COMMENTARY

Virtual Twins Powered by AI

Dassault Systèmes 2026 3DEXPERIENCE & ENOVIA User Conference

Takeaways

Gen 7 is the latest iteration of Dassault Systèmes evolution that began more than thirty-five years go, where they have progressed from 3D to DMU to PDM to PLM to Virtual Twin to Virtual Twin of Human, and arrives today at **3D UNIV+RSES**

3D UNIV+RSES extends the **3D**EXPERIENCE platform into generative AI and Industrial World Models based on science and physics. Virtual companions guide the company through the product lifecycle and enable the development and validation of products digitally.

Customer keynotes from well-known companies such as Ford Motor Company, Lockheed Martin Aeronautics, and Vermeer Corporation delivered intriguing insights on how Dassault Systèmes products, including the **3D**EXPERIENCE platform and ENOVIA, are used to bring their products to market.

Specialists from Dassault Systèmes delivered numerous sessions on new products and capabilities available in the latest product releases and customers such as Emerson, FNSS, and Tesla discussed how they use ENOVIA to solve their PLM related business issues.

Pascal Daloz, Chief Executive Officer and Chairman of the Board of Dassault Systèmes, met with analysts for an open Q&A session, where a wide range of topics, including details related to the journey that was taken to ensure Gen 7 had the proper architecture to support AI and **3D UNIV+RSES**, were addressed.

Dassault Systèmes held their annual ENOVIA and **3D**EXPERIENCE User Conference March 11-12, 2026. Over 325 people attended the event in Boston, Massachusetts. The two-day event opened with Mr. Stephane DeClee, CEO of ENOVIA, and Mr. Morgan Zimmerman, CEO of Dassault Systèmes' latest brand, **3D**EXPERIENCE. Mr. Zimmerman's recent promotion and the elevation of the new brand demonstrate the importance of the **3D**EXPERIENCE platform to Gen 7.[1]

3D UNIV+RSES, is an approach to enabling a generative economy, that is driven by technology, including Artificial Intelligence (AI) and Virtual Twins, to elevate human know-how to solve the many problems in today and tomorrow's world. Industrial World Models are foundational AI models developed by Dassault Systèmes based on science and physics accessed using the virtual companions, Aura (for business), Leo (for engineering), and Marie (for science). Virtual Companions were covered extensively at 3DEXPERIENCE World in February 2026. **3D UNIV+RSES** expands Dassault Systèmes' concept of the Virtual Twin of the

[1] Research for this paper was partially supported by Dassault Systèmes

Product to include the Virtual Twin of the Organization including its structure and know-how and a Virtual Twin of the Value Model to optimize flows (of money, resources, and products). An example given described how a generative model headlight design could be built that incorporates not only the product, but also the regulatory and environmental requirements, as well the manufacturing constraints. By offering this type of development as a service, "Virtual Twin as a Service," customers can focus on delivering high-quality products faster.

Another topic covered by Mr. Zimmermann was the importance of managing intellectual property to ensure proprietary knowledge remains within the company. While Dassault Systèmes welcomes knowledge shared by their customers, they are committed to leveraging public physics and scientific knowledge and augmenting it with their own proprietary knowledge. He emphasized the need for proper governance, so a company's proprietary "know-how" remains sovereign and secure within its own secure knowledgebase and is never absorbed into competitors' models.

Customer Keynotes

Mr. David Kepczynski, Global Chief Digital Transformation Product Development at Ford Motor Company, delivered an overview of how Ford is using the latest Dassault Systèmes solutions to transform its product development process and shift toward systems-based engineering. As part of the transformation, they are migrating to a single CAD and Part BOM while unified systems for Materials Engineering Management, Virtual Validation (for Virtual Twins), Cost & Weight Management, and End-to-End (E2E) Change Management. Also of significant interest, Mr. Kepczynski noted that the new environment has been piloted on the new Universal EV platform and their F150 truck platform.

Ms. Sharon Sukhai, Systems Engineer, Lockheed Martin Aeronautics, detailed the company's strategic migration from legacy manual supply chain scheduling to a robust, automated digital thread. The solution leverages DELMIA Quintiq, the **3D**EXPERIENCE platform, and NETVIBES to support supply chain planning. This digital transformation enables an agile shift between back-scheduling for requirements and forward-scheduling for risk mitigation, supported by NETVIBES dashboards that replace fragmented spreadsheets with real-time program visibility.

Mr. Harold S. Sullivan, Director of Product Lifecycle Management at Vermeer Corporation, delivered a talk on the importance of Organizational Change Management (OCM). Vermeer makes industrial and agricultural equipment. Mr. Sullivan described the importance of OCM, and how the process is being executed at Vermeer, and some of the early results. The money quote was from a Vermeer engineer who stated, "Best new system launch I have ever seen at Vermeer." Dassault Systèmes made a great choice to bring this topic in as a keynote. OCM is critical to successful adoption and given the magnitude of change coming with generative and AI technology, companies will need to invest in OCM to achieve the expected returns on their investment.

Product and Customer Presentations

Beyond the keynotes, teams of experts from Dassault Systèmes delivered presentations on a variety of topics, including sourcing, supplier collaboration, design through manufacturing configurator best practices, and sustainability. In keeping with the Gen 7 theme and AI theme, many of the presentations addressed the theme of data science as part of enabling AI. This is critical to ensuring Aura, Leo, and Marie virtual companions have the right data and context to improve technical and business processes.

Dassault Systèmes has an extensive Cloud-based SaaS offering, and many ot their new capabilities, such as the virtual companions require cloud access. To provide support for on-premises customers, Dassault

Systèmes is offering Supplemental Cloud, which enables on-premises customers to leverage the cloud-only services via integration. This is a useful offering that will ease the adoption effort for important elements of Gen 7.

Select Customer Presentations

Emerson, FNSS, and Tesla all presented in breakout sessions each with a unique story. FNSS is a manufacturer of defense armored vehicles, that makes extensive use of the **3D**EXPERIENCE platform to develop their products. Previously an ENOVIA SmarTeam user, they have integrated many tools across their landscape and noted that although the number of software applications connected to the platform has increased, the overall complexity of the system has decreased, making it more manageable. They currently utilize ENOVIA, CATIA, DELMIA, and NETVIBES in support of engineering, machining, and real-time monitoring. Their next steps include establishing a unified product structure, implementing advanced variant configuration, enabling full modeling & simulation, and using AI for part costing via the NETVIBES OnePart AI-driven application.

Emerson's Measurement Solutions division is a long-term customer of Dassault Systèmes' **3D**EXPERIENCE platform who is currently on version 2021X and are developing plans to migrate directly to Gen 7 on SaaS to leverage the latest technology. Their environment is spread across thirty-three plants and Dassault Systèmes is assisting them with migration to reduce the change risk to ongoing business. We are looking forward to hearing updates as this project progresses.

Tesla, a company that rarely presents at user events, presented their planned approach to deploying the 2025X **3D**EXPERIENCE platform as a containerized solution on premises using Linux. The containerized approach enables them to avoid adding virtual machines and improves scalability. They have developed a process and related scripts to automate the deployment. They are looking for companies to collaborate with to further develop their approach.

The customer technical presentations were well attended and generated many questions that were answered by the presenters and Dassault Systèmes session leaders. The learning and networking opportunities in these sessions are a great reason to attend.

Executive Q&A

Mr. Pascal Daloz, Chief Executive Officer and Chairman of the Board of Dassault Systèmes, met with analysts for an open Q&A session, where a wide range of topics were discussed including AI, Lifesciences, and pricing. Regarding AI, Mr. Daloz noted the difference between a large language model (LLM) and Physics AI needed to develop products. An enormous effort to incorporate AI into its solutions has been undertaken at Dassault Systems over the past decade, with the biggest part of the journey focused on the architecture. The math and physics knowledge required is very different from the typical text and image output from LLMs. Additionally, it is important to note that they have invested heavily in synthetic data generation to support model training.

AI pricing remains a challenge for Dassault Systèmes and the software industry in general. As customers crave for new technology to be included in base products, the added value and operating costs justify extra charges. Mr. Daloz does not view AI as a threat to the PLM software market, seeing it instead as an enhancement to the platform. However, he acknowledges that workflow-based SaaS-delivered solutions with simple data models face real competition from AI-generated solutions.

Mr. Daloz noted that Lifesciences, is currently the company's largest revenue driver, making up 50% of the top 20 customers and noted that biology is "harder than physics." He referenced a 15-year-old Harvard project focusing on the system design of a cancer cell, which led to the acquisitions of Accelrys,

the basis of BIOVIA, and Medidata, and helped virtualize medical testing. He emphasized using AI for biomimicry (revealing "patterns of life") and achieving sustainability by "programming" to eliminate waste instead of just designing physical shapes.

Conclusion

Dassault Systèmes' unveiling of Gen 7 and the **3D UNIV+RSES** marks a definitive milestone in a 35-year evolutionary arc that has transitioned from basic 3D modeling to the holistic "Virtual Twins of products, organizations and value models." By integrating Generative AI with science-based Industrial World Models, Dassault Systèmes is moving beyond static data management into a future of autonomous, physics-driven guidance.

The strategic significance of Gen 7 lies in its architecture; as CEO, Mr. Pascal Daloz emphasized, this is a platform purposely rebuilt to sustain the rigors of AI-native engineering. The depth of adoption showcased by industry leaders—ranging from Lockheed Martin and Ford to Tesla and Emerson—underscores the fact that the **3D**EXPERIENCE platform and ENOVIA remain the backbone of complex PLM environments. Ultimately, Dassault Systèmes is signaling a shift where the digital and physical worlds are no longer just mirrored but inextricably linked—allowing companies to instantiate products faster, at lower costs, and with significantly reduced risk.

CIMdata views this transition as a critical step for manufacturers seeking to move from digital threads to intelligent, generative ecosystems. Replays of many of the presentations are available in ENOVIA's User Community and on YouTube.

About CIMdata

CIMdata, a global strategic management consulting firm, provides services designed to maximize an enterprise's ability to design, deliver, and support innovative products and services. For more than forty years, CIMdata has provided industrial organizations, providers of digital technologies and services, and investment firms with world-class insight, expertise, and best-practice methods on a broad set of product lifecycle management (PLM) topics and the digital transformation they enable. CIMdata also offers research, subscription services, publications, and education through certificate programs and international conferences. To learn more, visit www.CIMdata.com or email info@CIMdata.com.