Superior design

As part of its commitment to deliver products that are innovative but beautiful too, Microsoft Devices Group has adopted Dassault Systèmes' high tech industry solutions based on the 3DEXPERIENCE platform. The result is improved cross discipline collaboration, for higher design impact

BY REBECCA LAMBERT

"How many times have you picked up that phone, MP3 player, tablet, new electronic device and put it back on the shelf?" asks Olivier Ribet, vice president of High-Tech Industry at Dassault Systèmes. For every brilliantly designed, successful product, hundreds of failed products litter the shelves of electronics stores and remain unsold. According to Ribet, this is because they don't capture and hold the consumer's attention.

"Designing for that 'first moment of truth' is critical," he explains. "The consumer experience, how the product looks and feels, and the delight it generates, is a major focus point in today's high tech industry," says Ribet.

The Phones team within Microsoft Devices Group is responsible for the company's devices strategy, including Microsoft Lumia smartphones and accessories, and it takes product design very seriously.

"We want to be known for beautiful and technologically advanced products that help people do more and provide them with great experiences when they access information or simply

communicate with one another," says Pauli Korhonen, a solution delivery manager of mechanical engineering at Microsoft. In 2014, Microsoft made important game-changing decisions to streamline the way in which it develops products and leverages its design talent. "From an IT perspective, we were using heavily customised third-party applications that resulted in a too high total cost of ownership to keep software maintained and up to date," says Korhonen. "We, therefore, needed to standardise our installation at all our development sites around the world to improve product design cycle times and data quality, to provide all stakeholders with access to accurate product information, and to increase the efficiency of our R&D and manufacturing entities."

The group adopted Dassault Systèmes' 3DEXPERIENCE platform alongside two industry-specific solutions called HT body and Smarter, Faster, Lighter to streamline product development. "We help high tech companies imagine, engineer, deliver and market successfully smart connected experiences in

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the age of the internet of things," says Ribet. "Based on the 3DEXPERIENCE platform, our industry solutions allows them to create digital, durable and desirable experiences."

For a global organisation, providing all stakeholders with remote and simultaneous access to product information shortens development cycle times and improves design quality – and this is what the solutions from Dassault Systèmes help them to do. "With the 3DEXPERIENCE platform we have real concurrent engineering with everyone working on the same design at the same time," says Korhonen.

Smarter, Faster, Lighter further enhances collaboration by allowing multi-disciplinary teams to work simultaneously on product development. This improves profitability by accelerating time to market and reducing engineering costs.

Smarter, Faster, Lighter provides a clear view of the product as it evolves, allowing Microsoft to design and add individual components

"Our products are increasingly sophisticated because of the interdependence among mechanical housing, printed circuit board and assembly process," says Korhonen. "Smarter, Faster, Lighter supports the integrated approach that is essential to any mechatronics design with end-to-end traceability. Multidisciplinary teams have online access to our environment. They work in concert and are aware, at all times, what their colleagues and other project participants are doing and what their requirements are. The design matures as an ensemble, which minimises costly re-dos and product recalls."

HT body, meanwhile, ensures that the final product looks as good as it can be. According to Ribet, it's the 'ultimate design experience'. "It gives you a platform where your designers can explore their ideas and effectively push the best designs further," he says. "It helps any design team to innovate and create, which ultimately results in great aesthetics in the final product."

It's also highly secure. "This is very crucial for a global business, because it gives everyone access to the same information, which results in shorter development cycle times and better quality designs," Ribet adds. "When everyone sees the latest designs, they are able to adequately improve on it, all while safeguarding their designs from prying eyes."

Today, hundreds of users in Microsoft Devices Group across Europe, the Americas and Asia use the 3DEXPERIENCE platform, bringing together talent spanning multiple disciplines,

from design and engineering to sourcing and manufacturing. Ultimately, this is helping them to simplify the way they design and develop the next generation of devices.

"We now want to provide key suppliers and other disciplines in our global organisation with access to this platform and the high tech industry solution experiences to streamline collaboration even further by eliminating the need to send information back and forth," says Korhonen. "Extending these experiences to other stakeholders will enable them to participate in the design effort as well, and to exchange ideas, which will lead to exciting products that help people do more." ◎