

Consumer products

Joyoung

Joyoung uses Siemens solutions to improve product development and manufacturing quality and efficiency

Product

Teamcenter

Business challenges

Product data uniqueness Product data change management

Improving product development efficiency

Keys to success

Implement PLM system from Siemens Digital Industries Software

Deliver a streamlined user experience with Active Workspace

Continuously improve data/ information consistency

Manage knowledge

Improve standardized management of product development process

Implement best-practice business rules

Results

Improved product data search efficiency by more than 80 percent

Reduced waste/loss each year by more than RMB one million yuan

Reduced product development cycle time by 15 percent Teamcenter enables Joyoung to improve product data search efficiency by more than 80 percent.

China's most influential small household appliance brand for eight consecutive years

Joyoung Co. Ltd. (Joyoung), a company focused on development, production and sale of kitchen appliances, was founded in 1994 and went public on the Shenzhen Stock Exchange in 2008. Over more than 20 years of rapid development, Joyoung's production output has grown continuously. The sales volume of its main product line, soy milk machines, has been the highest in the industry for many years, enjoying a market share of at least 70 percent. Currently, Joyoung is expanding in the kitchen appliance sector by continuously introducing new products.

The company's main products comprise several series and more than 300 models, including soy milk machines, noodle machines, juicers, electric pressure pots, induction cookers, food processers, electric cookers, electric kettles, electric rice cookers, range hoods, water purifiers, and others.



"The use of Teamcenter has changed Joyoung's methods of product development and knowledge management."

Jing Jin PLM Project Manager Joyoung Joyoung products are very popular among consumers. In 2016, the company realized a total industrial output value of over RMB 7 billion yuan and profits of RMB 760 million yuan. A famous brand in China, Joyoung has received many honors, including recognition as a National IP Advantageous Enterprise, National Trademark Strategy Model Enterprise, China Good Faith Model Enterprise, Shandong Province Governor's Quality Award Winner, National High-tech Enterprise and National Light Industry Computerization and Industrialization Model Enterprise.

A reliable PLM partner

When choosing a product lifecycle management (PLM) software solution, Joyoung considered the following key criteria: firstly, the PLM system should be a proven product that is influential in the industry; secondly, it must have successful implementations and application cases in the household appliance industry; thirdly, it should be accompanied by strong team implementation and technical support capabilities. After comprehensively considering these criteria, in 2009 Joyoung chose Teamcenter® software from Siemens Digital Industries Software.

With the implementation of Teamcenter, Joyoung gradually discovered that the PLM solution is more than a data management system. The business rules embedded in Teamcenter are derived from industry best practices and help standardize and optimize Joyoung's business processes. In addition, Siemens Digital Industries Software's technical and business support teams provided Joyoung with expert guidance in formulating business rules.

In the planning stage, Siemens Digital Industries Software conducted detailed business research and status assessments and offered insightful recommendations for the scope of system implementation. When Joyoung and its consultants encountered challenges during the implementation process, Siemens Digital Industries Software provided timely troubleshooting and diagnosis and proposed solutions. From problem identification to resolution, Siemens Digital Industries Software provided expert support.

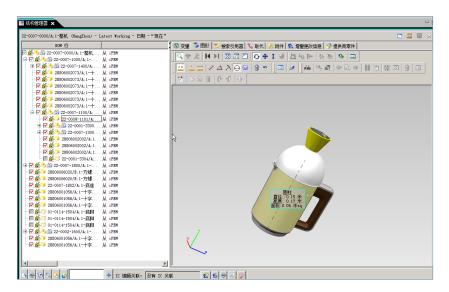
Consolidating the development foundation

Joyoung has for many years applied computer-aided design (CAD) tools to its

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Jing Jin
PLM Project Manager
Joyoung





product design and development and technical research activities. Before 2008, Joyoung mainly used domestically developed enterprise resource planning (ERP) software. In 2007, Joyoung deployed the Oracle® ERP system, which officially went online in 2008. The ERP solution played a crucial role in helping the company manage its business resources.

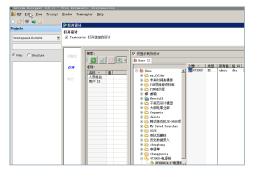
Joyoung uses Teamcenter primarily for data and project management and application software integration management, enabling collaboration and process automation for users across the product lifecycle. The company has tailored Active Workspace, the innovative interface for Teamcenter that provides users with a streamlined and intuitive PLM user experience, to support the development of all product lines.

When the company started using Teamcenter, Joyoung already had many product lines and wanted to eliminate duplicate data, re-use parts and assemblies, manage product data changes and improve development efficiency. An interface to the ERP system provides direct access to data such as product development and manufacturing materials and bills of materials (BOMs).

Improved corporate business process flows

In the project implementation process, Joyoung selected more than 20 full-time employees from all business divisions. In the upfront planning and business research stage, core personnel of all business divisions and functions participated in business research and the design of system business rules.

The entire implementation process was headed by the PLM project department at Joyoung, with participation of the IT information management department, the business division technical management department and the research and development (R&D) department.





The first task in the implementation process was the determination of business rules and included research and streamlining of development process flows, as well as the research into data access rights and approval process flows. The business plan design included change management, repository construction, compilation of documentation for system configuration and business rules including test cases and business and operations manuals. Employee training included business rules and actual operation instruction and examinations, using online video and micro-course training. After system activation, a dedicated tutor followed the user's business process, trained key users and conducted subsequent promotional activities.

During the entire project implementation process, Joyoung and its consultants were able to complete their tasks, and Siemens Digital Industries Software supported the effort with the release of new solutions. Effective cooperation between Joyoung, Siemens Digital Industries Software and the implementation consultants enabled a successful project upgrade.

Improved product development and manufacturing quality and efficiency

Currently, Teamcenter is widely used at Joyoung for management of data for product planning, research and development, production, maintenance, repair and service.

"In the future, Joyoung hopes to make full use of Siemens Digital Industries Software's capability for consolidating resources to rapidly move from market requirements to products and improve the process from development and design to product service."

Solutions/Services

Teamcenter siemens.com/teamcenter

Customer's primary business

Joyoung Co. Ltd. was established in 1994 and successfully listed on the Shenzhen Stock Exchange in 2008. It is a modern enterprise that specializes in R&D, manufacture and sale of kitchen appliances. Now Joyoung has more than 4,000 employees, and has multiple manufacturing and R&D facilities in Jinan and Hangzhou with annual production capacity reaching 30 million. www.joyoung.com

Customer location

Hangzhou, Zhejiang Province China "The use of Teamcenter has changed Joyoung's methods for product development and knowledge management," says Jing Jin, PLM project manager at Joyoung. The system's value relating to data accuracy, timeliness and search is significant.

The ability to link data is a convenient tool for precisely determining the scope affected by a change. Teamcenter also provides very good examples of business rules that are easy to understand; the rules have been optimized and consolidated with corporate processes and have helped improve corporate business efficiency. The system creates base data that provides a foundation for improving business and helps set goals and drive improvement in project management and data accumulation, enabling establishment of standard times for specific business operations. Finally, the upgraded system has more stringent requirements for users as it seeks to balance user convenience with project management efficiency.

Many factors affect the efficiency and quality of product development and production processes. The results of Teamcenter implementation at Joyoung show that product data users now spend less time on searching for data, and search efficiency has improved more than 80 percent. In the past, data errors resulted in significant wastes of parts and tooling, but now the improved data accuracy has



reduced waste by at least RMB one million yuan. Finally, the product development lifecycle has been getting shorter each year due to market competition; current development cycle time is about 15 percent shorter than before the implementation.

"Teamcenter is very helpful for Joyoung in terms of both data management and business management," Jin says. "It has enhanced Joyoung's business process, making work more systematic and efficient. In the future, Joyoung hopes to make full use of Siemens Digital Industries Software's capability of consolidating resources to move quickly from market requirements to products, and improve the process from development and design to product service."

Siemens Digital Industries Software

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