

DongKuk Steel Increases Use of Corporate Content, Promotes Real-Time Collaboration



DongKuk Steel
Seoul, Republic of Korea
www.dongkuk.com

Industry:

Industrial Manufacturing

Annual Revenue:

US\$7.89 billion

Employees:

1,914

Oracle Products & Services:

Oracle WebLogic Server
Oracle Universal Content Management
Oracle Database
Oracle Advanced Compression
Oracle Advanced Security
Oracle Real Application Clusters

Oracle Partner:



DK UNC
www.dkunc.co.kr

“By implementing a centralized document management system based on Oracle Universal Content Management, we turned company documents into intellectual assets and created an effective monitoring system to prevent these assets from being leaked. This led to real-time multilateral collaboration and a 24-hour ‘mobile’ office.” – MyungSup Byun, IT Advisor, DongKuk Steel Group and CEO, DK UNC

Founded in 1954, DongKuk Steel manufactures steel plates for shipbuilding (tankers, bulk carriers, and LPG and LNG carriers); bridges, buildings, and steel structures; oil pipelines and boilers; and machine parts. The company produces three million tons of crude steel and 5.6 million tons of steel products a year. It has four plants in Korea and one in Brazil.

In 2006, DongKuk Steel launched the first stage of its Management Reform project, which involved standardizing data and implementing an enterprise resource planning (ERP) system to streamline and integrate manufacturing and resource management processes. The second stage of the reform project required documents, images, and multimedia data to be consolidated in a central repository.

For this task, DongKuk Steel selected Oracle Universal Content Management to build a document management system. The company’s documentation is now stored centrally, making it easier for staff to search for and retrieve paperwork; improving collaboration between employees in multiple locations; and ensuring confidential business data cannot be leaked externally.

Turning Business Data into Corporate Assets

One of the biggest challenges facing manufacturers such as DongKuk Steel is how to collect and store business data such as documents, images, multimedia files, and blogs in a central location and make it easily accessible to staff. This data, typically confidential material about core technologies that the company has invested years of time and money on developing, must also be protected from security breaches.

Key Benefits:

- Streamlined document management and eliminated version control issues by deploying a central document management system to store and archive design blueprints
- Increased collaboration on documents from 10 to 20 cases; boosted the use of corporate content by five times; and lifted the registration of documents as corporate assets from 60% to 99%
- Cut search time by 83%
- Improved efficiency by enabling staff in different offices and countries to collaborate in real time
- Prevented confidential business data from being leaked by implementing new document security functions

There is also a need to reduce paperwork, which usually comprises 60% to 70% of administrative tasks in DongKuk Steel, to reduce resource waste and the chance of data leaks.

Realizing that business documents are corporate assets, DongKuk Steel decided to establish a central document management system. The aim was not just to improve document management, but to institute paperwork reform to renew the culture and capability of the organization and transition to a smart, ‘mobile’ office.

Streamlined Document Management

DongKuk Steel put document sharing, security, and collaboration as the three goals of the document management project, with the aim of increasing the efficiency of administrative tasks. The company deployed Oracle Universal Content Management to build a system that manages the entire document lifecycle, from generation, review, and approval to searching, storage, archiving, and disposal. Following an audit, all corporate material previously stored on disparate systems and personal computers were placed in the Oracle document management system.

In the past, multiple copies of the same document were stored on individual PCs, making it impossible for staff to know if they were modifying the latest version. Now, a single master copy is stored on the document management system for staff to review and amend. This has eliminated version control issues, enabled real-time collaboration between staff, and improved efficiency.

When an employee resigns, changes to a different role, or is transferred to another department during an internal restructure, the handover of documents can be completed by a simple change of ownership notification in the document management system.

Collaboration Improved

The ease at which documents can be shared has increased the use of corporate content and improved collaboration across the organization. Instead of relying on e-mail and phone calls to communicate, staff can view documents in real time with colleagues in other offices, as well as share content from wikis and blogs.

“The Oracle document management system has created a ‘mobile’ office environment that allows global collaboration unrestricted by time, location, or language,” said MyungSup Byun, IT advisor, DongKuk Steel Group and CEO, DK UNC.

DongKuk Steel expects collaboration on documents to increase from five to 10 cases in the past, to as many as 20. The company also expects the use of corporate documents to increase five-fold from between 10 and 20 cases, to 50 to 60. It also believes the registration of documents as assets in the document management system will rise from 60% to 99%.

Search Time Cut by 83%

In the past, the document search system was based on simple keyword matching and analysis of query terms for drafts saved on an individual notebooks or PCs, so it could take at least an hour to search for a document. This unsophisticated way to locate documents often resulted in the wrong material being retrieved or long wait times.

Oracle Universal Content Management offers a semantic function that enables the search engine to identify the meaning of a query and the user's intention, ensuring the right document is retrieved each time. Search times have also been reduced by 83%.

Document Security Enhanced

DongKuk Steel has implemented a digital rights management (DRM) security function developed by Oracle Partner DK UNC that applies an .EXE filename extension to all e-mail attachments. The DRM function links with Oracle Universal Content Management to provide enhanced security and control of documents. The 'locking' and 'hooking' functions of the DRM also adapt to different application versions, ensuring continuous version control for all documents. The company also secured client server data to eliminate loopholes in the previous document security system.

As a result, DongKuk Steel has minimized the risk of confidential business data such as product development designs and blueprints from being leaked outside the organization.

Having successfully implemented the centralized document management system, DongKuk Steel now intends to explore further opportunities for knowledge-based management.

Why Oracle?

DongKuk Steel was looking for a content management solution that could ensure the security of important corporate documents, from a vendor that could provide strong post-implementation support and transition management. The company assessed

solutions from local and overseas vendors, basing their judgment on stability, functionality, ease of implementation, and support.

The company selected Oracle Universal Content Management because it consolidates unstructured content from different systems for central management, and offers a secure link between the content and the database.

Implementation Process

Oracle Gold Partner DK UNC was engaged to build the document management system using Oracle Universal Content Management, Oracle WebLogic Server, Oracle Advanced Compression, Oracle Advanced Security, Oracle Database, and Oracle Real Application Clusters. Powerful data encryption functions and dual-layer document security devices were also deployed. The project began in April 2010 and was completed in October 2010.

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