



Customer Case Study

## Japanese Retailer Deploys Intelligent Fitting Room

**Mitsukoshi, Ltd. uses Cisco Unified Communications solutions to provide meticulous, Japanese-style service to customers.**

| EXECUTIVE SUMMARY   |
|---|
| <b>MITSUKOSHI, LTD.</b> <ul style="list-style-type: none"> <li>• Retail</li> <li>• Nihonbashi Muro-machi, Chuo-ku, Tokyo Japan</li> <li>• 7904 employees</li> </ul>   |
| <b>CHALLENGES</b> <ul style="list-style-type: none"> <li>• Enhance customer service</li> <li>• Improve back-office operational efficiency</li> </ul>  |
| <b>NETWORK SOLUTION</b> <ul style="list-style-type: none"> <li>• Deployed Cisco Intelligent Retail Network and Unified Communications for Retail solutions in fitting rooms</li> </ul>  |
| <b>RESULTS</b> <ul style="list-style-type: none"> <li>• Wasteful roundtrips by sales clerks to the stock room reduced by 25 percent</li> <li>• More than 90 percent of volunteers and sales staff requested immediate full adoption</li> <li>• Inventory and customer management expected to be connected with efficient back-office operations for delivering personal service to customers</li> </ul> |

### CHALLENGES

Mitsukoshi, Ltd., founded in 1673, is a time-honored company with more than 100 years of experience as a leading department store. Its unique retail philosophy and extensive experience in anticipating customers’ needs have made Mitsukoshi a leader in Japan’s consumer market with 14 department stores and \$8 billion in annual sales. In 2004, Mitsukoshi began experimenting with new approaches to further improve customer service. The retailer’s first project incorporated radio frequency identification (RFID) tag-based inventory management in its women’s shoe department with the goal of creating a “no-wait” shoe department. With only room enough to display one size of shoe per style on the sales floor, sales staff were constantly moving back and forth to the stock room to retrieve shoes for customers to try on, which reduced their productivity and prevented them from assisting a greater number of customers. Customers had to wait until the sales staff returned from the back of the store. If the desired shoe was out of stock, the sales staff came back empty-handed and would have to suggest a similar product and make yet another trip to the stock room to find it. Each time a product was not available, the store risked losing a revenue opportunity and creating a dissatisfied customer.

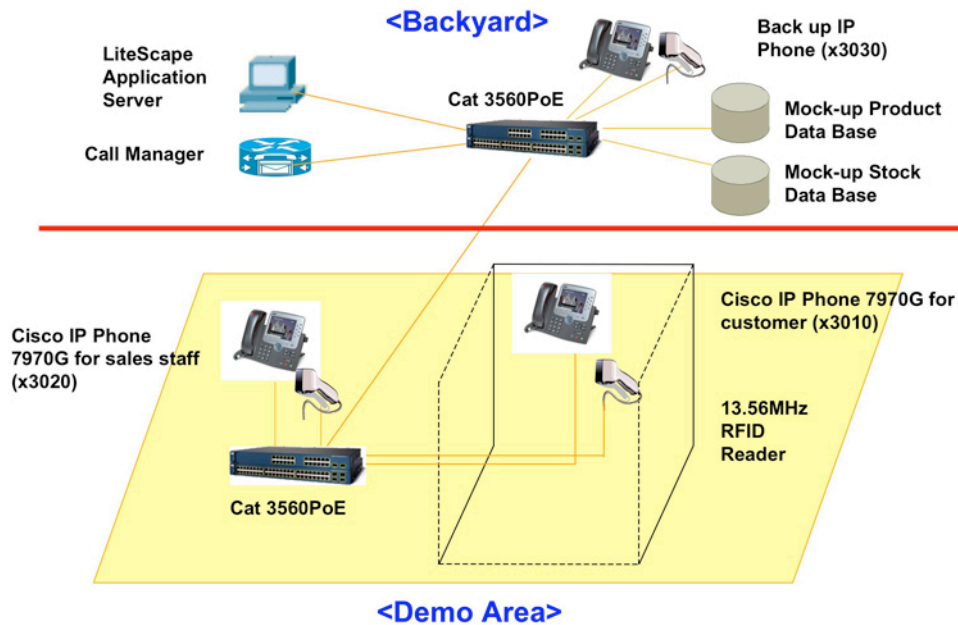
By adopting electronic tags, Mitsukoshi hoped to provide sales staff with access to inventory information from the sales floor, and enable clerks to recommend similar products if a shoe was out of stock. The experiment was successful, increasing customer satisfaction and revenue for the shoe department.

“Shoes represent a small portion of our products,” says Masakazu Nishida, general manager of Mitsukoshi’s Merchandising Division, Merchandising System Promotion Department. “We decided to extend tag-based inventory management to our apparel department, which represents more than 30 percent of our overall product base.”

Mitsukoshi expanded its original initiative to three new projects that would integrate inventory and customer management to enable customers to check availability of certain styles and sizes directly from a fitting room, without requiring assistance from a store associate; improve customer management techniques; and improve the efficiency of back-office operations.

## NETWORK SOLUTION

Figure 1. Demo Intelligent Fitting Room Overview



The first project, the “Intelligent Fitting Room,” would allow customers to check stock levels of product styles and sizes directly from the store’s display shelves and fitting rooms and to use touch panels located on the sales floor to search for products matching their requirements. Finding the right touch panel proved challenging, however.

The retailer first considered using tablet PCs, but they required customers to use special pens, which was impractical. Mitsukoshi had experimented with personal digital assistants (PDAs) for shoe department personnel, but the PDAs required at least 11 seconds to connect to the store’s wireless LAN, which was still too slow.

“At this time, we were approached by Cisco about using IP telephones,” says Takuo Ito, section chief of the Mitsukoshi Merchandising Division, Merchandising System Promotion Department. “When we viewed actual implementations, we quickly understood the idea behind using an IP telephone combination as the main interactive system terminal.”

Mitsukoshi chose a Cisco<sup>®</sup> Unified Communications for Retail solution for the pilot project, which is being coordinated by Fujitsu and includes other vendors and system integrators as well. Operating on a Cisco Intelligent Retail Network and Service-Oriented Network Architecture framework, the Cisco Unified Communications solution streamlines and accelerates information flow, enabling Mitsukoshi staff, customers, and management to automatically and dynamically access and share resources. The converged IT architecture provides the integration to transform the retailer’s information assets into a common platform for delivering services that optimize business applications while increasing visibility into customers and business processes. Mitsukoshi can add future services and applications without having to replace the network, allowing innovation and sustaining growth.

The project was designed to operate using the store’s existing IT infrastructure, eliminating the need for a complete network upgrade. Mitsukoshi’s solution is based on Cisco 7900 Series Unified IP Phones, which are outfitted with large-screen liquid crystal display (LCD) panels and installed in fitting rooms along with electronic RFID tag readers. Mitsukoshi chose the Cisco solution for several reasons. First, the touch panels are highly space-efficient, making them easy to deploy in limited floor space. By using PoE connectivity to a Cisco Catalyst<sup>®</sup> 3560 PoE Switch, Mitsukoshi eliminated the need to install additional power sources in the fitting rooms. The system’s response

time was superior to other solutions, and voice communication functions could be easily added in the future. Finally, the proposed solution was far more cost-effective than using PCs.

The Cisco Unified IP Phones and switch are connected to a LiteScape application server and to a Cisco Unified CallManager media server. The servers are connected to inventory information and product master databases located in the Mitsukoshi data center, which enables real-time product information to be downloaded and displayed on the LCD panel of the telephone.

“The members of Cisco’s Internet Business Solutions Group were well-versed in the retail industry,” says Nishida. “They prepared a total solution for us, including meaningful advice about how to set specific goals and ways to improve our business operations.”

**“Once we incorporate voice communication functions, we think IP phones will become an even more advanced communication tool for Mitsukoshi. We intend to expand the presence of IP phones throughout our various sales areas.”**

**– Masakazu Nishida, General Manager, Mitsukoshi Merchandising Division, Merchandising System Promotion Department**

## RESULTS

A pilot implementation of the Intelligent Fitting Room has been deployed for Mitsukoshi’s category of premium jeans products – imported, high-priced products that are made by hand in small volumes. Traditional sales methods are not effective for these products, and some products are presold before they are even displayed. Because they are imported, customers do not know how they will fit until they try the product on. If a pair does not fit, customers must wait in the fitting room while a clerk checks inventory; if the product is out of stock, the experience is even more disappointing. Mitsukoshi attached approximately 5000 electronic tags to premium jeans products.

“We allow customers the choice to check on available sizes and styles from inside the fitting room, which is where the purchase decision tends to be strongest,” says Nishida.

Now with the Intelligent Fitting Room, if customers have chosen jeans that are too small or too large, they can wave the price tag near the electronic tag reader, and all available product information will be displayed on the large-screen LCD panel of the Cisco IP Phone. Customers can then choose the size that they wish to check, and the system tells them whether the selected style and size are in stock. Mitsukoshi’s Cisco Unified Communications solution enables customers to receive the information that they need, when and where they need it.

The experimental system reduced wasteful roundtrips to the stock room by 25 percent and provided staff with a fast way to check inventory and answer customer questions without leaving the sales floor. More than 90 percent of the volunteers and the Mitsukoshi sales staff rated the system with exceedingly high marks. The sales staff requested full-scale adoption as quickly as possible.

In addition to supporting the Intelligent Fitting Room application, the tags will enable the store to better manage inventory in the store and stockroom, and to measure the effects on customer service and operations.

## NEXT STEPS

With a successful pilot, Mitsukoshi plans to deploy the solution first in its denim, shoe, and cosmetics departments to provide personal customer service and to communicate important information to sales staff. Future plans call for deploying Cisco IP Phone-based touch-screen solutions at the retailer's other 13 stores, as well as in new stores. Mitsukoshi is also considering adopting voice communication and additional Unified Communications applications, such as Cisco MeetingPlace® conferencing, in the future. These solutions would enable store managers and buyers from all of Mitsukoshi's stores to collaborate on trends, new inventory, and purchase decisions.

"Once we incorporate voice communication functions, we think IP phones will become an even more advanced communication tool for Mitsukoshi," says Nishida. "We intend to expand the presence of IP phones throughout our various sales areas."

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To learn more about Cisco Unified Communications Solutions, visit: [www.cisco.com/go/voice](http://www.cisco.com/go/voice).

To learn more about Mitsukoshi, visit: [www.mitsukoshi.com.hk](http://www.mitsukoshi.com.hk).

## PRODUCT LIST

### Routing and Switching

- Cisco Catalyst 3560 PoE Switch

### Voice and IP Communications

- Cisco 7970G Series Unified IP Phones
- Cisco Unified CallManager

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