

“Looking Outside” at Autodesk University 2013

CIMdata Commentary

Key takeaways:

- *“Collaborative Innovation” and “Looking Outside” were consistent themes cited to be keys to future success for companies of all kinds*
- *Autodesk continues to expand and enrich their Cloud offerings*
- *The addition of computer-aided manufacturing (CAM) offerings is Autodesk’s next step in filling out a more complete design and manufacturing suite of solutions*
- *Autodesk is evolving its business model—desktop, subscription, Cloud delivery—providing customers with multiple ways to obtain and use their tools and solutions*

CIMdata recently attended Autodesk University (AU) 2013 in Las Vegas, Nevada December 3-5, 2013. This was the sixth and final AU held during 2013. Over 8,000 people attended the five earlier events held at locations around the world and over 9,400 were present in Las Vegas. In addition, Autodesk estimated that over 35,000 people would attend the Las Vegas AU sessions over the Internet. One of the main themes at AU was “Collaborative Innovation.” At sessions entitled “Innovation Forums,” customers spoke about how they were changing how they thought about product development and delivery, and described the solutions they were using to achieve new levels of innovation. In support of this theme, Autodesk introduced several new cloud-based products including CAM 360.

Tuesday morning’s lead keynote speaker was Jeff Kowalski, Autodesk CTO, who described today’s product marketplaces as “volatile, uncertain, complex, and ambiguous” (VUCA). Future success will require companies and individuals to change their mindsets and think “Outside” in four areas: tools, people, work, and insight. Mr. Kowalski discussed the importance of thinking beyond the resources a company already has. Examples included working with tools accessed remotely that are not “owned” by the company, using open innovation and crowdsourced co-creation to get ideas and solve design problems, challenging for the organization to find blind spots in its thinking, and reverse mentoring—young people helping experienced users adapt to new technologies and work paradigms.

Autodesk continues to see impressive growth in their Cloud-based business. At AU they reported that:

- Autodesk 360 (A360) has more than 26 million logins—up 73% from 2012
- There are 14 million AutoCAD 360 subscribers
- There are over 17,000 Fusion 360 users across more than 95 countries
- 15,000 people use BIM 360 each month—up 60% over 2012
- Over 140,000 SIM 360 jobs have been run and users are averaging 10 jobs per week
- Over 10,000 PLM 360 users are working with over 60,000 workspaces
- Over 3,800 project are using InfraWorks 360

A360 is a strong platform for many of Autodesk’s Cloud-based solutions (some “360” offerings are recent acquisitions and are still being integrated). A360 will allow Autodesk to

expand their portfolio of Cloud-delivered solutions on a solid footing. The demos showed they have done a nice job integrating capabilities from the recent acquisitions of Inforbix (search) and Qontext (a social platform) for the benefit of users. They are helping lead the way in providing this new delivery model to manufacturing companies globally.

Autodesk also provided some updates on their work in CAM. In October 2012, Autodesk announced the acquisition of HSMWorks, a provider of integrated computer-aided machining solutions for SolidWorks. In yet another example of competition in the software industry, Autodesk has continued to invest in that product, while simultaneously developing Autodesk Inventor HSM, announced this fall. At AU 2013, Autodesk announced CAM 360, a Cloud-based CAM offering, which further leverages the HSM technologies.

CAM 360 is the manufacturing application within Autodesk’s “360” family of Cloud-based applications. CAM 360 uses the modeling tools found in Fusion 360, the 3D CAD industrial and mechanical design solution within Autodesk’s next generation Digital Prototyping platform.

Unlike standalone CAM solutions, according to Autodesk, CAM 360 users will enjoy the expanded computing power of the Cloud and also benefit from the Cloud’s ability to facilitate collaboration with coworkers, partners, and customers.

Autodesk’s plan is to release CAM 360 in 2014. Although Autodesk plans to offer equivalent functionality in CAM 360 as currently exists in HSMWorks for SolidWorks, early releases of CAM 360 will contain only a subset. According to Autodesk, the interactive user experience of CAM 360 is equivalent to that of a standalone CAM solution when used via Internet connection speeds in the range of 3.5 to 5.0 Mbps. Autodesk stated they will release a free 2.5-Axis beta version in mid-December 2013.

Brenda Discher, VP, Strategy and Marketing, talked about the next generation of digital prototyping and Autodesk’s continuing efforts to democratize manufacturing. According to Ms. Discher, factors such as open source hardware and software, crowdsourcing, and local/on-shoring are significantly changing the ability of companies to more quickly develop and deliver successful products, even as the global markets get more competitive. CIMdata believes that Autodesk’s efforts to offer new Cloud-based products are helping to transform the ways that companies acquire and use product design and development solutions. In turn, this is also helping to transform how those companies can work—collaborating from anywhere with anyone connected to the Internet, using both desktops and a wide variety of mobile devices—to more quickly define and create market winning products.

Conclusion

AU 2013 was a lively event that had a wide range of topics, one that CIMdata could only sample given the custom track created for the Media and Industry Analysts in attendance. The Innovation Forums were thought provoking, as intended, and had a nice energy from the thought leaders that populated them. AU 2013 highlighted Autodesk’s investments and other actions intended to transform their company from a “fast follower” of technology and ideas to one of the industry’s innovative leaders. They are rapidly expanding their product suite both in application functionality and breadth of solutions to encompass more of the product development and manufacturing lifecycle. Their Cloud offerings are showing good traction, and are just the beginning. Several talks provided a peek at interesting on-going work in Autodesk Research in systems engineering and other advanced PLM topics. If Autodesk can bring its democratization zeal to these and other problems, perhaps the outside will move inward.

About CIMdata

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