

# The Intelligent Digital Supply Chain: SAP Analyst Event

## *CIMdata Commentary*

### *Key takeaways:*

- *SAP's vision for the Intelligent Enterprise is expansive, spanning their traditional portfolio and SAP Leonardo, all powered by their digital platform, SAP S/4HANA.*
- *SAP has made great strides in their intelligent product development (IPD) offering, combining organic development with key partnerships, like with ANSYS on predictive engineering, to support their vision for networks of digital twins across the lifecycle.*
- *Their support for systems engineering, advanced variant configuration management, mechanical design, and electrical design continues to improve, with managing software assets coming soon.*
- *SAP's cloud-first development strategy for SAP S/4HANA positions SAP and their customers to take advantage of the on-going cloud adoption wave.*

CIMdata recently attended the SAP Analyst Event in Chicago, IL, held in conjunction with the International Manufacturing Technology Show (IMTS) at McCormick Place. IMTS is a gargantuan show, with over 129,000 registrants viewing 2,123 booths from 2,563 exhibiting companies.<sup>1</sup> From PLM solution firms to giant machine tools, this show has a bit of everything.

At IMTS, SAP's Mr. Patrick Crampton-Thomas participated on a panel on maintenance and the Industrial Internet of Things (IIoT). CIMdata agrees with the panel that maintenance is the low hanging fruit of IIoT. It is easy and cheap to make legacy assets smart and connected so operational data can fuel a range of analytics that can help improve performance.

The panel was followed by Ms. Hala Zeine, SAP Executive Vice President for Digital Supply Chain. (An 18 year SAP veteran, Ms. Zeine moved over to supply chain in May 2018.) Her talk on "The Vision for the Intelligent Enterprise" positioned their offerings a bit differently than stated in CIMdata's most recent commentary on SAP from May 2018. The positioning was new for SAPPHIRE, SAP's big event in June. The same pieces are there but are stated a bit differently as shown in Figure 1. Most of SAP's products are positioned as part of an Intelligent Suite and the Intelligent Technologies are mostly what was SAP Leonardo. The plan is to better integrate the Leonardo technologies into the business processes SAP enables. This is all powered by a digital platform, SAP S/4HANA, that is cloud-first, i.e., every quarter new functionality is delivered for the cloud and then re-packaged once a year to update those customers with SAP S/4HANA on premise.

Ms. Zeine continued, elaborating SAP's vision for the Intelligent Digital Supply Chain. For each stage, e.g., as-designed, as-planned, as-manufactured, as-delivered, and as-operated, SAP is working with lead customers as part of their Customer Engagement Initiative. Household names like Colgate, Daimler, HP, and Steelcase help SAP define and refine their new solutions so they best meet industrial requirements. This approach is common with many of the leading PLM solution providers and CIMdata heartily agrees. It is much better to have practitioners guiding your development to help ensure the new capabilities are important and add value to enterprise processes.

---

<sup>1</sup> <https://www.imts.com/>



Figure 1—SAP's Vision for the Intelligent Enterprise

The next day brought the formal SAP Analyst Event, with Ms. Zeine leading off, in effect elaborating on her overview remarks at IMTS the day before. SAP's views on the importance of the product and asset lifecycle are consistent with their previous messaging. Their solutions will help define and then rely on a network of digital twins, spanning the product lifecycle. SAP's portfolio now includes formal requirements management capabilities that can enable traceability from requirements across the lifecycle, an offering that leverages IP from their Sybase acquisition. They plan to help manufacturers define and manage digital twins of every product manufactured. Ms. Zeine claimed that SAP has over 20,000 asset intelligence customers and hundreds of thousands on the manufacturing side.

SAP has offered variant configuration management capabilities in their core ERP solutions for many years. Digitalization and the Industry 4.0 vision demand that companies be able to profitably serve markets of one. Reaching this goal requires more advanced variant configuration functionality. SAP has been working with the Fraunhofer Institute Kaiserslautern in Germany to develop a solution optimized for SAP S/4HANA. As with their other offerings, SAP is working closely with leading customers to define this new capability. A target application for leveraging this new capability is to power Configure-Price-Quote (CPQ) solutions. This category has seen strong growth over the last few years and has intensified the mergers and acquisitions (M&A) activity in the segment. In April 2018, SAP acquired Callidus Cloud, a leading CPQ solution provider. Their go forward strategy on CPQ is to continue to use the electronic commerce-oriented CPQ solution in SAP Hybris for that segment and to leverage Callidus Cloud for sales, manufacturing, and supply chain. It is the Callidus Cloud solution that is being integrated with SAP's new variant configuration offering. This is an important capability for SAP and their customers. CIMdata has talked for several years about PLM, systems engineering, and configuration management merging to better support the full product lifecycle. It also makes sense that SAP would move in this direction since they were part of the group that defined the Industry 4.0 vision. (The same is true, by the way, for the strategy of Siemens PLM Software, since Siemens AG was another participant in the visioning process.)

Other sessions highlighted SAP PLM's continued evolution toward support for systems engineering. Their requirements management offering can currently support traceability to objects managed in SAP S/4HANA, including SysML models and other documents. Their partnership with ANSYS brings their simulation and analysis capabilities to bear as part of SAP Predictive Engineering Insights enabled by ANSYS offering.<sup>2</sup> This partnership helps make SAP's network of digital twins strategy more credible with the ANSYS Twin Builder solution to

<sup>2</sup> <https://news.sap.com/2018/06/ansys-sap-insights-rich-data-across-engineering-operations-value-chains/>

help SAP users define and build those twins, including identifying the necessary sensors and communications on their products to deliver real-time data for predictive engineering analyses.

CIMdata applauds these moves to better support variant configuration and digital twins. Much of this functionality is new and needs to be exercised by SAP's client base. But the vision is sound and the pace of delivery has picked up substantially in the last few years. CIMdata looks forward to future SAP events where customers present how they are indeed using SAP's intelligent product design platform to profitably serve markets of one.

### **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.