

# All Things Cloud at Oracle OpenWorld 2017

## **CIMdata Commentary**

### *Key takeaways:*

- *From the opening keynote through the many sessions, Oracle's laser focus is on the cloud and the cloud leader, Amazon Web Services.*
- *Their new Autonomous Database offering and approach toward Highly Automated Cyber Security focus on the needs and threats facing information technology infrastructure today and tomorrow.*
- *Machine learning is behind both offerings, and will increasingly be embodied in their applications software portfolio.*
- *Oracle PLM Cloud continues to mature, including adding their process PLM offerings to the cloud roadmap and developing important synergies with their evolving Internet of Things (IoT) strategy and offerings.*

Oracle convened their annual OpenWorld gathering, taking over San Francisco from October 1-5, 2017. Over 60,000 attendees swelled the venues, and street closures and thousands of banners trumpeted the gathering on lampposts all over the city. Over 2,300 sessions were hosted by over 3,000 customers and partners. Beyond just the huge Moscone Center, Oracle hosted focused tracks at hotels nearby, including an Industry Analyst track that CIMdata attended. Those interested can review the Twitter stream using the hashtag #OOW17.

The crowd swelled for the opening keynotes on Sunday from Mr. Doug Fisher from Intel and Mr. Larry Ellison, the founder of Oracle now acting as Chief Technical Officer (CTO). Mr. Fisher echoed the sentiment of others that "data is the new oil" and who better to help us manage that asset than Intel, the company powering much of the world's IT infrastructure. They are prepping for a future where by 2025 over 75% of mobile data will be video. Next up came Mr. Ellison, clearly a highlight of the event that drew a huge crowd in the main room and was beamed around the Moscone area to accommodate all comers. His focus was on their new Autonomous Database offering that he claimed was designed for upgrade and fault tolerance while still keeping users online. While trumpeting his new product he did not miss an opportunity to chide his competitor Amazon. In fact, once some of his claims about Amazon and their services spread around the Internet, Amazon responded publically to contradict his statements. Oracle has publically stated their commitment to the cloud, and clearly their focus is on Web services, a much bigger target than their historical database and applications software positioning. One of the things that will make these automated services possible is machine learning, which Mr. Ellison termed to be as revolutionary as the Internet itself. Embedded machine learning helps automate Oracle 18c, their first "fully autonomous database," the "most important thing Oracle has done in a long time," claimed Mr. Ellison. They are promising customers 99.995% reliability and availability, without all of the disclaimers that Mr. Ellison stated are in the service level agreements (SLAs) of competitors like Amazon. He believes that rapidly dealing with outages and security threats demands having machines do it for us. His passion was evident and he managed to get a nice audience response when he said "all you have to do is be willing to pay...less." He guaranteed that customers would pay no more than half their former Amazon Web Services (AWS) bills, and that Oracle would write that in the contract. Mr. Ellison also claimed that his offering would be 100x as reliable as Amazon. No wonder Amazon felt the need to respond publically. If these figures are accurate, the competition would be welcome. If data is indeed the new oil, and CIMdata agrees with this sentiment, having price and service competition is

essential to leverage Moore's Law and networking evolution to ensure that all can easily leverage this global asset. Oracle 18c will be commercially available in December 2017.

While the event offered a wide range of topics, technologies, and applications, CIMdata focused on PLM and product-related sessions. Those tracks provided some useful updates. Cloud solution development processes are often agile, producing new features quickly, a huge contrast with the history of on-premise solutions, that were often only updated annually. (In fact, this move to agile will help Oracle speed up product releases to a cadence of releases every 3 months.) While a continuous stream of new features may be viewed positively by some, companies in regulated industries take great pains to validate their solutions for their regulators and do not want changes that could affect that status. In calendar year 2018 Oracle will include an "opt in" framework in Oracle PLM Cloud, allowing users to turn "off" features they do not wish to accept. CIMdata thinks this is an innovative solution to a very real problem, one that others in the industry are also considering in their solutions. To improve the user experience, (UX) Oracle will introduce an Apps Composer capability in the PLM suite, a capability now available in their Customer Experience offering. Anything that can improve UX in PLM is a welcome addition. To better support model-based development, Oracle is using technology from Tech Soft 3D and Anark to generate role-specific technical data packages in 3DPDF. While the promise of PLM was originally to provide all actors in value chains with ready access to the needed product and process data, many look to 3DPDF to share this information. Oracle will be expanding what information can be included in these 3DPDFs in future releases.

Oracle also provided more information on their Internet of Things (IoT) offerings, expanding on their announcements from the Modern Supply Chain Experience event in San Jose in February 2017. Many companies are looking to benefit from IoT applications downstream, improving reliability and maintenance of equipment in the field, and that is part of Oracle's focus. While this could provide huge benefits, the real benefits will come when product development gets insights from real use, not just the intuitions often used to justify product-related decisions. Oracle understands this and positions their IoT offerings as supporting those communication flows back up the lifecycle stream. CIMdata looks forward to more specifics on how that communication will work, and who gets involved. In CIMdata's opinion, these insights need to go back to the original requirement, and then changes should flow into product design with a formal engineering change process under configuration control. Of course, to manage this workflow requires using both requirements management solutions and engineering work-in-process management solutions that can make the right linkages. For Oracle customers using requirements functionality in Oracle Innovation Management Cloud linked to Oracle Product Development Cloud, this is a natural connection. In addition, Oracle has practical experience with their support for Corrective Action Preventative Action (CAPA) in medical devices so they fully understand what traceability is required. The bigger question is how Oracle, and all the other major solution providers, will support linkages between requirements and development in a more heterogeneous solution environment. This will require openness by the solution providers to make those linkages. Work is on-going by organizations such the Open Services for Lifecycle Collaboration (OSLC) community to support this exact problem.

In their move to the cloud, Oracle fundamentally rethought most aspects of their business. They also took the opportunity to rethink the boundaries of their applications. This is of critical importance to the Oracle PLM Cloud suite. Before the cloud, Oracle had five different project portfolio management solutions because of their organic solutions growth and many acquisitions. They now have one, Oracle PPM Cloud, with the ERP development team taking

a lead role. Similarly, they had two main quality solutions, one in the Oracle Agile portfolio and a second in their E-Business Suite (EBS). Their R13 release offers one solution addressing both PLM and supply chain quality. In their presentation, Oracle used the famous W. Edwards Deming quote: “Quality is everyone’s responsibility.” Now Oracle users have one solution that offers “enterprise quality management” to cover these different constituencies.

Oracle has also rethought about the age-old dilemma of PLM/ERP integration, by creating a single integrated item master that is used by both Oracle PLM Cloud and ERP. This “enterprise product record” results in seamless integrations of data flow from PLM to and from ERP, change management processes that transcend PLM and now include ERP and CRM users and data. This is an important advance and helps them with their digital thread and digital twin strategies.

In conclusion, Oracle OpenWorld 2017 was an information rich environment with something for everyone, spread across multiple venues. With over 60,000 attendees that is a good thing, because it was slow going when everyone wanted to go to the same place, like for the Ellison keynote. Oracle made some big announcements, such as their Autonomous Database and cyber security. CIMdata agrees that machine learning is crucial to help understand the data engulfing us, a volume that defies human intervention. CIMdata was also happy to see Oracle’s plans to embed this capability in their applications. While standalone intelligence has its place (see IBM Watson), putting this capability in service to applications users makes more sense. It is not another thing to adopt or bolt on. It also helps that this intelligence is targeted to the right problems of specific users. This approach is consistent with other application providers, like Infor, and shows great promise. We look forward to seeing machine learning applications in the Oracle PLM Cloud suite. We also applaud Oracle’s competition with industry heavyweights like Amazon. It can help focus the mind (and strategy) but Oracle must not lose sight of their applications’ success. Yes, the cloud is a bigger addressable market but it is applications that are paying the bills, at least in the short term. Companies attempting any such large strategic transformation need to embrace both their past and their future to ensure they can survive and thrive in that future.

## 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.