

teleflora.

Infrastructure Provider for Florist Network Selects Microsoft over UNIX and Linux

Overview

Country: United States **Industry:** Technology services

Customer Profile

Headquartered in Los Angeles, California, Teleflora has provided technology services to florists since 1934 and today enables more florist-to-florist wire orders than any other company in the United States and Canada.

Business Situation

An assortment of point-of-sale systems and operating systems made it difficult for Teleflora to enable member florists to enhance their systems and also posed security and support challenges.

Solution

Teleflora executives revamped the system and infrastructure with the Microsoft® .NET Framework and deployed it into a client environment of Microsoft Windows® XP Professional and Windows 2000 Professional.

Benefits

- Scalable functionality
- Support for security
- Intuitive user interface
- Stronger communications

"Microsoft really got it right with the .NET Framework, which we've found to be the most powerful and comprehensive development environment available."

Terry Byers, Executive Vice President and Chief Technology Officer, Teleflora

To address usability, enhancement, security, and support challenges stemming from various legacy applications and multiple configurations and operating systems, a leading provider of technology services to florists is deploying a new point-of-sale system and infrastructure. Targeting the solution for use ultimately by tens of thousands of shops in a florist network spanning the United States and Canada, company executives have chosen Microsoft® technologies for development and deployment even though the larger and more influential florists in the network are operating in a SCO UNIX or Linux environment. Early results indicate that the new system and infrastructure offer an intuitive and powerful user interface and a way to provide efficient support, security, and enhancements.





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Dr. Nand Singh, President, BEST CROSSMARK

Situation

If you've ever sent flowers to someone living in the United States or Canada, it's likely your delivery was facilitated by Teleflora, a leading provider of technology services to florists. Founded in 1934 and headquartered in Los Angeles, California, Teleflora supports 25,000 member florists in the United States and Canada and more than 50,000 affiliate florists worldwide. Through traditional clearinghouse services and flower-order wiretransfer services using the company's Dove Network®, and through more than 11,000 Web sites, the Teleflora infrastructure enables more florist-to-florist orders than does any other company in the United States or Canada.

The growth that made Teleflora a leader, however, has also presented challenges. As Teleflora Executive Vice President and Chief Technology Officer Terry Byers explains, Teleflora has become an industry leader by acquiring other providers, each of which has its own point-of-sale (POS) system for member florists. Ultimately, the Teleflora infrastructure has come to include a total of eight separate POS systems, in more than 400 configurations and running on four different operating systems.

"This assortment makes it nearly impossible to supply the features that the shops need to compete," Byers points out. "If a florist wants to integrate new functionalities like delivery mapping, time clock, accounting, financials, or marketing, we do our best to incorporate those features into that shop's system. But it's costly to find and maintain a staff of experts who can keep up with all the different configurations and platforms."

Equally daunting are usability problems, which stem in part from the very nature of the florist business. "Florists are typically small operations, so it's common for some employees to be assisting customers in the

shop, taking phone orders, doing some bookkeeping, and maintaining the shop displays," Byers says. "This means they have little time in front of the computer screen to really get to know the POS as they might want to. Because of seasonal staffing, many workers aren't employed long enough to become experts on the system. What's more, most people are in the business because they enjoy working with people and they love flowers, not because they love technology. Add it all up, and you have a formula for lots of calls to our help desk."

To make matters worse, because of the multiple configurations and operating systems in the shops, it can be difficult to monitor for problems. "Often a help-desk call might be the first clue that we have a malfunction in the hardware, for example, or even a virus," Byers explains. "Moreover, because many of the shops lack high-speed connectivity, we have to mail a CD-ROM to distribute software updates, new releases, or quarterly electronic florist directories. When the CD-ROM arrives at the shop, we often spend time on the phone helping someone with the installation."

Solution

To address the challenges of the mixed environment, usability, and the multiple configurations, Byers and her colleagues are deploying a new POS system and infrastructure. Early deployment is targeting florists that have not yet adopted POS technology, and longer-term deployment will target florists that have existing POS systems and are ready to move to new ones.

"This is a multimillion-dollar project and one that is highly strategic for our company," Byers points out. For these reasons, her team spent considerable time on determining the project objectives and selecting the project development and deployment technologies. Agreeing on the objectives—modularity and

"The Microsoft .NET Framework ... provides a clean and powerful methodology for writing secure code."

Terry Byers, Executive Vice President and Chief Technology Officer, Teleflora flexibility, strong communications, and usability and support—was easy in contrast to the job of choosing the development and deployment technologies.

On one hand, the team had strong reasons for preferring Microsoft® technologies. "We already had used Microsoft technologies for developing and deploying one of our current POS systems and for our Web-hosting solution, and many of the florists were running Windows® on their client computers," Byers says. "On the other hand, we were encouraged to consider alternatives, because our top-tier shops were running SCO UNIX and our next-tier shops were running Linux, and many of them were comfortable with those technologies."

In response, Byers and her colleagues enlisted individuals from the Microsoft Technology Center to present an architectural design and proof of concept to technical representatives of the larger shops.

"We talked to the representatives about their plans for their business and convinced them that we would be their partner and support them," Byers says. "Then we described the advantages of using Microsoft technologies, particularly the broad and deep tool set available in the Microsoft .NET Framework. We explained that what we could do through Web services alone was virtually limitless. We also pointed out that hardware for a Windowsbased platform was far less costly than that for a UNIX platform, and that documentation, access to expert development resources, and formal support programs would be more readily available for a Microsoft environment than for Linux. We also reminded everyone of how users in a highly seasonal industry are more likely to be familiar with the Microsoft Windows operating system than with either UNIX or Linux."

To implement the project, Byers and her colleagues selected BEST CROSSMARK, a Dallas, Texas—based Microsoft Gold Certified Partner that Teleflora had worked with in the past. Under the leadership of BEST CROSSMARK President Dr. Nand Singh, development of the new POS system and infrastructure launched in early 2004.

According to Singh, there were significant challenges from the start. "We had to build a client system that would integrate with datacenter applications for billing, reports, and other enterprise business financials, yet be flexible enough to serve a highly diverse user base," he explains.

Nonetheless, Singh and his team, which at its peak comprised 105 people, met an aggressive timeline of nine months from concept to first pilot release. For this accomplishment, he credits the team's adherence to International Organization for Standardization (ISO) 9001:2000 methodology; the Microsoft Solutions Framework, for helping the team to comply with that methodology; and the Microsoft .NET Framework, an integral component of the Microsoft Windows operating system that provides a programming model and runtime for Web services, Web applications, and smart client applications.

"With the Microsoft .NET Framework, our programmers have ready-made tools that integrate well with one another and support a broad assortment of third-party hardware drivers and communications utilities," Singh says.

Teleflora began distributing a basic version of the POS system in mid-2005 and is planning to complete the full deployment, including highly sophisticated versions targeting the larger florists, by mid-2006. The full deployment will deliver turnkey software and hardware client solutions, including those running on Windows XP Professional and Windows "It's through development with the Microsoft .NET Framework and deployment on the Microsoft Windows operating system that we can offer such support—support we couldn't come near to providing in a UNIX or Linux environment."

Terry Byers, Executive Vice President and Chief Technology Officer, Teleflora 2000 Professional, to up to 20,000 florists across the United States and Canada. The 11,000 Web sites also will be integrated into the new infrastructure.

Benefits

Byers, Singh, and their colleagues are delighted with how the Microsoft .NET Framework is facilitating the development of the new POS system and infrastructure. "Microsoft really got it right with the .NET Framework, which we've found to be the most powerful and comprehensive development environment available," Byers says. "The environment as a whole and the individual tools within it far surpass anything that's available for Linux."

Singh concurs. "The breadth of fully integrated technologies in the .NET Framework, including Web services, database access through Microsoft ADO.NET, and features for accessing the database from within the .NET Framework, were instrumental in helping the team to create a highly modular solution," he says.

For Byers, having a highly modular solution is key to a number of benefits that she anticipates for Teleflora and its member florists once deployment is complete. Those benefits include an easier approach to enhancement, software-release management, support for security, greater usability, and stronger communications.

Easy Enhancement, Support for Security

Having a single code base with options and features that can be enabled and disabled through a remote connection will make enhancement and software upgrades far easier than ever before, according to Byers. "For example, a small shop can start simple and increase its feature set as necessary," she says. "It can add high-speed credit-card authorization, automated e-mail reminders for customers, business financials, sales-tax

support, instructions on floral design, employee policies, and many other functions, depending on its users' comfort level and the growth of the business."

Byers says that adding such functionality is easy for both parties—the florist and the Teleflora support staff. "A shop might call or send e-mail to say they want a certain feature, and we can turn on the module supporting that feature remotely," she says. "No one at the shop needs to download anything, much less bother with a CD-ROM." She adds that Teleflora expects to distribute formal upgrades, which will go to all the shops, in an equally transparent fashion, using Macrovision Update Service 4.1.

Another benefit of the modularity of the new POS system involves security. "Security is a huge concern when transactions are taking place over the Internet. It's critical to segregate system components so that an owner or administrator can access functions that, say, a temporary clerk cannot," Byers explains. "It's easier to build a secure system using a modular design. It's also easier to build a secure system when you have the right development system. For us, that's the Microsoft .NET Framework, which provides a clean and powerful methodology for writing secure code."

Improved User Interface

Byers reports that the shops receiving the pilot version of the new POS system are enthusiastic about the browserlike user interface. "The user interface is much more intuitive and easily accessible, which we anticipate will dramatically increase user satisfaction and reduce help-desk calls," she says. "It's also a lot more powerful. From a single workstation, users can access functions for order entry, credit-card authorization, marketing, electronic directory, the Internet, and much more."

The infrastructure that Teleflora is deploying alongside the new POS system also is expected to dramatically improve the florists' communications. "Historically, many shops have resorted to paying for multiple dial-up accounts, but with the new solution, they'll be able to rely on a single broadband line. This will help them to save money and provide their customers services such as high-speed credit-card authorization and order transmission without requiring the user to leave the POS system," Byers explains. "Better yet, they'll be able to access such information immediately instead of waiting for us to mail it to them each quarter on a CD-ROM. That will put them in a far stronger competitive position."

The upgraded communications infrastructure also is expected to play a big role in helping Teleflora to provide the shops a more reliable overall solution. "We'll distribute directory updates, software updates, and antivirus updates daily, if necessary, instead of having to send them out on quarterly CD-ROMs," Byers points out.

Teleflora also plans to conduct remote performance monitoring with Microsoft Operations Manager, part of the Microsoft Windows Server System™ integrated server software. Byers explains, "Operations Manager will enable us to discover whether a shop is having a problem with software or hardware—and possibly do something about it—even before users know there is anything wrong."

A Key to Growth Strategy

To Byers, the ability to offer the shops such a comprehensive, timely, and proactive approach to support symbolizes the advantages of basing the new solution on Microsoft development tools and operating systems as opposed to UNIX or Linux.

"Providing support in the ways that our customers can use it best is perhaps the

most important thing we can do to help them remain competitive and successful. And it's through development with the Microsoft .NET Framework and deployment on the Microsoft Windows operating system that we can offer such support—support we couldn't come near to providing in a UNIX or Linux environment," Byers says. "In return, we enjoy the loyalty of shops already in our network and are well positioned to reach others that aren't yet. This is absolutely central to our growth strategy as a company."

The Microsoft .NET Framework and other Microsoft technologies also play a role in the growth strategy of Teleflora partner BEST CROSSMARK. "Having a set of fully integrated tools that are ready to work right out of the box—this is key to helping us deliver powerful solutions to clients like Teleflora on schedule and within budget, and reach other clients that are seeking similar, large-scale solutions," Singh points out. "This is why BEST CROSSMARK has used Microsoft development technologies exclusively since its founding."

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