

Are You 3DEXPERIENCEd?

CIMdata Commentary

Key takeaways:

- *Dassault Systèmes continues to drive its vision for ENOVIA forward by extending lifecycle support to business planning and after-sales while enriching it with expanded connectivity for lifecycle functions.*
- *Digital assets are becoming more valuable than physical assets and the 3DEXPERIENCE platform is designed to support this concept in multiple ways— as a business platform, as an operating system, and as an enabler of new business models.*
- *The enhancements to the 3DEXPERIENCE platform and ENOVIA with 2019X should be appealing to SmarTeam and SOLIDWORKS users, giving them the capabilities they need to advance their PLM maturity.*
- *POWER'BY offers PLM collaboration services that will help clients with multiple ECAD and MCAD authoring tools (including non-Dassault Systèmes tools) manage data using ENOVIA to improve configuration control and better distribute information to the enterprise.*

CIMdata attended a “3DEXPERIENCE ENOVIA Day” event on 28 September 2018. This analysts-only event provided updates on key aspects of ENOVIA’s positioning, business, and strategy and an opportunity to ask questions of Dassault Systèmes staff.

Dassault Systèmes attacks the market with a set of brands united by the 3DEXPERIENCE platform which now supports all company brands, as emphasized by Mr. Stephane Declee, ENOVIA’s CEO, in his opening remarks. Their 12 target industries have not changed in the last several years: Aerospace & Defense; Architecture, Engineering, and Construction; Consumer Goods & Retail; Consumer Packaged Goods & Retail; Energy, Process & Utilities; Financial & Business Services; High-Tech; Industrial Equipment; Life Sciences; Marine & Offshore; Natural Resources; and Transportation & Mobility. Their Industry Solution Experiences focus on delivering value to industry-specific processes and specific user roles, orchestrated on the 3DEXPERIENCE Platform and Dassault Systèmes tools (with an increasing focus on supporting tools from other solution providers).

Mr. Declee described Industry 4.0 as “yesterday,” with “today” dominated by Digitalization. The “future” is for makers and innovators, who are helping bring an Industrial Renaissance, Dassault Systèmes’ preferred turn of phrase. According to Mr. Declee, in this new world, digital assets are becoming more valuable than physical assets, a sentiment with which CIMdata heartily agrees.

The 3DEXPERIENCE platform, according to Mr. Declee, serves multiple roles in Dassault Systèmes’ strategy. First, it serves as a business platform for knowledge and know-how powering their industry portfolio. It also serves as an operating system. Finally, it is at the core of a new business model, powering their marketplace portfolio. During the morning session, Dassault Systèmes provided some useful statistics: 1.3 million ENOVIA users across 15,000 customers in all 12 of their target industries.

Remarks by Mr. Keith Charron, Senior Vice President Worldwide Sales & Operations for ENOVIA, highlighted ENOVIA’s business success. While we are not allowed to reveal details, Mr. Charron claimed that about half of their business is competitive wins, which can include replacing homegrown legacy systems. In the midmarket, Dassault Systèmes is focusing on

replacing their legacy ENOVIA SmarTeam installed base and Mr. Charron claimed that about 25% could be moved to the **3DEXPERIENCE** platform. In CIMdata's experience, many customers have done amazing things to get ENOVIA SmarTeam to support their use cases and processes but many have reached a limit on how much they can achieve from the SmarTeam platform. Having a path to the **3DEXPERIENCE** platform could be a good opportunity for them. Dassault Systèmes is also looking to expand the PLM horizons of their SOLIDWORKS customers with the **3DEXPERIENCE** platform. Some of this cannibalization of existing product data management (PDM) based business is inevitable. As companies move up the value chain they need a more powerful solution at the core of their PLM strategy, a role that the **3DEXPERIENCE** platform was designed to fulfill (and SOLIDWORKS EPDM cannot). In a later session, Mr. Declee emphasized that their target was not to displace the SOLIDWORKS Enterprise Product Data Management (EPDM) offering but to help companies expand their value delivery capabilities. CIMdata believes that companies should consider a path forward with the same provider. There is one consistent interface with the provider and one would expect that migration would be well understood by a company owning the "from" and "to" systems. There is a caveat: many of these small customers do not have IT staff or budget, or are not used to committing their resources to addressing their PLM needs. It will be interesting to see how Dassault Systèmes and their go-to-market partners deal with this issue. Solutions can be made easier to use and to adopt out-of-the-box, and tailored by industry as Dassault Systèmes has tried to do. Delivery on the cloud can also certainly reduce the IT resource needs for customers. Indeed, some Industry solutions are cloud-based today.

Dassault Systèmes POWER'BY strategy, announced in 2017, will also help them reach new prospects, offering PLM collaboration services with improved tool integrations and process support for CATIA V5 and SOLIDWORKS, as well as other mechanical computer-aided design (MCAD) solutions. This move to open up their platform to support competing tools is a good move as many companies have to deal with heterogenous tool environments, both among their large and midmarket target customers. This is a tension that all PLM platform solution providers will have to balance. Their use cases and processes are optimized for their own tools but must also maximize the benefits of those same processes when users employ third-party tools. Investments in this area will be extremely beneficial to their current customers and future prospects.

The session also included an update on the next offering release, ENOVIA 2019x, currently scheduled for November 2018. It will include an issue management solution, created through work with Toyota. Dassault Systèmes is rethinking the user experience, having moved from HTML to HTML5 and now modular components that can work on other platforms. This is similar in approach to how PTC and Siemens PLM Software have worked to harmonize their offerings to support industrial use cases and processes. CIMdata was heartened to hear about expansions to their global program and project management solution to include a new solution to help transition from social collaboration to structured collaboration. This is important to support successful idea management and to ensure that the learnings and requirements derived in the fuzzy front end of innovation get fully considered downstream and are traceable to their source.

Another important piece in 2019x is having an integrated application lifecycle management (ALM) and DevOps capabilities in 2019x. While Dassault Systèmes plans to provide an organic capability, it will also invest in Open Service for Lifecycle Collaboration (OSLC) integrations to other commercial tools this year.¹ This is important because there are a wide range of ALM and

¹ <https://open-services.net/>

DevOps tools used to develop software that animates smart connected products. A side conversation emphasized this need to integrate third-party tools more broadly in their Industry Solution Experiences. Dassault Systèmes is investing more here, a good sign for their customers.

Mr. Charron described their success as coming from, in part, the 5 C's of differentiation: Connectivity, Continuity, Commonality, Convergence, and Conservation. This view on their offerings and approach is consistent with CIMdata's work on PLM Enterprise Value & Integration (PEVI). Customers need a consistent approach from their solution providers, one that conserves their investments, the last C on the list. Mr. Charron admitted that this last C was lacking in their strategy in the last few years but is essential going forward. He continued to provide an impressive list of current Dassault Systèmes customers and prospects. If this list pans out, Dassault Systèmes ENOVIA revenues should get a nice boost in our next CIMdata PLM Market Analysis Report (MAR).

In the afternoon session there were two provocative talks. Mr. Binu Panicker, ENOVIA's Chief Technology Officer, spoke about Dassault Systèmes' plans for enabling new types of value networks. The plan will support both the core engineering and manufacturing capabilities and the new initiatives that extend the value stream. Upstream Thinking was defined as integrated business planning and Ownership defined as service and aftersales. His discussion of their Value Network Strategy and Services for ENOVIA aligns well with CIMdata's view of value creation for product innovation platforms. This type of practitioner knowledge sharing could have extreme value but can be complicated to achieve in practice. Companies often do not like to share their hard-won early adopter knowledge, rightfully thinking this head start will help them stay ahead. But getting this knowledge shared is central to the state of the art and practice moving forward especially when companies are trying to develop new business models and improve customer satisfaction. Siemens PLM Software discussed a similar initiative at their analyst event in August. CIMdata wishes both of them well in this important endeavor.

The second provocative session was led by Mr. Kevin Baughey, Senior Director Portfolio & Product Management at ENOVIA, entitled "Transformation of the EBOM: Model-Based Engineering." Mr. Baughey spoke about needing to stop hard coding structure into the objects, letting the system organize the information based on tags and other metadata captured and derived as data flows along the digital thread. CIMdata sees this as an elegant way to avoid the classic manual input problems with data classification. In the longer term, this could support automation and possibly suggest solutions to configuration problems by providing data to be processed by machine learning algorithms. He also suggested that "intelligent" part numbers could go away using this approach, something that CIMdata has tried to convince its industrial clients to do for years. It is their more recent clients that pick up on the new approaches faster, Mr. Baughey claimed, which makes sense. Mr. Baughey also commented on another important part of their vision: providing support for as-built and as-maintained configurations, capabilities that are crucial to support new business models like product-as-a-service. This is good to hear as CIMdata has observed many companies are considering such a move.

In conclusion, CIMdata was impressed with the breadth and depth of information presented and the offerings they described. The 3DEXPERIENCE platform, with the ENOVIA technical and business role offerings, has evolved significantly since it was announced and does provide a unified user experience across much of the Dassault Systèmes portfolio. The market gains described were impressive, but we will have to wait for the financial results. Based on CIMdata's global PLM Market Analysis Report results, the collaborative product definition management (cPDM) segment in which the 3DEXPERIENCE platform sits had anemic growth

in 2017. With their marketing initiatives filling the pipeline and their products evolving, Dassault Systèmes is clearly expanding their ability to help their customers achieve their PLM visions.

About CIMdata

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