk. To support this requirement, Oracle is working with partners (mainly xPLM and Zero Wait-State) to support the definition and enablement of "Agile CAD to cloud" use cases, where design files are managed on-premise by Oracle Agile, with some published to Oracle Product Development Cloud as required, as well as developing team data managers to connect other data management offerings to Oracle's cloud PLM suite. While on one level this is a setback, it does help address a critical issue in the minds of industrial companies—protecting their intellectual property. CIMdata does not believe that cloud is less secure than on-premise. In fact, if done right it is much more secure than on-premise applications, hence the statement that the critical issue was in the "minds" of industrial companies.

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One customer presentation of note came from Cisco, talking about their Model-Based Enterprise Journey. According to Mr. Benny Yap, Senior Technical Leader of Supply Chain Operations of Cisco, Cisco is moving toward becoming a Model-Based Enterprise (MBE) that relies on Model-Based Development (MBD), where 3D models are used to define parts and assemblies and are shared as needed across the extended enterprise. Mr. Yap claimed that Cisco has been interested in MBE and MBD for some time, but the governing standards were not ready to be used when first published, e.g., ASME Y14.41 on Digital Product Definition Practices was originally published in 2003, and then updated in 2012. According to Mr. Yap, it was the completion of the USS Gerald Ford, all digitally designed using MBD that helped kick-start Cisco's MBD journey. The conversation of Cisco, and even Oracle, around 3D technical data packages (TDPs) that include 3D and associated data in one digital bundle raised a couple interesting questions. First, if the TDP is not dynamically generated when needed for downstream use, how can companies avoid the same problems caused by "old" drawings laying around the shop floor being used when they are out of date? Secondly, if someone is bundling up digital data to share, has the vision of PLM, with value chains readily sharing information through shared systems, failed? The first question can be answered by good data governance. The second is rhetorical and, since the journey is on-going, the answer remains to be seen.

In conclusion, the Oracle Modern Supply Chain Experience was a must-see event for those interested in Oracle and their supply chain/PLM journey. The company continues to make progress on their Oracle PLM Cloud offerings, while still evolving their Oracle Agile solutions per the Applications Unlimited pledge. According to Oracle, companies that two years before were adamantly against considering the cloud are now ready to talk. Again, this is consistent with CIMdata's recently published cloud PLM study, that showed that the vast majority of respondents to our survey are planning to move to the cloud in the next 24 months. Based on what we have heard from Oracle at this event, and others that preceded it, Oracle will be ready when they are.

About CIMdata

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM). CIMdata provides world-class knowledge, expertise, and best-practice methods on PLM. CIMdata also offers research, subscription services, publications, and education through international conferences. To learn more about CIMdata's services, visit our website at http://www.CIMdata.com or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands. Tel: +31 (0) 495.533.666.

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