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Siemens PLM Connection 2016

CIMdata Commentary

Key takeaways:

- "Monetizing innovation"—capitalizing on disruption is key to forward movement in the current technological environment
- Siemens PLM Software is moving to "Totally Integrated Automation"
- Companies must "own the edge" by using disruptive technology to create new products, solutions, and business models
- Solid Edge ST9 release announced expanded licensing options and an option for increased productivity using Teamcenter integration

On May 16, 2016, Siemens PLM Software users opened PLM World 2016 in Orlando, Florida. The event celebrated its 40th year with over 1,900 attendees from 423 different companies and 73 partners traveling from 30 countries worldwide. This annual gathering of Teamcenter, NX, and other Siemens PLM Software solution users met to learn and share their experiences. Several customers had large (10 to 40 person) groups that spanned much of their organization. New to PLM World this year was a "Customer Showcase" in which selected customers displayed some of their products and described how they were using PLM Software solutions.

Mr. Chuck Grindstaff, President and CEO of Siemens PLM Software, delivered the opening speech titled "Innovation for the Future." He characterized current technology as at a "tipping point" where technological progress in the twenty-first century will be equivalent to that of the prior 200 centuries combined. As products are getting smarter, he stated that we are experiencing "relentless innovation" with smart products everywhere incorporating increased complexity and shorter market windows. Mr. Grindstaff continued to describe how smarter products are changing the way products are realized with additive manufacturing processes, intelligent automation, and advanced robotics.

He encouraged companies to "monetize innovation"—to capitalize on disruption. He offered an example in the automotive industry where General Motors is capitalizing on the technology evolution toward self-driving cars with their partnership with Lyft, the ride sharing company. Rather than bemoan the fact that self-driving technology will allow for increased use of an automobile and result in fewer new sales, General Motors chose to capitalize on the disruption. They are investing \$500 million in Lyft and targeting the joint development of a network of on-demand autonomous vehicles.

Mr. Grindstaff then discussed the PLM industry and Siemens PLM Software's strategic position under the banner of "Ideation, Realization, and Utilization." He presented how the Siemens PLM Software suite of solutions fits within the digital thread of product development, from design authoring to manufacturing and utilization with plant and machine analytics. He stated that they are driving to TIA-Totally Integrated Automation, having spent more than \$2 billion dollars since 2013 to acquire solutions that support its strategy of building a platform of technology to span all domains and transform product engineering. He announced a new relationship to work with HP and their Multi Jet Fusion technology and devices to create new 3D printing solutions and integrate them with Siemens PLM Software solutions.

Mr. Terry Jones, founder of Travelocity.com, founding Chairman of Kayak.com, and current Chairman for Wayblazer, delivered the opening keynote address about the ways information

has found its freedom and that the internet has disrupted everything. He presented 10 drivers for change and disruption. He stated that technique follows technology and that leading companies "own the edge"—using technology to create new products, solutions, and business models. He said that to be successful, companies have to take risks to live in the world of disruption. Mr. Jones closed by stating that "creativity is about thinking new things and innovation is about doing new things."

Siemens PLM Software executives took the opportunity of announcing Solid Edge ST9 to the gathered industry analysts and media. The Solid Edge team led by Mr. John Miller, Senior Vice President, Mainstream Engineering Software, and Mr. Dan Staples, Vice President of Development highlighted the new release and addressed four key points in the solution offering:

- First, users have multiple licensing options, including the cloud which allows
 access and personalized settings from anywhere, or remain with a standalone
 solution. Users can mix and match options to best fit their business needs.
- Second, they described the "fast and flexible 3D modeling" aspects of Solid Edge with synchronous technology. One new capability is "sweep solid," the ability to sweep one solid body along a path on a second body to either add or subtract material.
- Third, users have scalable data management options. They can chose to use
 the set of data commands embedded within Solid Edge itself. If their
 management needs grow, they can leverage Teamcenter directly from within
 Solid Edge.
- Fourth, new support tools are available to assist users who are moving to Solid Edge from competitors' solutions.

In an executive panel question and answer session for PLM industry analysts, Mr. Grindstaff and his direct reports were asked what areas they consider their "best." Their consensus was threefold: integration—the manner in which their solutions interface with each other; their broad portfolio—the suite of solutions from authoring, simulation, manufacturing, and PLM applications; and their ability to handle the product transition into manufacturing. In a response to a CIMdata question, they admitted the release of "convergent modeling" in the Parasolid geometry kernel was indeed downplayed based on their belief that its importance will be realized through the applications that take advantage of the new technology. Convergent modeling is the integration of precise NURBS-based geometry with tessellated geometry. Expectations are that in the future both CAE finite element meshing and additive manufacturing may benefit.

CIMdata welcomed the openness with which the Siemens PLM Software team presented and discussed their solutions. PLM World offers a unique environment to speak with not only Siemens personnel, but also their end users and technology and service partners across numerous industries.

About CIMdata

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