

HIGH TECH CASE STUDY  
**DONG YANG E&P**



### Challenge:

DONG YANG E&P needed to improve the efficiency of its development teams and their ability to collaborate throughout the product development lifecycle.

### Solution:

The company chose the **3DEXPERIENCE**® platform and its industry solution experience for high tech companies, *HT body*, to boost collaboration and productivity.

### Benefits:

Innovation increased due to enhanced interaction between team members and early detection of design issues spiked from 5% to 45% increasing product quality and helping to minimize downstream manufacturing issues.

## LOOKING TOWARD GLOBAL LEADERSHIP

Founded in 1987, DONG YANG E&P focused on cementing its leading position as Korea's number one switch mode power supply (SMPS) manufacturer before exporting its technology abroad. It launched its global expansion by establishing a plant in Qingdao, China in 2003, offices in Slovakia and Romania in 2006 and one in Vietnam in 2008. DONG YANG E&P has experienced steady growth and continues to focus on going beyond being Korea's top SMPS manufacturer to become the world leader in this domain.

To achieve global leadership, DONG YANG E&P needed to improve collaboration between product development teams. The company already had a product lifecycle management (PLM) system in place to manage product-related data, yet it needed a platform that would facilitate collaboration and boost its global competitiveness even further. The company also believed that to achieve better product quality, it had to increase problem detection early on before going to mass production.

DONG YANG E&P chose Dassault Systèmes' **3DEXPERIENCE**® platform and its *HT body* industry solution experience to boost collaboration between its designers, engineers and manufacturing teams, and to shorten product development time. In the past, collaboration between teams only began after a product took shape. Communication was limited to the development department. Today, with *HT body*, all departments involved in product development enjoy real-time collaboration.

"The **3DEXPERIENCE** platform provided our company with an opportunity to create an enterprise-wide collaborative platform," Youn-Ik Nam, Managing Director of R&D at DONG YANG E&P, said. "With *HT body* we can estimate the cycle time from the early stage of development to manufacturing and fine tune the diversification of the supply chain. The results were remarkable. As a result, the rate of early-problem identification before product completion, which was about 5%, increased nearly tenfold to 45%. Going through a thorough pre-verification process before completing a product allows us to obtain an accurate manufacturing-ready design that helps minimize manufacturing errors at the mass production stage while further improving the quality of our products," he said.

In today's experience economy, high tech products must boast more than just functional or technical prowess, they must also seduce consumers at an emotional level. Increased collaboration helps DONG YANG E&P create innovative products that enhance the customer experience. "*HT body* promotes innovation because project stakeholders have more opportunities to interact with one another, exchange ideas



**"The **3DEXPERIENCE** platform provided our company with an opportunity to create an enterprise-wide collaborative platform."**

— Youn-Ik Nam, Managing Director of R&D

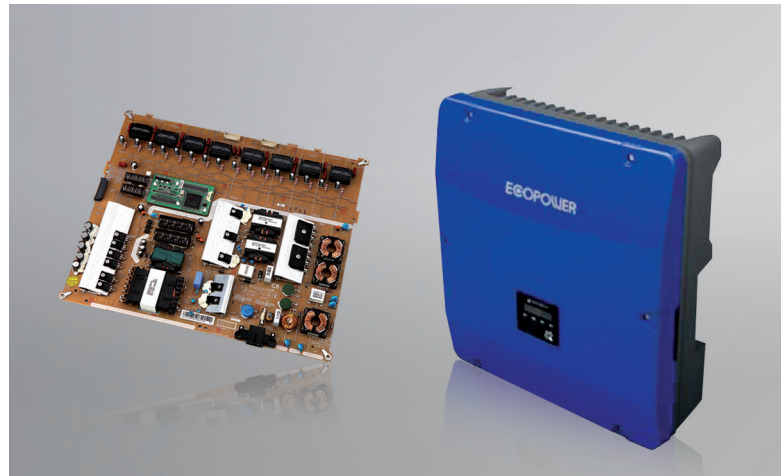
and explore more design options. This improves the way our electronic devices are designed and produced,” Youn-Ik Nam said.

“Moreover as product lifecycles in the high tech industry are considerably shorter than in other industries, from three to six months, with *HT body*, we make faster decisions thanks to more accurate product management. For example, with the **3DEXPERIENCE** platform and *HT body*, project teams and decision makers at DONG YANG E&P have a precise view of the current project status and can react quickly. Consequently, delays that occurred during product development decreased to less than 10%.”

### **GOAL TO BECOME THE WORLD’S TOP SWITCH MODE POWER SUPPLY MANUFACTURER**

Now that the foundation is laid, DONG YANG E&P is preparing for another leap forward. Currently, 45% of design issues are detected early in the development process. The company plans to expand its use of the **3DEXPERIENCE** platform to improve on that rate, as well as ramp up communication among employees across all stages of product development from planning to design and through to production. “This will further boost innovation and help detect errors before product manufacture,” Youn-Ik Nam said.

“DONG YANG E&P’s greatest competitive advantage is its fast technological response to customer demand,” Youn-Ik Nam said. “We were able to reinforce our competitiveness with Dassault Systèmes’ *HT body* and the **3DEXPERIENCE** platform, and since it is a scalable platform, as we evolve, we will expand the way we use it as well,” he concluded.



Top image: SMPS and Solar inverter

Bottom image: Wireless and wired power chargers

**Focus on DONG YANG E&P**

Manufacturer of switch mode power supplies, chargers, DC converters and solar inverters.

**Products:** switch mode power supplies, cell phone chargers, DC converters, solar inverters

**Revenue:** KRW 520 billion / US\$ 472 million (2012)

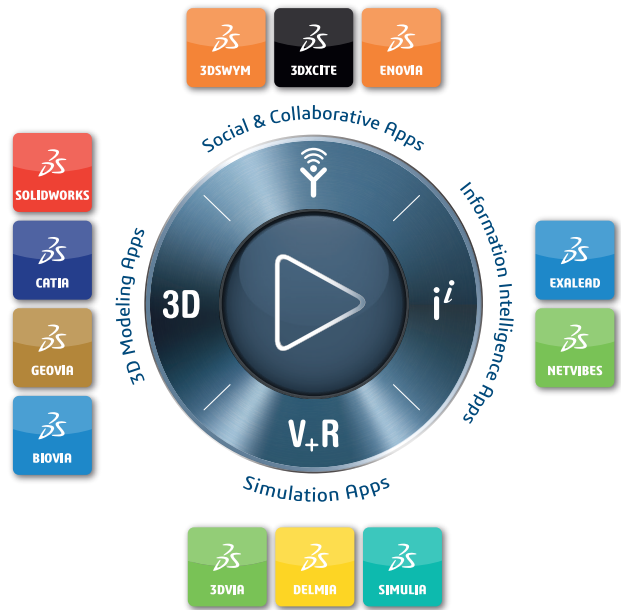
**Employees:** Approx. 4,850 (Korea: 450, China: 3,000, Vietnam: 1,400)

**Headquarters:** Jinwisandan-ro, Jinwi-myeon, Pyeongtaek-shi, Gyeonggi-do

**For more information**  
www.dyenp.com

**Our 3DEXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.**

Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 190,000 customers of all sizes in all industries in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com).



©2015 Dassault Systèmes. All rights reserved. 3DEXPERIENCE®, the 3DEXPERIENCE logo, CATIA, SOLIDWORKS, ENOVIA, DELMIA, SIMULIA, GEOVIA, EXALEAD, 3D VIA, BIOVIA and NETVIBES are commercial trademarks or registered trademarks of Dassault Systèmes or its subsidiaries in the U.S. and/or in other countries. All other trademarks are owned by their respective owners. Use of any Dassault Systèmes or its subsidiaries trademarks is subject to their explicit written approval. Images courtesy of Dong Yang E&P.