



## Japanese Electronics Giant Saves Projected US\$63 Million With Microsoft Office

### Overview

**Country or Region:** Japan  
**Industry:** Hi Tech and Electronics  
Manufacturing

### Customer Profile

Founded in 1875, the Toshiba Corporation is a global leader in complex electronics manufacturing. With nearly 130,000 group employees working in 542 consolidated subsidiaries, its innovative product range includes LED bulbs and glass-less 3D LCD televisions.

### Business Situation

In order to become more globally competitive, improve communications across the group and save costs, Toshiba searched for an alternative to the Lotus Notes groupware it had been using for 15 years.

### Solution

Toshiba decided on a group-wide deployment of Microsoft Office products including Exchange Server 2010.

### Benefits

- Cost Savings
- Better Information Sharing
- Strong Office Products
- Closer Collaboration

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Masaki Minemura, General Manager, Toshiba’s Information Systems Center.

Toshiba Corporation is a global leader in complex electronics manufacturing with nearly 130,000 group employees working in 542 consolidated subsidiaries. To become more globally competitive, the company decided in 2009 that the Lotus Notes groupware it had been using for 15 years was not meeting its needs. It decided to switch to Microsoft Office products to save costs and create a mail platform which enabled better information-sharing. It estimates that its new Advanced Communication System platform will save the company US\$63 million in the first four years of operation.

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Masaki Minemura  
General Manager  
Toshiba's Information Systems Center

## Situation

Founded in 1875, Toshiba Corporation is one of Japan's leading electronics manufacturers.

In 2008, to position itself as one of the world's top complex electronic manufacturers, the company began looking into building a communication and collaboration infrastructure that would enable flat information sharing for its 130,000 group employees.

Masao Namiki, Toshiba's Director, Corporate Senior Executive Vice-President, Strategic Planning & Communications Group, said: "Global business development is becoming increasingly important for the future growth of our company. Fifty percent of sales in 2009 came from overseas, and we are working to increase sales to 63 percent or higher during the medium-term management period of 2009 to 2012."

He added: "A mail-based information sharing system is essential as a foundation for supporting innovation to achieve that goal. It was important to provide an environment in which our 130,000 employees, including those in overseas locations, can share past data and the latest market conditions smoothly and exchange ideas."

Over the past 15 years, Toshiba had used Lotus Notes to construct and make use of 48,000 databases. But because of increasing licensing, hardware, development, operations and maintenance costs, it became difficult to expand the use of Lotus Notes to the entire Toshiba group, which was growing globally.

## Solution

### From Notes to Microsoft

After detailed analysis, Toshiba decided to discontinue its use of Lotus Notes and turned to Microsoft's Exchange, SharePoint

and Communications Servers to construct a new communication and collaboration environment.

On the critical decision factor, Masaki Minemura, General Manager of Toshiba's Information Systems Center and the Executive Officer of the project, said: "Although it took a lot of courage to do away with a tool that we had been using for a long time, the fact that Microsoft's group of products have more open specifications was the deciding factor.

"In terms of communications with those outside of the company, they are likely to use Excel and other Microsoft Office products. The first thing that comes to mind, when thinking about an infrastructure that features high compatibility with these products and enables smoother information sharing, is Microsoft's server products."

He added: "Furthermore, when it comes to the key feature of a mail system, there were those who wanted the latest product. The storage capacity of mailboxes per server has been substantially improved and the fault resistance is extremely high. The choice was natural."

### Building Up the New System

When the decision was reached in July 2009, Toshiba started building and testing the new Microsoft-based information sharing infrastructure, called the Advanced Communication System (ACS).

In January 2010, the company started the migration process – priority was given to migrating mail functions - and by January 2011, 70,000 users had migrated to ACS.

The success of the high-speed migration was due to a close cooperative system that was forged among the group companies headed by Namiki, which enabled the

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Toshiba's Director  
Corporate Senior Executive Vice-  
President  
Strategic Planning & Communications  
Group

migration of 5,000 user mailboxes at one shot.

Mimemura said: "The goal of implementing ACS was to improve conventional mail-oriented communications. Therefore, we eliminated the use of a vertical system of Lotus Notes databases that were conventionally created freely by each division or project group, and used SharePoint Server to create a Web-based system, enabling a wide and timely sharing of information transmitted within the company to the group."

Deploying ACS required the consolidation of the entire group's authentication infrastructure to Active Directory. By applying a policy based on personnel information, privileges for accessing required information could be granted smoothly to users.

Approximately 100 servers running Exchange Server 2010 were implemented in the mail system, which handled some 2.8 million messages a day for the entire Toshiba group. This server product took advantage of the greatly improved disk I/O performance over the previous version. Also, some 35 servers running SharePoint Server, which made up a portal site, managed 20 terabytes of data for information sharing.

With the migration of workflow data – including applications that had been handled by Lotus Notes - to the SharePoint Server, Toshiba evaluated approximately 10 add-on tools over a six-month period before deciding on Nintex Workflow to create an environment that covered all of the previous workflow functions and provided additional features.

All of these servers provided redundancy through the use of a double cluster configuration. With the construction of a private cloud within the company, Toshiba

was able to cost-effectively achieve the availability and redundancy suitable for an information infrastructure for 130,000 users within the Toshiba group.

Toshiba also created an extensive inventory of existing applications, which was a challenging task.

Project Leader of the TSIS Advanced Communication System Development Project Team, Toshiaki Fujimoto, said: "We used Microsoft-recommended tools to check the frequency of use and difficulty of migration of our nearly 48,000 Lotus Notes databases, and have spent over a year inventorying the databases. The goal of the inventory was to migrate only 30% of the databases. We had many meetings and sorted through those databases we wanted to archive or discard without migrating, and after completing half of the inventory, we have been able to finish in about the number we expected."

## Benefits

### Better Information Sharing

On the ground, employees found that with the Office Communications Server, they could easily verify if their contacts were online, in a meeting, or out of the office. They could also tap on different modes of communication: Chat, mail, and telephone.

Group-wide, Masaaki Mukushi, President of Toshiba Information Systems, believed that a key takeaway from ACS was the better sharing of information.

"It has enabled us to consolidate the information sharing environment of the globally-spread Toshiba group and search for information horizontally. Each business unit within the Toshiba group—be it digital products, lighting systems, displays, electric power systems, or power distribution—is varied, and there are hundreds of cultures within the group if you include the affiliated companies. ACS is very important

## For More Information

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[www.microsoft.com](http://www.microsoft.com)

For more information about the Toshiba Corporation, visit the Web site at:

[www.toshiba.co.jp](http://www.toshiba.co.jp)

because it enables us to provide flat information sharing on this scale.”

Even external users reaped the benefits of Toshiba’s deployment. Namiki said: “This system is much more user-friendly than the previous groupware environment. We are using products, such as Exchange Server, that are used by large numbers of users around the world, and there are no complaints with the tools.”

### Cost Savings

Although the global implementation of ACS is expected to be completed by 2013, the cost savings were apparent. Adding to the savings was Toshiba’s decision to build a private cloud. Fujimoto said: “We performed a comparative study of public clouds. After calculating the costs for a scale of 130,000 users, we realized that constructing a private cloud for the group would be more cost effective.”

Toshiba estimates that in the first four years of ACS’s operation, Toshiba will save over US\$21.5 million in server hardware operation costs, software licensing costs and personnel costs for operation and maintenance. Indirect savings from the consolidation of its information-sharing infrastructure amount to US\$42 million, netting total projected savings of about US\$63 million over a four-year period.

### Strong Office Products

The Microsoft Office suite also proved to be very effective. Yasunari Segawa, Supervisor of the Information Technology System Strategy Division at the Toshiba Information System Center and who oversaw the mail transition project, said: “The Microsoft products that we selected this time have a strong global share and very high level of completeness. The high

fault tolerance of Exchange Server 2010, in particular, was very attractive.”

Seiji Takimoto, Chief Specialist of Advanced Communication System Deployment Project Team at Toshiba Information Systems, added: “The consolidation of the authentication infrastructure to Active Directory has been big. Now it is linked to the personnel information of each organization, and each group is notified that the group policies are applied automatically and access privileges are set. This will significantly reduce the amount of maintenance work and strengthen the security.”

### Closer Collaboration

Ultimately, in the bigger picture, Namiki feels that the new set of tools is a great people enabler.

He said: “In the end, IT is simply a tool. People are what create the value of a business. To promote innovation globally requires an environment with close communication between people over time and distance, working hard together as a team. Ideally, ACS will help us achieve that goal.”

## Microsoft Office 2010

Microsoft Office 2010 gives your people powerful, timesaving tools to do their best work from more places. With new capabilities and insightful updates to Excel, PowerPoint, Word and Outlook, Office 2010 offers the complete package — with familiar, intuitive tools. Now you can express ideas, solve problems, connect with people, and create amazing results — in the office, at home, or on the go. For more information about Microsoft Office, go to: [www.office.com](http://www.office.com)

### Software and Services

- Microsoft Exchange Server 2010

Microsoft Office Sharepoint Server 2007  
Microsoft Office Communications Server 2007