

Manufacturers invest in high-end software

In an exclusive interview with AMT, Robert "Buzz" Cross, Senior Vice-President, Manufacturing Solutions Division Autodesk, based in the US, Portland, Oregon, talks about the Autodesk concept of digital prototyping and how it can support Australian manufacturers to be more competitive in the current economic climate.



Barbara Schulz: How is Autodesk faring in the current economic climate?

Buzz Cross: I would say we are doing ok, revenue is down a little bit from where it was last year, but I think we're having a good solid year. But customers are certainly a little bit concerned although we are seeing better growth than our competitors.

BS: What is your biggest market outside the US?

BC: Europe is our biggest market. The US is our single biggest country, followed by Germany and Japan. The market in Brazil, Russia, India and China is still relatively slow, growing very, very rapidly though.

BS: Do you feel that companies are investing in technology and software that helps them to be more competitive especially in this economic climate in Australia as well as in the US?

BC: Yes, I think you've hit it exactly. The companies that are investing are investing in the higher-end tools. I think, the companies that do want to invest want to make a change, they want to improve their products and improve their competitive position. We have a whole range of customers here in Australia, like Cochlear, who really do impressive work with our products.

BS: What products do you offer to help manufacturers to remain competitive?

BC: Let me explain our concept to help customers deliver. We produce software for digital prototyping. With our software, our customers can design, simulate and visualise the product before they produce it. It helps them to get their products to market faster, it lets them know their product's behaviour before they produce it.

Costs are also reduced due to the elimination of building prototypes and timeframes. Generally, we offer a complete solution from concept to design, FEA and simulation, dedicated to the type of user.

BS: Do you see an increased shift from 2D to 3D modelling in the industry?

BC: Currently, only about 25% of our customers use 3D software. So we think we are still at the very beginning of the 3D cycle. Of course we offer 2D software with which our customers can be more productive, but they can be far more productive if they shift to 3D - so we try to help to make that shift possible. The ability to design something in 3D and create a better product is a huge benefit to customers and we show them how to do that.

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BS: What is your impression about Australian companies' willingness to improve and adopt new technology?

BC: I was quite impressed with the customers I've met here in Australia. I thought there was a lot of innovation, a desire to do things in new different ways, some of our customers impressed me with really elegant design, they do incredible work. Another thing we do is helping our customers to deliver a sustainable design, help engineers to understand the environmental effect of the products that they are producing. They do want to develop sustainable products, but very often don't understand what the effect is. We think sustainable design is going to be an increasingly large focus for customers and consumers.

Autodesk® takes you beyond 3D to Digital Prototyping.

Autodesk

Gain the competitive edge with Autodesk® Inventor™

In today's fast paced world and against a backdrop of economic uncertainty, designers and manufacturers are constantly seeking ways to gain the competitive edge. This is why so many companies are now turning to Digital Prototyping.

Digital Prototyping gives conceptual design, engineering, and manufacturing departments the ability to virtually explore a complete product before it becomes real. With Digital Prototyping, manufacturers can design, visualise, and simulate products from the conceptual design phase through the manufacturing process, boosting the level of communication with different stakeholders while getting more innovative products to market faster. By using a digital prototype, manufacturers can visualise and simulate the real-world performance of the design digitally, reducing their reliance on costly physical prototypes.

Race track success for Triple Eight

In the last decade, Triple Eight Race Engineering (Triple Eight) has become one of the largest and most successful touring car operations in the world. Autodesk® Inventor™, the foundation for Digital Prototyping, enabled Triple Eight's engineers to quickly and easily create an accurate digital prototype of every component and this allowed Triple Eight to simplify and accelerate their concept-to-manufacturing process.

As Peter Jamieson, Commercial Operations Manager of Triple Eight concludes, "Without Autodesk®

Inventor™, the design of the car would have been impossible. Every component of the car is created, modelled, and analysed using the software."

Making Australian genius a commercial success

In 1999 Thompson Couplings Limited (TCL) acquired the sole ownership of the 'Thompson Coupling' - a new Australian Invention. This is a true CV joint that allows two shafts to rotate at constant speed and is the first ever to have no load bearing sliding surfaces. By harnessing the power of Autodesk® Inventor™, TCL engineers and designers can simulate in real-time the capabilities of the coupling throughout its full operating cycle and reduce the time spent developing designs.

David Farrell, Director of Engineering, TCL says, "Autodesk® Inventor™ has been invaluable ... we have saved considerable time. Autodesk® Inventor's true benefit for a small business such as ours is the affordable cost combined with the ease of operation. It is very easy to learn and come up to speed with its functionality."

According to an independent study by the Aberdeen Group, best-in-class manufacturers use Digital Prototyping to build half the number of physical prototypes as the average manufacturer, get to market 58 days faster than average, experience 48 percent lower prototyping costs, and ultimately drive greater innovation in their products. Autodesk's Digital Prototyping solutions helps customers achieve these results.



Autodesk® Inventor™ is the Answer

Autodesk® is a world-leading supplier of engineering software, providing powerful Digital Prototyping technology within the reach of mainstream manufacturers, Autodesk® Inventor™ is changing the way manufacturers think about their design processes and is helping them create more productive workflows. The Autodesk® approach to Digital Prototyping is unique in that it is scalable, attainable, and cost-effective, allowing a broader group of manufacturers to realise the benefits with minimal disruption to existing workflows. It also provides the most straightforward path to creating and maintaining a single digital model in a multidisciplinary engineering environment.

Learn more about how the Autodesk solution for Digital Prototyping helps manufacturers become best-in-class.

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