

Nippon Steel Engineering leverages EcoSys™ to improve project performance management

Key Facts:

Company: Nippon Steel Engineering Co., Ltd.

Website:

www.eng.nipponsteel.com/english/

Industry: Plant Engineering

Country: Japan

Products Used: EcoSys™

Key Benefits:

- EcoSys provided the ultimate solution for achieving high levels of project and portfolio performance across the enterprise with its comprehensive project lifecycle management platform.
- With its single integrated solution, EcoSys enabled enterprise-wide visibility and accountability into financial and human resource utilization, alignment with organizational strategy, state-of-the-art performance measurement and forecasting. EcoSys has also provided an effective means to communicate and address changes, risks and challenges.
- EcoSys instilled professional and personal confidence by ensuring that the company utilizes the most accurate information to support decision-making and maximize the performance of the entire project ecosystem.

Nippon Steel Engineering contributes to the development of both society and industry through its accumulated engineering expertise in the steelmaking industry. By integrating its technologies with digital transformation initiatives to create innovative value, the company undertakes more than 100 construction projects annually, covering various sizes and a wide range of business sectors, such as environmental energy, urban infrastructure, steelmaking plants and offshore steel structures. The business processes for these projects are diverse, and improving the efficiency of their management has been a long-term challenge.

The challenges

The periodic collection of actual performance data, which was entered manually into Excel for project progress reviews, resulted in delays in receiving reports from relevant personnel. Furthermore, the effort and time required to compile and convert data was time consuming and tedious. To improve the usability of performance data, it was essential to eliminate duplicate processes and enable real-time data visibility.

In 2020, Nippon Steel Engineering implemented an organizational transformation aimed at strengthening its competitiveness, and in conjunction with this, it decided to deploy an enterprise-wide integrated system infrastructure, and as part of this, the company implemented EcoSys for its project management system. The company chose EcoSys because of Hexagon's consultants' extensive knowledge of engineering practices, the ability to deploy quickly using EcoSys' extensive pre-populated templates and its rich project and program management capabilities.

How EcoSys solved the challenges

The following benefits were reported after implementing EcoSys:

Improved productivity and visibility in resource management processes

Upon registering the project into the system and entering start and end dates, the workflow automatically replicated the Work Breakdown Structure (WBS) template, generating and displaying the schedule in a Gantt chart format. While reviewing the project schedule, the user can input the number of days required to complete each task. This information is then consolidated per each project member, allowing users to view and adjust individual team members' workload and availability.

The system facilitated the aggregation of planned workdays entered, enabling users to compare and analyze the planned manpower with the actual number required for the project. Additionally, users can now assess whether planned tasks were completed compared to the actual number of days. The system also provided the capability to analyze manpower requirements by simulating various scenarios, such as project delays or when the project couldn't be undertaken.

Simplified data visibility and reporting processes for project management

EcoSys is seamlessly integrated with data from the ERP system. Once the basic information and project details are entered, financial data, including project order value, recurring profit, and other financial information, can be used to generate reports based on the ERP system data.

The item list, previously manually edited by the project manager using data from the ERP system in Excel, is now efficiently managed within EcoSys. The data is seamlessly integrated with ERP data, automating the reconciliation against the actuals. The data managed within the procurement item list can be displayed and analyzed in tables and graphs according to the WBS. This enables easy identification of budget spending status and current overrun status, providing valuable information for cost control and monitoring the status of procurement items.

By simply clicking on the completion rate, users can toggle between the line chart displaying the percentage progress of the project's contract and the percentage progress of the specification's issuance. This feature enabled the users to easily track the progress status at a glance.

Furthermore, Earned Value Management (EVM) metrics are now seamlessly integrated with EcoSys. This integration enabled their users to check the current status of EVM, Cost Performance Index (CPI) and Schedule Performance Index (SPI) records. Users are also able to analyze the latest performance metrics to determine whether the numbers indicate an upward trend.



Productivity gains through the streamlined aggregation of numbers and progress tracking across multiple projects

Users have the capability to manage scheduled project reporting dates and actual task completion dates for each project. This allowed them to check and analyze the progress and performance.



We found EcoSys unique in its ability to combine a diverse range of templates with a high degree of flexibility for customization. As a company involved in multiple business projects, we required a process that facilitated interaction with numerous users, enabled agile development of functionalities and interfaces, and allowed us to articulate our requirements in concrete terms. EcoSys proved to be an invaluable tool in meeting these challenges.”

Yuki Fukao

Technology Management Center, PMIS Development
Department Manager, Nippon Steel Engineering

About Hexagon

Hexagon is the global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Hexagon's Asset Lifecycle Intelligence division helps clients design, construct, and operate more profitable, safe, and sustainable industrial facilities. We empower customers to unlock data, accelerate industrial project modernization and digital maturity, increase productivity, and move the sustainability needle.

Our technologies help produce actionable insights that enable better decision-making and intelligence across the asset lifecycle of industrial projects, leading to improvements in safety, quality, efficiency, and productivity, which contribute to Economic and Environmental Sustainability.

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