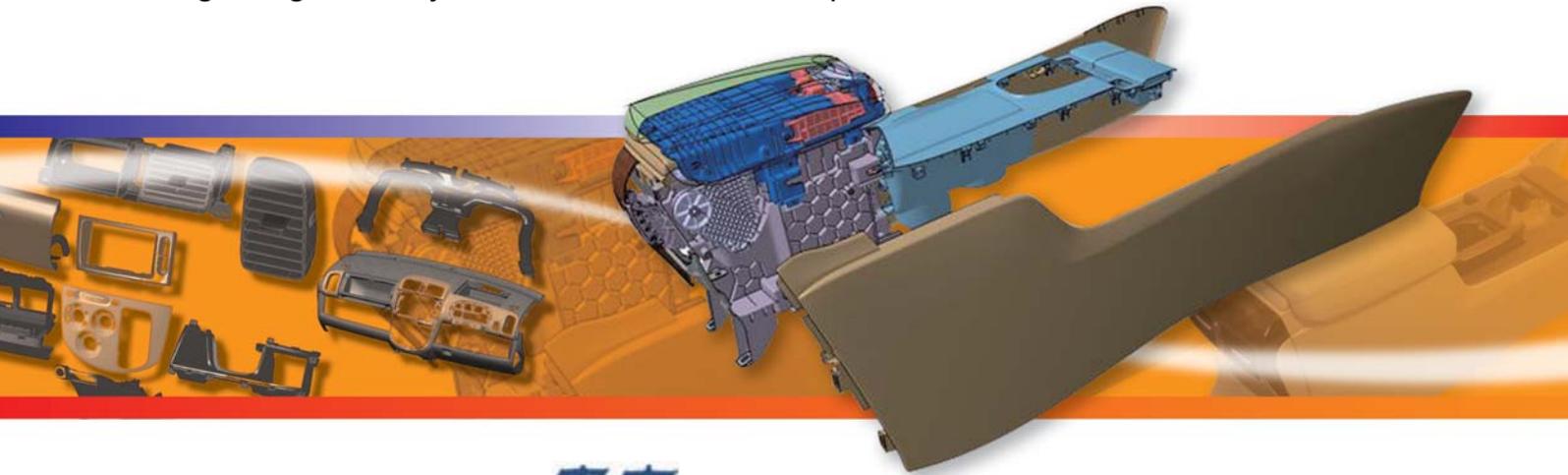


Moriroku Technology

Reducing design time by 30% with CATIA PLM Express



Overview

■ Challenge

Moriroku Technology needed to improve design productivity to reduce time to market and increase its competitive edge.

■ Solution

The company adopted the CATIA for Automotive Suppliers offering based on CATIA PLM Express.

■ Benefit

Using the concurrent design capabilities of CATIA PLM Express, Moriroku Technology styling and mechanical designers shortened design time by 30% and streamlined product development.



"In a fiercely competitive international context, design-to-production cycle times for new cars is getting progressively shorter and pressure to reduce costs is particularly intense. In the last few years, the market environment has changed dramatically."

Tetsuo Toda
production headquarters and general manager
Technical Research Center
Moriroku Technology

Leading manufacturer of plastic interior and exterior automotive parts

Japan-based Moriroku Technology is a leading manufacturer of industrial chemicals and plastics, as well as a supplier of automotive parts. The company focuses on satisfying the growing market demand for lighter, smaller and hybrid cars that are environmentally friendly.

In a fiercely competitive international market, design-to-production cycle times for new cars is getting progressively shorter and pressure to reduce costs is particularly intense. "In the last few years, the market environment has changed dramatically," said Tetsuo Toda, production headquarters and general manager of Moriroku Technology's Technical Research Center.

Company objective: reduce development time by two-thirds

A long time user of Dassault Systèmes' virtual product design solution CATIA, Moriroku Technology has set an ambitious goal. "Our aim is to reduce development time by two-thirds," said Takashi Okuyama, Design Dept. Technical Research Center, Moriroku Technology. "We've made considerable headway in the creation of templates for exterior parts with CATIA." Following up with templates for interior parts, the company has also partially automated design using CATIA's knowledgeware and standardized company design know-how.

Further design productivity improvements

After its success with template creation, Moriroku Technology moved to further increase production efficiency by responding faster to design modifications. Each car model has unique specifications for interior parts such as the dashboard and glove box.



“To adapt the parts to the legal regulations and safety standards that vary between countries, design modifications are inevitable,” said Toda. “In addition, in a highly competitive market, development time is shorter and design modifications are frequently repeated.”

To increase its competitive edge, Moriroke Technology selected the CATIA for Automotive Suppliers offering based on CATIA PLM Express. “All the functions we needed were together in one package, which also offered a considerable price advantage,” said Okuyama. “This offering enabled us to accelerate the process of standardizing our development procedures. Previously when doing each layout during the concept design phase, designers used various tools that made integration difficult. The CATIA 2D Layout for 3D Design capabilities, which are included in the CATIA for Automotive Suppliers offering, enabled us to have the construction criteria, dimensions and restraints reflected seamlessly in the 3D design, directly from the 2D data.”

Functional modeling

To further increase design productivity and flexibility, Moriroke Technology takes full advantage of the functional modelling capabilities in the Automotive Supplier offering. With this history-free approach, the order in which features are created has no impact on the

design itself, giving designers greater freedom in the creation phase by allowing them to focus exclusively on the design intent. The built-in associative intelligence of functional bodies, volumes, and features ensures quick and safe design changes and fosters concurrent engineering, as the design intent is clearly legible by any designer at any time. The functional modelling capabilities also include a wide range of intelligent features that encapsulate industry-specific behaviours to take into account manufacturing constraints and save considerable time when elaborating on complex forms.

“Overall, we reduced the total number of man-hours by 30% thanks to CATIA’s functional modelling capabilities and standardization of modeling for large-scale designs,” said Yuichi Araki, Design Dept., Technical Research Center, Moriroke Technology.

Moriroke Technology’s goal is to further raise the design standards of the company, improve development productivity, and strengthen its competitive edge. To do this, Moriroke Technology’s has already begun additional training to support the increasing momentum. The company also plans to continue to extend development to the company including overseas offices.



“The functions we needed were together in one solution - CATIA PLM Express. This offering also accelerated the process of standardizing our development procedures.”

Takashi Okuyama
Design Dept, Technical Research Center
Moriroke Technology



“For large-scale designs or design modifications, we reduced the total number of man-hours by 30% thanks to standardization with CATIA.”

Yuichi Araki
Design Dept, Technical Research Center
Moriroke Technology



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