

Dassault Systèmes 3DEXPERIENCE Forum 2019

CIMdata Commentary

Key takeaways:

- *People who design and sustain products will benefit by using the virtual world to extend and improve the real world.*
- *The 3DEXPERIENCE extends well beyond manufactured product support.*
- *Product innovation platforms (such as Dassault Systèmes' 3DEXPERIENCE platform) enable innovation. Platforms don't innovate, people innovate, but the platform is a critical innovation foundation.*
- *Dassault Systèmes continues to expand and enhance their cloud offering.*

Dassault Systèmes' North American 3DEXPERIENCE FORUM 2019 was held in Las Vegas from 13 to 16 May. This year's theme was "Industry Renaissance: Sustainable Innovation and Business for a Sustainable World." Mr. Dean Marsh, Managing Director of North America, Dassault Systèmes, kicked off the event by stating that the "virtual world extends and improves the real world," providing Dassault Systèmes' community of users with a true 3DEXPERIENCE. Dassault Systèmes characterizes their 3DEXPERIENCE platform as supporting a set of sustainable innovations capable of harmonizing products, nature, and life. They make the case that their solutions support all aspects required to provide a 3DEXPERIENCE. A bold statement that Dassault Systèmes has taken to heart and is well on its way to delivering.

Ms. Florence Verzelen, EVP Industry Solutions, Marketing and Communications, Dassault Systèmes, who followed Mr. Marsh, talked about building sustainable businesses while improving operational efficiency and reducing cost, and how Dassault Systèmes is embedding sustaining concepts into their 3DEXPERIENCE platform. Ms. Lucia Chung, Boeing Senior Director of IT Factory Operations, discussed Boeing's Manufacturing IT Digital Transformation Journey. She described how Boeing uses standards to drive digitalization of their manufacturing architecture. She noted that "Without a standard there can be no KAIZEN." She also stated that a "Digital enterprise leverages latest technologies," but that is not enough, the culture of the organization has to adapt to and adopt those technologies, so companies need to build a decision culture that encourages change agents and cultivates talent supported by training and certification that allow structured time for people to practice what they learn. CIMdata reinforces this sentiment—change without cultural adoption is simply not sustainable and the cultural change needs to be an active undertaking.

The next speaker, Mr. Aidan Quilligan, Accenture's Leader of their Industry X.0 practice talked about Reinventing the Product. His main theme was that companies must transform and scale innovation. To do this, they must attack below the line—doing things faster and more efficiently, as well as above the line—deploying new services and experiences to scale and lead to successful innovation. Three key factors he mentioned were: 1) define the value expected from innovation, 2) drive organizational change (an important theme repeated), and 3) build innovation factories to institutionalize innovation and make it a continuing organizational legacy. CIMdata's more than 35 years of experience working with industrial companies indicate that sustainable innovation and the benefits it provides takes time to be fully embedded and adopted by an organization. Mr. Quilligan's key factors are well articulated.

Mr. Chris Collins, SVP Product & Technology Enablement, NXP Semiconductors, gave a presentation on Excellence in Design. NXP Semiconductors has been building chips for many years. Mr. Collins described their products as having thousands of components embedded in

them, and to achieve zero defects they need to track them all. To solve the data management problem, they turned to Dassault Systèmes, who worked as a trusted partner in building and deploying their new environment. Today they have 10,000 users, with 1,400 distinct users per day, and all of their IP is managed in the platform, providing the single source of the truth they require to work with their complex and massive product structures. An impressive accomplishment.

Another company with massive product structures is McDermott International. Their Global VP of Engineering, Mr. Vaseem Khan, gave a presentation about the role of PLM in helping with Silo Busting in companies. McDermott executes huge projects (\$30 to \$100 billion) that cross multiple groups in their own organization, but also with owners, operators, and many suppliers. Even small overruns can be very large, but savings can also be large in projects of this magnitude. He stated very clearly that what McDermott has found is that creating a digital workstream that does not recognize silos is critical to supporting communication and responsibilities across the team. They rely on PLM's single source of truth repository to capture the IP from the silos, making it available to everyone—effectively minimizing the impact of silos. He stressed that organizations “need to digitize the good processes.”

Mr. Bernard Charlès, CEO and Vice Chairman of Dassault Systèmes echoed the sentiment. He stated that “It’s about connecting people together.” He also referenced Albert Einstein’s quote: “Pure logical thinking cannot yield us any knowledge of the empirical world; all knowledge of reality starts from experience and ends in it.” Reinforcing Mr. Khan’s talk, he stated: “Don’t digitize the past.” Adopt a digital transformation that is people centered—not technology centered. Mr. Charlès, looking forward, proposed that bio-science will have a major influence on this century, much as material science had in the last, and thus Dassault Systèmes has expanded its **3DEXPERIENCE** vision to embrace bio and other sciences in an attempt to overcome the silos in industries such as healthcare. CIMdata continues to watch the **3DEXPERIENCE** platform evolve with great interest. It is an embodiment of what CIMdata believes must be available if PLM is ever going to meet its promise as an innovation enabler.

Ms. Dawn Hudson, former CEO Pepsi North America, talked about “Driving Authentic Business Innovation.” Her key messages were about the importance of “disrupting the disruptor” to build new, innovative products and brands. She spoke about using “brand soul” to drive brand purpose. Another of her themes on driving innovation was that “Innovation is a science and an art.” Having great technology helps, but people also need vision and the will to drive innovation. An important observation, one that has been described by CIMdata for a while now. Product innovation platforms (i.e., solutions like Dassault Systèmes’ **3DEXPERIENCE** platform) enable innovation, they don’t innovate for you, people innovate when given clear, concise, and accurate information and the time to think beyond the past.

Customer presentations on how they use Dassault Systèmes’ **3DEXPERIENCE** platform and its extensive set of solutions were interesting and represented a number of industries and products. CIMdata views these as demonstrations of the power of applying a product innovation platform to real-world problems. They also demonstrate Dassault Systèmes’ continued commercial success with its **3DEXPERIENCE** platform strategy and associated PLM-enabling solutions.

To kick off Day Two, Mr. Olivier Bellin, Head of Operations at Canoo described how they are Creating Mobility for the Future. Their solution is a small footprint, large capacity electric vehicle, designed using Dassault Systèmes’ **3DEXPERIENCE** platform. Besides the design, based on providing social space for the occupants, they are introducing a new business model wherein the vehicle is provided as a month-to-month subscription service. According to Mr.

Bellin, to accomplish this requires a value loop instead of a value chain supported in a decentralized organization model—all supported by the solutions that make up the **3DEXPERIENCE** platform.

Moving from the automobile world to Building the Supersonic Future, Mr. Josh Krall, Co-founder and Vice President, Technology at Boom Supersonic, talked about “removing the barriers to experiencing the planet” through reasonably-priced air travel. Their new supersonic aircraft is being created virtually in the **3DEXPERIENCE** platform. Boom has been expanding rapidly and has been increasing their use of Dassault Systèmes’ solutions for a number of years now. This is a good proof point that Dassault Systèmes’ solutions are scalable and a company designing sophisticated products can start small and expand as needed.

Harnessing the Power of Domain & Technology Led Innovation to Drive Measurable Business Value was the title of Mr. Nitesh Bansal’s presentation. Mr. Bansal is Senior Vice President and Global Head for Engineering Services at Infosys. His presentation covered many benefits of employing PLM and illustrated Infosys’ experience implementing PLM.

The last keynote of Day Two was an inspirational talk by Pro Football Hall of Fame Running Back, Businessman and Entrepreneur, Mr. Emmitt Smith. His talk was titled Dreaming, Goal Setting, and Making the Impossible a Reality. Mr. Smith described his journey of development centered on his football career from a youth through his retirement, and on to his current business career in real estate development. He urged the audience to embrace change stating that “change happens all the time,” so use it. “How you deal with the challenges defines who you are.” This of course holds true for everything we do in life.

In addition to these main speakers and themes there were numerous breakout tracks that supported how Dassault Systèmes sees their **3DEXPERIENCE** platform impacting and enhancing how companies work today. These tracks included:

- Advancing Future Flight and Mobility Innovation
- CxO Technology Insights: What’s Next to Enable the Industry Renaissance?
- Eliminate the Silos with the 3DEXPERIENCE Platform
- **3DEXPERIENCE** Platform for Model-Based Systems Engineering
- Manufacturing: Factory of the Future
- Manufacturing: **3DEXPERIENCE** Twin & Cognitive Augmented Design for Additive Manufacturing

As always, there was an area for Dassault Systèmes and its partners to showcase their products and services—called the **3DEXPERIENCE** Playground. As in past years, there was a buzz in the Playground among the numerous service providers with significant Dassault Systèmes practices. Multiple conversations point to the fact that many of them have been expanding their partnership with Dassault Systèmes and look for a bright future.

On a side note, Dassault Systèmes mentioned that they continue to expand and enhance their cloud offering. Mr. Charlès specifically commented that Dassault Systèmes is creating their own cloud infrastructure, which currently has eight sites. He also mentioned that their cloud infrastructure doesn’t use Microsoft or Oracle database capabilities but rather their own solution run by OutScale, which is majority owned by Dassault Systèmes. Mr. Charlès stated that Dassault Systèmes’ cloud offering, which is fully DevOps supported, is the only cloud service with a site in China that has been approved to be administrated from outside of the country.

CIMdata continues to find that Dassault Systèmes’ **3DEXPERIENCE** platform provides continually broadening solutions to support what, to some, may appear to be fringe areas

compared to manufactured product development—such as those in bio-science. However, Mr. Charlès and his team provide a visionary view of just how interconnected, expansive, and inclusive support of human endeavors can be. We at CIMdata look forward to seeing where and how Dassault Systèmes' 3DEXPERIENCE approach and platform evolves next.

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.