



Hoya Builds New Web-Based Ordering System and Customer Portal

Hoya Corporation was established as a specialized manufacturer of optical glass over 60 years ago. Its Eye Care division manufactures eyeglasses, contact lenses, and eyesight-measuring equipment.

Like many other industries, the eyeglass and contact lens sector is experiencing the trend toward less-expensive consumer goods. In recent years, many companies have taken advantage of cheaper products available from China and other Asian countries to enter the eye care industry. However, unlike clothing and many other goods, glasses and contact lenses are vital to the well being of their wearers.

Satoshi Sekiya, executive general manager of Hoya Vision Care's IT Promotion department, explained, "Hoya is a specialized manufacturer of optical equipment, so we have to have absolute confidence in our products' quality. We strive to meet our customers' expectations and gain their trust by providing high-value products and comprehensive services."

"Ideally," Mr. Sekiya continued, "we aim to make our clients, both customers and opticians, confident that if it's a Hoya product, it's a good product." This attitude has been well received by the marketplace. Hoya is internationally recognized as one of the world's largest optical manufacturers, and in Japan it has the largest market share for optical glass products.

IT's Role in Order Processing and Support

As in many industries, wholesalers traditionally handled distribution in the optical glass industry. Hoya, however, decided to use direct marketing to forge close partnerships with opticians. In the

Customer:

Hoya Corporation

Industry:

Optical Manufacturing

Challenges:

- Building a new, more efficient Web-based ordering system
- Linking new and legacy systems
- Creating a full-service customer portal
- Streamlining support and maintenance

Solution:

- Fujitsu Interstage Application Server
- Fujitsu Interstage Traffic Director
- Fujitsu PrimePower servers
- Fujitsu Siemens Primergy server

Benefits:

- Concurrently available Web- and mainframe systems offer the best tool for any given job.
- Internet applications speed transaction times.
- Simplified support and maintenance saves time and cost.
- More flexible system allows easy expansion to new services and regions.



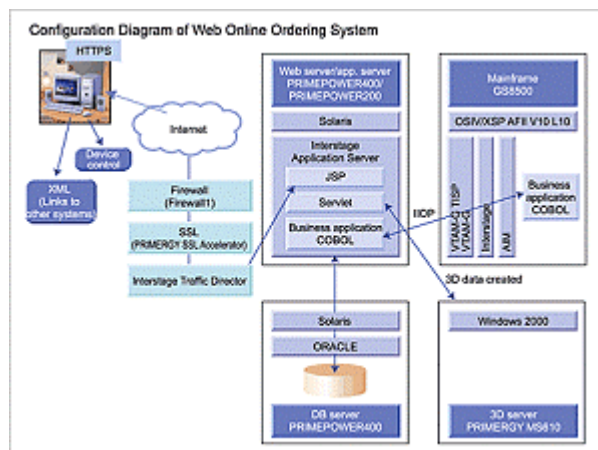
1970s and 1980s, Hoya leveraged technology to enable direct orders from the opticians to the factory.

But Hoya uses technology for a lot more than simple order fulfillment. Because glasses and contact lenses require precise customization to match the individual user’s needs, high-quality service is crucial. (Approximately 60 percent of Hoya’s products are made to order.) To improve service levels, Hoya actively incorporated IT into its business activities, including a system that processes eyeglass frame specifications in the optician’s office, reducing manufacturing errors and requiring less labor and equipment to process the lenses. It proved extremely popular with opticians.

Constructing a Web-Based Ordering System

Although the existing online system had optimized the ordering process, Hoya needed to continue to improve to support a rapidly changing market. The Internet offered greater speed and cost-efficiency when compared to the old client-server system. “We needed to migrate Hoya’s online ordering system to the Web,” Mr. Sekiya said.

Once work began on the new Web-based ordering system, the Hoya team gave major consideration to leveraging existing assets in the new system environment. Hoya’s mission-critical systems had been constructed on mainframes—recreating everything from scratch would be too expensive and time-consuming. In addition, Mr. Sekiya said, “We couldn’t force all the opticians using the existing system to move to the Web environment simultaneously. We had to ensure that the current system could run concurrently with the Web-based system.”





Interstage Links Legacy and Web Systems

Hoya chose Fujitsu's Interstage products to meet their requirements. "Hoya conducts business globally, so we don't want to be locked into specific technologies or platforms," Mr. Sekiya explained. "Interstage is compatible with global standard technologies and supports a wide range of platforms, including Unix, Windows, and mainframes. And," he added, "Because we had been using Fujitsu mainframes, we knew that connecting our systems to new Web-based systems would be easier with Interstage products."

The Hoya team installed Fujitsu's Interstage Application Server on a Web Application Server. Interstage Traffic Director provided server load distribution. According to Tsutomu Ueno of Hoya's Information Systems department, who managed the system's construction, "Interstage Traffic Director not only supports high-volume access, it also enables business to continue without interruption during server faults."

The new ordering system has been operating for some time now, and Mr. Ueno expressed his satisfaction with the results, "Thanks to Fujitsu's Interstage products there was virtually no need for modifications to the applications on the mission-critical mainframes. This made our job much easier."

Although Hoya's IS department had previously developed many business applications, it had little experience with Java and JSP. "Our lack of experience led to some confusion at first," Mr. Ueno continued, "but because Fujitsu provided us with complete support, we were able to migrate to the new system without difficulty. Since then, we have been continuing to improve the range of services we offer our clients."

A Host of Benefits

The two aspects of the new system can be used independently. When up-to-the-minute information is required, such as when users are checking on product orders, they access the mainframe directly. When only historical data is needed, the server side can provide the necessary answers.

The Web-based business environment also makes it possible to conduct online transactions with opticians who have not yet adopted Hoya's new system, Mr. Sekiya said. "Interstage products are proving extremely useful in opening up new marketing channels."



In addition, the Web-based system does not require any special programs to be installed on the PCs. “This has dramatically reduced the on-site maintenance required,” Mr. Sekiya said. Similarly, Hoya can now use online downloads to upgrade the software at customer sites, rather than sending service staff, as needed to be done with the old client-server system.

Interstage Supports Global Business Expansion

Along with helping with placing and receiving orders, Mr. Sekiya sees the new system making catalogs and new product information immediately available to opticians online, thus performing a sales and promotional role.

“The purpose of the new system wasn’t just to convert our existing ordering system to a Web-based format. We also intended to create a customer portal that could provide a range of services in a unified, centralized way,” Mr. Sekiya stated.

As a first step, Hoya conducted joint development with Fujitsu to produce the Three-Dimensional Lens Simulation Service. In the past, when customers needed large frames or high-power lenses, they were unable to see when ordering what the glasses would ultimately look like. With this service, they can view simulated frame-and-lens combinations in three dimensions on screen, rotating the completed model to see it from any angle. “The simulation program allows customers to immediately see the result right then and there,” Mr. Sekiya explained.

“We are also hoping to further promote our business with opticians with a new range of applications, such as a program to simulate three-dimensional face and frame images,” he continued. Interstage technology links these three-dimensional display-processing systems with back-end lens-simulation programs.

Because of the success of all these initiatives, Hoya expects Fujitsu’s Interstage products to serve as the infrastructure supporting its future global expansion. Mr. Sekiya described some of the company’s plans, “At present, Hoya business offices in other countries each run their own copy of our ordering system. However, with a Web-based system in place, these offices won’t need to maintain their own servers. The new system already incorporates support for multiple languages, so we are working to improve efficiency by gathering all the Web ordering systems from around the world into a single central location.”

“I have no doubt that Interstage products will play a big part in this effort,” he added.