

# SOLIDWORKS World 2017: Expanding the Eco-System

## *CIMdata Commentary*

### *Key takeaways:*

- *Dassault Systèmes' continued investment in SOLIDWORKS, as well as its connection to their 3DEXPERIENCE platform, illustrates a long-term commitment to add value and ensure that SOLIDWORKS remains a design platform of choice for its customer base.*
- *Dassault Systèmes is driving to reduce the distance between the virtual and the physical to zero.*
- *SOLIDWORKS World 2017 demonstrated the strength and size of the SOLIDWORKS community and greater eco-system that continues to develop around it.*

The 19<sup>th</sup> annual SOLIDWORKS World conference was held February 5-8, 2017 at the Los Angeles Convention Center, Los Angeles, California, USA. A large and enthusiastic crowd of over 5,000 SOLIDWORKS users attended the conference, reportedly the largest crowd ever. This year's theme was "The New, The Next, The Never Before." The general sessions focused on how specific SOLIDWORKS engineers and innovators have used it "to break the bounds of the 'possible' and create the next great things that has never been done before."

This year's general sessions were held in an "in-the-round" configuration, with the 360-degree stage in the center, surrounded by the attendees. This year's host, Ms. Tracy B. Wilson, an actor, writer, and photographer, kicked off the event by appearing "out of the blue" from a magician's cabinet, welcoming the crowd and introducing Mr. Gian Paolo Bassi, CEO, Dassault Systèmes SOLIDWORKS Corporation. Mr. Bassi engaged the crowd with his enthusiasm and energy, and even permitted a magician to cut him in half with a device designed in SOLIDWORKS. Fortunately, for Gian Paolo, the device worked according to design and he emerged unharmed.

Mr. Bassi made Dassault Systèmes' vision clear—to bring the power of the 3DEXPERIENCE platform to SOLIDWORKS users so that they could continue to design new, the next, and the never seen before products and experiences. He stressed that Dassault Systèmes continues to invest in SOLIDWORKS on both the desktop and a growing set of native web apps. He provided several examples, including how Dassault Systèmes enhanced SOLIDWORKS to support topology optimization, a highly valuable capability for design for additive manufacturing; the introduction of SOLIDWORKS CAM; and a few web native apps, like SolidWorks Xdesign (a browser-based 3D parametric design package). Dassault Systèmes' continued investment in SOLIDWORKS, as well as its connection to their 3DEXPERIENCE platform illustrates a long-term commitment to add value and ensure that SOLIDWORKS remains the design platform of choice for its customer base. To further illustrate this point, Mr. Paul Reed Smith and Mr. Jon Wasserman from PRS Guitars were joined on stage by guitarist Mark Tremonti to describe their collaborative effort and how SOLIDWORKS has played a major role in supporting it.

The next main stage speaker was Ms. Monica Menghini, Dassault Systèmes' Vice President Industry, Marketing, and Corporate Communications, and Chief Strategy Officer. Ms. Menghini focused her lively presentation on the future of SOLIDWORKS in the Age of

Experience—a topic that has been a key pillar of Dassault Systèmes’ movement towards the definition, development, and delivery of its 3DEXPERIENCE platform. Ms. Menghini did an excellent job describing SOLIDWORKS’ continued role in Dassault Systèmes’ platform strategy and how the design of experiences is what SOLIDWORKS is all about. Ms. Menghini’s talk was followed by Mr. Bernard Charlès, Dassault Systèmes’ Chief Executive Officer, President, and Vice Chairman of the Board of Directors.

Mr. Charlès expanded on the Age of Experience topic introduced by Ms. Menghini and described how “Dassault Systèmes is driving to reduce the distance between the virtual and the physical to zero” (i.e., making the digital representation the same as the physical object). He also stressed that the world is moving towards an experience economy and how the cloud is one way that Dassault Systèmes is providing experiences to their customers. He provided some customer examples that reinforced his comments. Finally, he concluded by reminding the audience that Dassault Systèmes purchased SOLIDWORKS twenty years ago and that in that time Dassault Systèmes has made significant investments in SOLIDWORKS to make sure that it continues to be a design solution of choice. Speaking to several SOLIDWORKS devotees it quickly becomes evident why SOLIDWORKS is still their solution of choice—its capabilities, its ease of use, and the value it provides (i.e., what new, next, and never before things it can design).

Other main stage presentations included a review of SOLIDWORKS’ various education and certification programs. Mr. Suchit Jain, SOLIDWORKS’ Vice President, Strategy and Community, for example, provided insight into SOLIDWORKS’ community progress—how it now has over 200,000 certified users and supports numerous maker spaces and fabrication labs. He also mentioned that MySOLIDWORKS had over 1 million visitors last year and described that the SOLIDWORKS education community has grown to have over 2.7 million participants. These are all excellent examples of SOLIDWORKS’ community strength and the growing presence of its eco-system.

One of the most thought-provoking presentations was given by Mr. Jason Silva, a television personality, filmmaker, and public speaker probably best known as the co-host of National Geographic’s *Brain Games*. Mr. Silva lectures internationally and tends to mix technology, philosophy, and science in a way that draws people’s attention (i.e., makes them think). He commented how he believes that this generation is witnessing “exponential emerging technologies.” This and other similar phrases can be found all over the Internet with a quick search, but Mr. Silva’s take wasn’t just about the technology. It was also about the philosophical and often scientific implications of these technologies. For example, he spoke about how virtual reality can be used as an “empathy machine.” He stressed how we need to see the big picture—including, as CIMdata states it, people, processes, and technologies need to be considered together and none of these three should be considered alone. His discussion fit well with Dassault Systèmes’ focus on the Age of Experience, as it tried to pull the engineer out of engineering to see the bigger picture.

Beyond the main stage there were dozens of special, educational, and technological sessions in multiple tracks. Additionally, there were several news conferences to introduce new technologies (e.g., from Stratasys and HP). Stratasys, a leading 3D printing and additive manufacturing solutions manufacturer, held a news conference where representatives spoke on how they “shape what’s next” and how their newly introduced line of high-end rapid prototyping solutions allow them to enter an era of 3D printing specialization. According to their representatives, the new Stratasys F123 Series was designed to be office-friendly, at a price point under US\$20,000. The Stratasys representatives stressed how SOLIDWORKS users can connect directly with the device via their GrabCAD connector to print in four

different materials. CIMdata identifies 3D printing and additive manufacturing as becoming key manufacturing tools for companies in multiple industries and that SOLIDWORKS must continue to support this movement, as well as provide additional manufacturing-centric capabilities. To support meeting these requirements SOLIDWORKS relies on their “Smart Manufacturing” strategy.

To date, SOLIDWORKS’ Smart Manufacturing strategy has encouraged more than thirty CAM solution providers to offer integrations with SOLIDWORKS. In addition, SOLIDWORKS developed 2 ½-axis machining and turning and rules-based machining functionality that will be released soon. SOLIDWORKS’ stated focus is on design for manufacturing. This broadens SOLIDWORKS appeal and usage, and will undoubtedly further convince customers to extend their use of the design-focused solution.

As in past years, SOLIDWORKS World 2017’s Partner Pavilion included a host of interesting solution partners and product showcases. With over 100 exhibits the pavilion floor was quite crowded. Partners included firms demonstrating technology solutions (e.g., 3D scanners, computers, 3D printers, and rapid prototyping); those exhibiting adjacent and supporting software solutions (e.g., CAM, data management, and mold and die design); and those offering services. Dassault Systèmes occupied the largest pavilion space, where they demonstrated various solution elements of their 3DEXPERIENCE platform. The largest contingent of partners came from the world of rapid prototyping. In all, sixteen solution providers in this rapidly growing space were represented. This clearly illustrates that 3D printing is no longer limited to large companies with hundreds of seats of CAD. Smaller companies (i.e., those typically using SOLIDWORKS) are also leveraging the technology. This is another indication of the size and strength of eco-system centered around SOLIDWORKS and its user community.

Once again, SOLIDWORKS World 2017 demonstrated the strength of the SOLIDWORKS community and how the greater eco-system continues to develop around it. SOLIDWORKS’ fit within Dassault Systèmes solution and platform strategy continues to grow and evolve as well. These are all positive signs. They illustrate Dassault Systèmes’ continued long-term commitment to the SOLIDWORKS community—the commitment to support, enhance, and evolve the solution, as well as provide additional value-added capabilities via Dassault Systèmes extensive set of offerings. For some time now, SOLIDWORKS hasn’t been a standalone solution, but a solution that is an integral part of Dassault Systèmes’ extensive solution offering. Since the introduction of the 3DEXPERIENCE platform, Dassault Systèmes delivered a platform not only for CATIA users, but one for all its solutions. The SOLIDWORKS community has a lot to look forward to.

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