Tomita Pharmaceutical, Ltd. (herein referred to as Tomita Pharmaceutical) undertook setup of a new mission-critical system that can support both Web and mobile environments, while making the most of the business application assets they have used over the years. For the rapid migration of their mission-critical system to the Web, they chose uCosminexus/OpenTP1 Web Front-end Set, COBOL2002, EUR and Job Management Partner 1, all parts of Hitachi’s Open Middleware line-up. By applying complex business logic already created in COBOL, and conforming to the MVC model for development, they were able to shorten development time significantly. With a smooth migration from the mainframe to Windows® servers, they gained an up-to-date business environment.

Full application of business application assets and know-how, for a smooth downsizing.

Using an open environment to enhance customer-oriented information services.

Tomita Pharmaceutical, Ltd.

A new mission-critical system, invaluable for supporting innovation and speed.

Tomita Pharmaceutical has developed pharmaceutical wholesaling from Japan’s southern island of Kyushu. The hospitals and pharmacies that comprise most of their customers number around 15,000, not including hundreds of suppliers. In this era of wholesaling, supplying information is just as important as supplying products. Under a slogan of “Innovation and Speed”, Tomita Pharmaceutical has embraced innovation as a way of succeeding in an increasingly competitive environment.

“Due to institutional reform and industry reorganization, the pharmaceutical industry finds itself in difficult circumstances,” said Mr. Hisao Tomita, Executive Managing Director of Tomita Pharmaceutical. “Aiming for a corporate structure able to adapt quickly to these difficult changes, we formulated a mid-range profit plan for the 110th anniversary of our founding, to take measures focused on reducing costs through enhanced customer support and operational reform.”

Unfortunately, the existing mainframe system did not allow for rapid adaptation to changes in business environments, and incurred costs to maintain and operate. To achieve a system able to handle open technologies for a rapid downsizing, Tomita Pharmaceutical had to meet their partner’s demands for EOS (Electronic Ordering System) and Internet-based EDI (Electronic Data Interchange) support.

A two-step downsizing

First, operations for which an open environment was crucial were determined, and migration was performed from mainframe to Windows® server, with operation starting in October 2003. Then, using the knowledge obtained from the first step, migration was performed for remaining operations. January 2005 marked the removal of the mainframe, and the start of open system operation.

Using existing assets as-is to achieve rapid and low-cost standardization and compartmentalization

The legacy mission-critical system was developed in-house, using COBOL. Tomita Pharmaceutical needed a smooth migration to an environment that could handle Windows®, Web, and mobile computing, while reusing the complicated business logic and operations know-how obtained over the years.

To accomplish this, OpenTP1, the popularly deployed distributed transaction manager, was used as the company’s system infrastructure for mission-critical operations, and uCosminexus/OpenTP1 Web Front-end Set, was used to bring it to the Web in a short period of time.

This is a suite based on the Collaborative E-business Platform Cosminexus and the ObjectWorks® framework from Nomura Research Institute, Ltd. These products allow input checking in Microsoft® Excel® and Visio® and complicated GUI flow to be created without code, enabling efficient development and deployment of mission-critical systems linked to Web systems.

“As our company has several talented COBOL programmers, it was of utmost importance to select a development environment to determine whether a rapid and low-cost migration could be achieved using their skills,” said Mr. Junichi Minami, Information Systems Department Manager of Tomita Pharmaceutical.

To take advantage of existing human capital while supporting a new Web-based infrastructure, a Web application was distributively developed with future extensibility in mind, following the three-tier MVC model. Debugging and testing was simplified by using the existing business logic (model) as-is. Also, new Java™ programming was kept to a minimum by using uCosminexus Developer for the GUI (view) and interface flow (controller).

“Future systems need to be created with the premise that migration to new technologies may come down the road,” Mr. Minami continued. “We have created an infrastructure that enables future migration, while making the most of our existing COBOL system.”

For batch job operation, the integrated system operations management program Job Management Partner 1 was used. An important point here is that job scheduling and monitoring can be performed through a GUI.

In addition, EUR was used for report system setup support to achieve nearly system-wide digital reporting of external management reports for customers. This not only reduced development hours for the report output program for downsizing, but also aided in paperless communication, as
paper output for around 800 types of reports was no longer necessary.

**Enabling sales orders to be entered from Web-enabled mobile devices**

Support for an open platform via migration from mainframe to Windows® server was a significant accomplishment. Because access via Web server to the company's mission-critical system running in a client/server configuration is shared with the same business programs running on an OLTP server, the mission-critical system and Web system work together seamlessly. This allows sales orders to be entered from a Web browser and facilitates linkage to customer systems, creating opportunities to develop new strategies for improving customer service.

"Web support has allowed us to efficiently and quickly provide our customers with up-to-date information, such as new product introductions," added Mr. Tomita. Mr. Minami also elaborated, saying "because we were able to witness Hitachi's sophisticated technology in the first step of the migration, we could without question trust them with the second step. Hitachi provided everything from COBOL to the application servers and responded with a one-step explanation of the framework operations. Hitachi's combined strength was evident." A significant reduction in maintenance and operation costs for the mission-critical system was also achieved, not to mention curbed migration costs due to re-use of COBOL assets. Users felt the benefits too, as response times for routine online operations improved.

"Providing not only medicine but also information is an important mission for us," Mr. Tomita continued. "Because end customers trust their lives with our products, we need to provide accurate information about strengths and side effects. This is why we need to take advantage of mobile devices, and need to use an open system for such linkage. Moving forward, the quality and timeliness of this information is only going to become more important. Opening our systems and creating a infrastructure to do so is an important step forward."

From the wholesale of products, to the wholesale of information, it is clear that a smooth downsizing played a crucial role in Tomita Pharmaceutical's leap forward.

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**USER PROFILE**

Tomita Pharmaceutical, Ltd.
URL: http://www.tomita-pharma.co.jp/
Headquarters: Kuhonji 6-2-36, Kumanono City, Kumamoto, Japan
Founded: August 1892
Incorporated: August 1948
Capitalization: JPY 3,415,700,000 (as of 3/31/2005)
Employees: 765 (as of 3/31/2005)
Line of business:
A pharmaceutical wholesaler based in Kyushu, the southern island of Japan. Operations consist of three main parts: pharmaceutical wholesale to hospitals, wholesale health care such as general pharmaceuticals to pharmacies, and pharmaceuticals intended for animals.

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* For details about Cosminexus, OpenTP1, COBOL2002, Job Management Partner 1, or EUR, see our website.

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http://www.hitachi.co.jp/soft-e/