Skanska improves construction project management with ENOVIA

Skanska's operations in Finland cover construction services, residential and commercial project development and public-private partnerships. Marketplace challenges require the construction industry to be more innovative and competitive with respect to time, predictability and cost.

In a sector where sharing information is critical, the use of «shackled» IT solutions in the construction industry gave rise to situations where information created in one business function could not be used by another. In order to increase transparency and improve decision making and project control, Skanska Finland wanted to support its construction site stakeholders with business-role based access to project, document and approval information.

“Our strategy is to simplify and modernize our business processes, information and tools,” said Hannu Hakkarainen, Director of Enterprise Architecture in Skanska IT Nordic.

In February 2008, Technia signed an agreement with Skanska to implement ENOVIA in the company. As a result, Technia and Skanska deployed next-generation project support for the construction industry. The ability to collaborate throughout the entire Skanska value chain from customer, design partners, contractors all the way to suppliers helps Skanska shorten lead times and enforce best practices, leading to more industrialized business processes. “With ENOVIA, information is always updated,” declared Hannu. “About 1200 users are impacted by the solution.”

Skanska’s ENOVIA solution is comprised of a project hub and a cost-forecasting process integrated into it. “With ENOVIA, we are able to provide better transparency, which leads to improved decision making and project control,” said Hannu Hakkarainen.

FAST IMPLEMENTATION AND IMMEDIATE BENEFITS

In just four months, Skanska was able to go live with document management functionalities. Overall implementation with project hub and renewed cost-forecasting took a little more than a year. Already Skanska has gained several benefits. “Transparency of product information has improved dramatically. By having a better grasp of document control and project related information we improved efficiency and have more satisfied customers,” said Hannu.

“The first indication of customers seeing benefits is illustrated by an increase in the use of building information during the construction phase (BIM). Sharing this information gives our customers better visibility into the construction process. ”

There have been immediate benefits in more traditional areas of construction project management as well. The amount of “lost making projects” have decreased dramatically during first months after go-live. “That is something that really counts in the construction industry, especially during these challenging times,” added Hannu.

PROGRESS DURING FALL 2009

“It has been a positive surprise for us that we have been able to expand the use of the PLM platform to so many various areas,” said Hannu. “During the fall of 2009, we digitized several of our old workflows and streamlined some key business processes. In the area of risk management and reliable production we have created some new types of cross functional digitalized processes that are supported with the ENOVIA platform.” The reliable production process is a new process that includes a lot of interaction and pro-active collaboration with subcontractors. Previously a manual process, the risk management process has now been streamlined with the help of ENOVIA. “With these processes we improve production reliability and obtain a better view of each project,” said Hannu.

Another new process area Skanska supports with ENOVIA is a collaboration interface where customers can electronically authorize project progress directly in ENOVIA. This speeds up cash flow, decreases capital used and improves transparency towards customers by taking customer dialogue to a new level.

FUTURE

In the future Skanska plans to link more PLM functionalities with BIM information in ENOVIA V6. “This will allow us to gain even more efficiency and to continue on the selected path to ‘simplify and modernize,’ commented Hannu. “The long-term objective is to fully utilize BIM-information in our key processes and to continue collaborating with our customers, design partners, suppliers and subcontractors. This, however, requires further re-thinking and harmonization of some of our core processes, which is high on the corporate agenda as well.” One of the first steps toward change was to establish the Skanska Global BIM Competency Center.

“In 2010 and 2011 we plan to better integrate the procurement process in the design, planning and forecasting processes that are already supported by ENOVIA V6,” described Hannu. “Integrating these processes is a serious boost to efficiency. Construction companies that invest in developing cross functional process support are really providing added value to their customers when the upwards scalability is expected.” More fact-based visibility and control over direct procurement spending is achieved thanks to this approach. Minimizing waste by more accurately planning material purchases also supports Skanska’s objective to be the number one green construction and project development company in the world.

“With these investments, Skanska will definitely come out from the global economy’s recent downturn as a company that creates more value for its customers. We still have the same innovative spirit and drive that Rudolf Fredrik Berg had more than 100 years ago when he established Skanska by pulling together innovations from other industries and creating business out of that,” concluded Hannu.

For more information: www.skanska.com

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Technia is one of the leading suppliers of Product Lifecycle Management Solutions for creating and managing product information throughout the product’s lifecycle. Technia, with more than 110 employees, is a strategic partner of more than 200 companies. It has offices in Stockholm, Gothenburg, Helsinki and Oslo. Technia’s customers include: Ericsson, Ericotes, ESAB, Danaher Motion, GE Healthcare, Maroff, Metso Paper, Mölnlycke Health Care, Nokia, Perkin Elmer LifeSciences, Proviron, Scania, Secta Mamea, and Sony Ericsson. 