Promoting Business Process Re-engineering by Rebuilding the Enterprise Systems with Cloud

Pursuing cost efficiency and availability with two “absonne” models

Background

The enterprise systems worked on mainframe computers were to be rebuilt with cloud computing. Cost efficiency and speed of development were important for the general management systems, while availability was a key factor for the sales and production management systems.

Solution

The “absonne” platform from NS Solutions was selected as the cloud IT infrastructure. The absonne standard model was used to pursue cost efficiency and speed of development, while the enterprise model was selected to meet availability requirements.

Outlook

As planned, some new systems using the standard model started operation in April 2012. Configuration of the overall system including systems using the enterprise model is currently in progress. By April 2014, the entire new enterprise systems will be fully operative.

Considering the enterprise systems rebuild with cloud computing

NIPPON STEEL & SUMIKIN CHEMICAL is producing a wide range of revolutionary products including new materials for cellular phones and similar. The company has formulated a “grand design” of long-term goals to be attained by the year 2020 and is currently promoting business process re-engineering to achieve the goals.

As part of this drive, the company began to look into rebuilding its enterprise systems in the autumn of 2010. The systems were running on mainframe computers but were suffering from various drawbacks, such as lack of functions for multi-type small-lot production, and the difficulty of adapting to new or revised legal regulations. As a result, a plan was drawn up to rebuild new enterprise systems based on a cloud IT infrastructure.

Covering different requirements with two absonne models

The cloud IT infrastructure service to be used for the new enterprise systems had to meet two different types of requirements. For the sales and production management systems, high availability is a top priority. On the other hand, cost efficiency is paramount for the general management systems. NIPPON STEEL & SUMIKIN CHEMICAL selected the “absonne” platform of NS Solutions Corporation (NSSOL) as the cloud IT infrastructure.

The absonne standard model provides the IT infrastructure with menu-based operation and fixed-fee billing. In addition, the absonne enterprise model provides the IT infrastructure with high availability. Consequently, the standard model was chosen for the general management systems and the enterprise model for the sales and production management systems.

IT infrastructure costs are expected to drop

The project for the new enterprise systems was launched in April 2011. Some of the general management systems went into operation in April 2012, as planned. As a result, performance increased significantly over the old methods. The remaining general management systems and the sales and production management systems are currently being rebuilt.

Because of the large number of systems to be developed, the project has been divided into two steps, with step 1 scheduled to be completed at the end of March 2013, and step 2 at the end of March 2014. With the eventual completion of the new enterprise systems, IT infrastructure costs are expected to drop by at least 20 percent, along with reduced inventory requirements and shorter lead times.
NIPPON STEEL & SUMIKIN CHEMICAL is pursuing a rebuilding of the enterprise systems in order to fundamentally renew its way of doing business and to foster its competitive advantage. With this in mind, the company established an internal new division that is in charge of driving the rebuilding project forward.

Project manager Mr. Takayuki Tohaya comments, “After defining what our business process should look like, we turned our attention to creating new information systems that would realize our ideal business process.”

The cloud service chosen by NIPPON STEEL & SUMIKIN CHEMICAL as the IT infrastructure for its new enterprise systems is the “absonne” platform of NS Solutions Corporation (NSSOL).

Another project manager, Mr. Takanari Miura, says, “Our company’s enterprise systems run on mainframe computers whose operation we have outsourced. By adopting a cloud IT infrastructure, we are able to keep initial investment costs low and maintain operation by qualified specialists.”

The fact that absonne comes in a standard model and an enterprise model geared to meeting different requirements also was a major factor in the decision.

The standard model is a cloud IT infrastructure service based on virtualization technology. It is designed for quickly establishing an IT infrastructure with a standard configuration, menu-based operation, and fixed-fee billing.

The service was therefore adopted in the area of general management systems where cost efficiency and speed of rebuild are essential, as well as for the development and testing environment.

The enterprise model is a customized solution that delivers a cloud IT infrastructure geared for ensuring high availability and meeting other advanced requirements. It was adopted for the sales and production management systems where uninterrupted operation around the clock, every day of the year is required, and also for common infrastructure functions.

The advantages of moving to absonne became apparent immediately. The fixed assets management system and human resources management system of the general management systems were scheduled to start operation one year before the other general management systems.

In configuring these systems, NSSOL relied on the special features of the absonne standard model, completing the process from IT infrastructure design to handover in less than seven weeks.

Advancing progress of the project with absonne standard model

The work of the NSSOL IT engineers earned high praise. As Mr. Tohaya says, “Their professionalism as IT specialists is outstanding, and we felt that we were in really good hands.”

Mr. Miura adds, “With their rich expertise in middleware, they were able to provide a lot of valuable information also to the application software vendors, which helped the project as a whole.”

Since going live in April 2012, the fixed assets management system and human resources management system have been well received. Mr. Tohaya says, “There are no issues, and performance has become much better.”

When step 1 and 2 of the project are completed and the new enterprise systems are in full operation, the benefits are bound to be even more significant. Not only will IT infrastructure costs be lower, but lead times of the products will be slashed and other competitive advantages will emerge.

The expectations of NSSOL are correspondingly high. As Mr. Miura points out, “NSSOL is providing data centers and handling operations in a comprehensive arrangement. We will constantly be looking into new ways of making the best use of the data center services.”

Mr. Tohaya adds, “When the new enterprise systems are completed, we are going to move on to our new information support systems. We expect NSSOL to come up with attractive proposals also in that area.”

■ Outline of the new systems for NIPPON STEEL & SUMIKIN CHEMICAL

| Core technologies | Cloud computing, absonne, virtualization, Windows |
| System outline |
| Cloud service: absonne standard model, absonne enterprise model |
| Applications: MCFrame, COMPANY |
| Network: IP–VPN |