SAP Customer Success Story
Retail

"The system consolidation is regarded as an overall success because it helped us to reduce IT costs and to enhance the management decision-making process."

Koji Shibagaki, General Manager, Information Strategy Department, Marubeni Corporation

AT A GLANCE

Summary
When Marubeni Corporation decided to consolidate multiple systems that use SAP® R/3® software and to simultaneously upgrade the release level, it deployed the experience of the System Landscape Optimization group from SAP Consulting, SAP Active Global Support, and SAP Custom Development services.

Web Site
www.marubeni.com

Key Challenges
- Consolidate 10 systems that use SAP R/3 software into a single target system
- Upgrade the SAP R/3 software from release 3.1H to release 4.7 ext. 2.0
- Transfer existing company code – distributed across 9 existing systems into a single system/server
- Merge purchasing organization (distributed across 4 systems and used in sales and distribution as well as materials management operations) into a single client/system

Project Objective
Consolidation of multiple systems that use SAP R/3 software into a single, upgraded system – with a corresponding reduction in IT infrastructure and total cost of ownership

Solutions and Services
Migration workbench and conversion workbench, expert tools developed and used by the System Landscape Optimization group

Why SAP Solution and Services
- Long-time customer with positive experience using SAP solutions
- SAP services and technology enabled company to preserve existing data

Implementation Highlights
- Consolidation and migration in a single project
- Source and target systems running different releases of SAP R/3 software
- Successful data transfer of Marubeni-specific development into the new target system

Key Benefits
- A single system – upgraded to SAP R/3 software (release 4.7 ext. 2.0) – with one client and purchasing organization (SAP R/3 functionality is now found in the mySAP™ ERP solution)
- Reduction in total cost of ownership
- Successful transfer of all historical data into new system

Implementation Partners
- Marubeni Corporation
- Marubeni Information Systems
- SAP Japan
- SAP Consulting
- SAP Custom Development
- SAP Active Global Support

Existing Environment
SAP R/3 software for materials management, sales and distribution, and financials (including special ledger and executive information system)

MARUBENI CORPORATION

Global Japanese Enterprise Consolidates 10 Systems That Use SAP® R/3® Software into a Single System – with Help from SAP Services

During the annual "Golden Week" holidays in Japan, Marubeni Corporation was hard at work carrying out the finishing touches to a major consolidation of its old systems that use SAP® R/3® software. The project – resulting in the successful merger of 10 old systems into a single new one – was a shining example of clear project planning and goals, multicultural teamwork, and the resolution of technical challenges by key players, including specialists from SAP Consulting, SAP Active Global Support, and SAP Custom Development services.

Founded in 1858, Marubeni Corporation is a Japanese trading house – or *sogo shosha* – with a large and diverse business portfolio. With many lines of business spanning import and export, offshore trading, and project management, Marubeni produces and markets its own products in numerous areas. The company's lines of business include agri-marine products, textiles, forest products, general merchandise, chemicals, energy, metals and mineral resources, transportation machinery, industrial machinery, information systems, power plant and infrastructure projects, development and construction, finance and logistics, iron and steel strategies and coordination, and business incubation.

Marubeni CORPORATION

SAP®

Listed on five Japanese stock exchanges (Tokyo, Osaka, Nagoya, Fukuoka, and Sapporo) Marubeni also invests in various projects around the world, including some huge construction projects. For example, Marubeni recently won a new feather in its cap – the majority ownership and leadership role in a consortium that will own, operate, and expand the 20-year Taweelah B power and water project in the Emirate of Abu Dhabi in the United Arab Emirates. In addition, the company is a principal shareholder in the construction and installation of the offshore oil transportation infrastructure in Brazil.

With 3,600 employees and 127 international subsidiaries, the global, Tokyo-based company has a presence in 74 countries. In March 2005, Marubeni reported annual revenues of €56.7 billion.

Demanding Project, Experienced Team

In 2004 Marubeni decided to consolidate and optimize its existing SAP landscape and the company put together a project team consisting of consultants from SAP Japan, SAP services, as well as Marubeni Information Systems (MJS) – the Marubeni IT subsidiary – and the information strategy department at Marubeni Corporation. The task of the project team – and no small undertaking – was to merge 10 systems that use SAP R/3 software into a single central system. (SAP R/3 functionality is now found in the mySAP™ ERP solution.)

Marubeni also wanted to take advantage of the consolidation and upgrade its SAP software at the same time, moving from SAP R/3 release 3.1H to SAP R/3 release 4.7 ext. 2.0. In addition, as the project evolved, the project team was able to consolidate key operating aspects of the old multisystem landscape. For example, they transferred the company code that Marubeni had previously distributed across nine systems into the single new system. Similarly, they consolidated the purchasing organization previously used in the company's sales and distribution and materials management operations – and formerly distributed across four systems – into the new target system.

An additional challenge for the consolidation project was the incorporation of a large number of customized changes Marubeni had made to SAP standard software. However, the consolidation project team was able to overcome this challenge too. "SAP delivered on time," says Jutaro Shiraishi, deputy general manager of the information strategy department at Marubeni, "And we were able to successfully meet our project goals and timetable." According to Shiraishi, Marubeni is very satisfied with the new solution.

Consolidating Systems, Reducing TCO

Marubeni already knew SAP and its products and services well. The company has been an SAP customer since 1996, deploying SAP solutions for their materials management, sales and distribution, and financial accounting (including financial special ledger and executive information system capabilities). In fact, until recently the company's head office in Tokyo managed 10 SAP systems, each with one productive client using SAP R/3 software (release 3.1H).

"The cooperation with Marubeni Corporation, MJS, the System Landscape Optimization group, SAP Japan, and SAP services was extremely efficient and helped the consolidation project to become an overall success."

Fumihiko Nishita, Customer Engagement Manager, SAP Japan

Marubeni also uses SAP solutions for other applications, such as controlling, treasury management, enterprise controlling and consolidation, financial supply chain management, and data warehousing. However, these applications run on an additional server that was not part of the system consolidation.

For Marubeni, Impressive Business Benefits

The main advantage of the project for Marubeni – from an operational point of view – was to cut down the number of servers, a reduction which went hand in hand with a significant decrease in hardware. Furthermore, the overall operation process was simplified. The consolidation of the formerly distributed company code and the purchasing organization – used in sales and distribution and materials management operations – would allow more effective access to financial and purchasing data. In both cases Marubeni will be able to use this newly gained advantage to extend its market position.

The setup of the new centralized system supports central database management and replaces all cost-intensive decentralized activities. Furthermore, Marubeni's vision was to prepare its system for the introduction of new SAP solutions and the answer was the consolidation of the existing systems. The main argument for a centrally administered system is that it enables coordinated and streamlined data management as well as unified business processes. And at the same time, Marubeni could reduce its total cost of ownership of the ERP system by managing 1 single system instead of 10.

Putting Together the Right Team

With a consolidation project of this size, Marubeni gave a lot of thought to choosing the best service provider. They had no doubts about selecting SAP services and the System Landscape Optimization group, a decision based partly on the previous positive experience they had when the System Landscape Optimization group of SAP Consulting helped the company change the organizational structure in its SAP R/3 software system. In addition, the services delivered by the System Landscape Optimization group had the advantage for Marubeni that all the company's historical data in the old systems could be quickly transferred into the new system.

SAP Japan lead the project, a team effort that became an example of a very successful intercultural collaboration. "The cooperation between Marubeni Corporation, MJS, the System Landscape Optimization group, SAP Japan, and SAP services was extremely efficient," says Fumihiko Nishita, customer engagement manager at SAP Japan, "and helped the consolidation project to become an overall success."

Step-by-Step, Structured Project Implementation

For a consolidation effort like the one at Marubeni, the project follows six phases:

- Analysis
- Setup of target system for merge
- Preparation of target system
- Preparation of source systems
- Data transfer from source systems into target system
- Activities after transfer

In the first step, the System Landscape Optimization group analyzed the existing system landscape. Based on the results of the analysis, the team established a blueprint for merging the systems. The analysis identified a number of congruities, which were candidates for system merge. Certain complex areas required an adjustment of the classical system merge process. In the second step, the MJS team set up the target system – without transactional data – using SAP R/3 software (release 4.7 ext. 2.0).

Consolidation and Cleanup of Master Data

To avoid duplicate records in the new target system, Marubeni took the opportunity to combine the system consolidation with a cleanup of its master data. The cleanup operation harmonized master data and transaction data, which could be found in several source systems.

As a result of the system consolidation and the reduction of clients, Marubeni is enjoying a number of benefits. The initiative has helped the company lower its total cost of ownership for IT. Furthermore, users now have the advantage of being able to more easily access information or carry out analyses via the management information system.

"The fact that the data can be found in one client within one system improved our reporting capability and helps us manage our applications in a much more effective way," says the deputy general manager Jutaro Shiraishi. "Furthermore, it is now easier to meet management requirements such as the implementation of organizational changes, which are mostly created by economic and market-driven demand."

Flexible Solution for Transferring Customer Development Data

As a preparatory step for merging the old systems, the team made important customizing changes and adjustments to the ABAP™ programming language in the target system. To protect its existing investment and ensure continuity, Marubeni wanted to make sure that all its previous company-specific development was transferred into the new target system. For the consolidation team, this posed technical challenges that would demand a high degree of skill and collaboration to master.

Rising to the task, the team members from Marubeni, MJS, SAP Japan, and the System Landscape Optimization group worked closely together and established a concept for the data migration of the customer-specific developments. The specific challenge for the System Landscape Optimization group – which was responsible for the final transfer of data – was to adapt the migration workbench and conversion workbench expert tools to the project conditions, which in this case included the customer's own development. In the end, the System Landscape Optimization group successfully transferred both the standard transactional data and the customer-specific data.

Technical Problems Posed and Solved

To ensure that all Marubeni's existing documents would be available in the target system, the team had to create some specialized solutions. For example, they had to adjust several existing number ranges so that the same number ranges would have the same descriptions and associated documents when they were transferred to the new target system.

In fact, the System Landscape Optimization group developed multiple solutions, including "prefix," "shift," and "renumbering with offset" solutions. The prefix solution used fixed "character places" in the number range to start the renaming process. The renumbering with offset solution entailed adding a certain number to the existing document. Finally, the shift solution involved adding characters to the existing number and therefore posed the greatest risk for integrity and document security. Intent on creating the best possible transfer of data, Marubeni decided to concentrate on the prefix and renumbering solutions.

Using Migration and Conversion Workbench Tools

Each test cycle throughout the project phase challenged the System Landscape Optimization group and its solutions. The migration workbench tool migrates data on an "object" or table level from the source to the target system. The conversion workbench tool, however, converts data within a system. At Marubeni the team applied both tools: migration workbench for the server consolidation processes, conversion workbench for organizational changes. The combination of these tools helped the team to perform the conversion and enable the data transfer simultaneously.

The main advantage of using the conversion workbench tool was that the team could use existing standardized conversion programs and that they needed to use program adjustments only in the case of specialized issues. The standardized approach of both tools offered a clear benefit – the fast and reliable transfer of all data. Because both tools operate directly at the table level, they ensure a high-performance conversion.

When the project started, the team planned three test cycles. Throughout each test cycle all source systems were transferred to a single target system. The intent of the test scenario approach was to copy all source systems in groups into the new test system by using the tools of the System Landscape Optimization group. And this step-by-step approach had its advantages. For example, each test cycle was followed by a revision phase and the results and necessary adjustments were used for upcoming tests.

Intensive Testing, Then Successful Go-Live

During the final test, the team simulated a "big bang" scenario for the productive conversion and during this simulation all data in the 10 test systems was transferred to the target test system. Because this preparation phase had been well planned, it was possible to accomplish the productive conversion in three days, instead of four as originally planned. Marubeni decided to perform the productive conversion during the "Golden Week" Japanese holiday, when the system would be free of users. After the successful system consolidation, Marubeni carried out a series of user tests. After only 10 hours of intensive testing, Marubeni was able to make its new system available again to productive users.

50 075 838 (05/08)