For Oracle, PLM is Not Just About Engineering…

CIMdata Commentary

Key takeaways:

- *For Oracle, PLM isn't just about providing product engineering support*
- *Oracle has enabled a broad range of extended (i.e., outside the traditional engineering-centric domain of PLM) lifecycle management capabilities*

CIMdata attended Oracle's Value Chain Summit in San Francisco, February 4-6, 2013, along with a few thousand Oracle professionals and customers. The event was billed by Oracle as the event where you will "…learn how Oracle is helping companies transform supply chains into value chains to gain competitive edge." According to Oracle, they designed this single event to bring together a number of related summits, including the Product Lifecycle Management Summit, Manufacturing Summit, Maintenance Summit, Logistics Summit, and the Value Chain Planning and Procurement Summit, to create a comprehensive conference that included almost 200 sessions across all of their supply chain management solution areas. For those who have ever attended the much larger, if not overwhelming, Oracle Open World, the Value Chain Summit offers a more right-sized venue to focus on solution suites of greatest importance with peers who care about the same issues and trends. The summit certainly delivered on its promise, and much more, if you had the chance to sit back and take it all in by connecting what was said with what was not said.

One of the first things you realize is that for Oracle, PLM isn't just about providing product engineering support. This is a vision shared and long championed by CIMdata as well. While many "traditional" PLM solution providers have evolved from an engineering-centric view of PLM, they have learned, some the hard way from their customers, that engineering by itself does not comprise complete product LIFECYCLE management, nor is it where some of the largest ROI from a PLM investment can be attained. Oracle, by leveraging its enterprise and supply chain heritage, clearly understands this as well as anyone, even if they occasionally fail to articulate how fundamentally different their approach to PLM is.

While Agile product lifecycle management applications do a fine job supporting engineering processes (for example, BOM creation and management, CAD data management and engineering change management), Oracle's overall PLM solution set is much more comprehensive. Agile PLM has had extensive cost and supplier management capabilities for years with Enterprise Quality Management to enable Design for Quality. Agile Product Lifecycle Management for Process is one of the original specification and formula management tools on the market. Oracle's newest PLM related offering, Oracle Innovation Management, provides a set of capabilities that directly supports the "fuzzy" front-end of the lifecycle, including Product Requirements and Ideation Management, Concept Design Management, and Product Lifecycle Portfolio Management. These are only a few examples, of non-engineering-centric capabilities Oracle delivers. Beyond these, Oracle provides adjacent capabilities that not only interact with PLM but also seek to optimize other aspects of the lifecycle, such as transportation and related lifecycle management (i.e., where products are purchased, how they are manufactured, how to best ship them, etc.).

At the Value Chain Summit there were numerous presentations from industrial market leaders like Agilent, Beckman Coulter, BPL Global, Emerson, John Deere, GE, Marzetti, Penske, Seagate, Stryker, Tellabs, Toyota and others who are Oracle customers. Initially, if one only looked on the surface of what was said, it might be challenging to fully appreciate the entire

forest and not just the individual trees. On the surface, many of these presentations could have been given years ago by early implementers of product data management solutions of the past, but the difference today is where and how Oracle PLM's solutions are being applied, not just the problems they are solving.

As examples, a high-tech Oracle customer presented how they are using Agile as a supply chain tool that manages an as-sourced structured view of third-party software and provides a BOM compliance risk score for embedded software. A farm machinery equipment company illustrated how the company's electronics group is using Agile to support software development and BOM grading for supply chain risk to enable design for supply. Another high-tech company presented how they use Agile to support product cost management with a sourcing focus. And a representative from a Japanese automotive OEM engine controls group spoke of the increasing complexity and content of electronics and software in their vehicles. He commented that in the 1980s their automobiles had an engine control unit (ECU) with 5 inputs and 2 outputs, but today the typical ECU has 55 inputs and 48 outputs and their luxury cars have more than 100 ECUs. He commented that this increased complexity has resulted in increased testing complexity, since all the various operating characteristics (i.e., all possible combinations of inputs and outputs across the ECUs) need to be validated to ensure that the automobile will operate appropriately. In the past they would physically test the vehicle and the multiple combinations of inputs and outputs. Today, this would add a significant amount of time to the vehicle development and testing cycle. This need led the OEM to pursue a model-based development approach where Agile is used to manage critical elements of their virtual ECU test environment. The company reports that this virtual testing approach has resulted in a 30-times reduction in testing time.

When taken as a whole, these and a host of other presentations illustrated Oracle's comprehensive end-to-end lifecycle management strategy and associated enabling capabilities. While CIMdata would like to see Oracle better articulate its vision in forums like this one, and on their web site for example, CIMdata is impressed with the significant in-roads Oracle has made in enabling extended (i.e., outside the traditional engineering-centric domain of PLM) lifecycle management capabilities. With Oracle's Fusion architecture and associated application strategy, CIMdata is confident that Oracle will be able to deliver additional well-thought-out and integrated capabilities that leverage Oracle's comprehensive set of solutions, beyond those under their PLM banner, to support adjacent up- and down-stream business processes. There are a lot of different solutions in Oracle's "forest" and sometimes when in the forest it is difficult to see and fully value all the individual trees. Fortunately, many companies are taking notice and advantage of Oracle's inherently broad and now increasingly deep PLM ecosystem.

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.