IBM

# CSE delivers multichannel banking through a single e-business platform.

## Overview

- **Challenge**
  Offer more convenient banking to existing customers; expand customer base; minimize customer support costs
- **Solution**
  Virtual B2C banking; online equity trading and automated call center
- **Why IBM**
  IBM's reputation in the banking industry and its expertise in large-scale e-business applications; IBM software supported on multiple platforms, facilitating integration and future expansion
- **Key Business Benefits**
  30% ROI in 12 months; 2 new banking channels with estimates of 80% savings in online banking customer support costs and 50% savings in phone-banking transactions
- **Business Partner**
  INFOservice

According to business information provider Datamonitor, 1.7 million Italians will be banking online by 2004. CSE is helping its client banks capitalize on this opportunity.

In stark contrast to the seemingly leisurely pace of its rural traditions, Italy's modern economy is fast, furious and highly competitive. And as a leading provider of outsourced IT infrastructure and services for the banking industry, CSE, based in St. Lazzaro di Savena, near Bologna, Italy, lives and breathes the market's ups and downs. Established in 1970, the 130 billion-lira (US$60 million) company now serves 30 financial institutions, with US$150 billion in assets under management and a customer base of more than 5 million.

*"Setting up a multichannel banking system presented a logistical challenge. Whether customers bank online, use the automated call center or visit the branch, we have to make sure their transactions are registered in the system in realtime."*

*−Dott Lombardi, General Manager, CSE*

e-business

*e-business—redefining the competitive environment in your favor*

## Key Components

*Software*

- IBM WebSphere® Application Server, Advanced Edition, Version 3.5
- IBM DirectTalk™
- IBM DB2® Universal Database™ for AIX® and OS/390®
- IBM Tivoli® Firewall
- IBM HTTP Server
- IBM VisualAge® for Java™
- INFOservice OneWealth

*Servers*

- IBM @server zSeries™ in an IBM Parallel Sysplex® configuration
- IBM RS/6000®

*Services*

- IBM Global Services

With the advent of the euro and the opening of European markets, CSE's client banks found a whole host of new competitors at their back doors. To succeed in this environment, they realized they would need to make it more convenient for customers to manage their accounts and take advantage of new services. In the past, the banks' brick-and-mortar branches—open only six hours a day—had been the primary customer touch points. And while the branches answered general inquiries by phone, all banking transactions had to be conducted on site.

By offering online banking and stock trading as well as phone banking, the banks would effectively be open around the clock, which they hoped would encourage customers to conduct more business. The Web and phone self-service channels would also be less expensive to operate than fully staffed branch locations.

Eager to meet the banks' needs with new e-business services, CSE faced the daunting task of creating Web- and phone-based services that would work with its existing IBM @server zSeries server banking applications. "Setting up a multichannel banking system presented a logistical challenge," says CSE's General Manager Dott Lombardi. "Whether customers bank online, use the automated call center or visit the branch, we have to make sure their transactions are registered in the system in realtime."

Publicly exposing the legacy applications—which had previously been accessed only by a limited number of bank employees—raised security and scalability concerns. CSE realized it needed not only sophisticated technology to address them but also the assistance of a vendor experienced in meeting the e-business requirements of financial services companies.

After evaluating solutions from several leading vendors, CSE selected IBM Global Services on the strength of its reputation in the banking industry and its proven experience in integrating large-scale, mission-critical systems. The IBM WebSphere platform for e-business also made IBM an attractive option for CSE. "The multiplatform support of WebSphere software and DB2 Universal Database was a huge advantage, making it easier to integrate the systems while also imparting flexibility for future application development," Lombardi says.

**Dramatic improvements in service and cost-efficiency**

IBM Global Services helped define the vision, design a Java technology-based architecture and implement a proof-of-concept for the applications, which run on multiple IBM RS/6000 servers. The virtual banking and online trading applications are based on OneWealth, a multichannel, Java 2 Platform, Enterprise Edition (J2EE) solution from IBM Business Partner INFOservice; the phone banking application is powered by IBM DirectTalk software. The infrastructure supporting the new applications is deployed in IBM WebSphere Application Server, Advanced Edition, with IBM DB2 Universal Database for AIX serving as the main data management system. IBM Global Services also developed the Java code that integrates the new applications with the legacy systems on the zSeries servers.

Since their launch in mid-2000, the virtual banking and online trading services have been used by more than 140,000 customers, with users averaging 30,000 online transactions per day. The phone banking service, which will soon go live, is expected to be equally well received.

Lombardi isn't surprised by the enthusiastic response. "These services represent a big improvement in customer service, compared with the six-hour business day at the brick-and-mortar branches," he says.

CSE estimates that online banking reduces banks' customer support costs by 80 percent, compared to brick-and-mortar branches. Similarly, phone-banking transactions cost 50 percent less than those handled by tellers. As a result of these and other savings, the bank expects to achieve a 30 percent return on its investment within 12 months.

**IBM software and servers ensure secure, expeditious service**

Customers access the online services through their banks' Web sites, hosted by CSE on two RS/6000 B50 servers. CSE uses IBM Resource Access Control Facility (RACF®)—part of the OS/390® Security Server—to authenticate users based on the user names and passwords they enter. Once logged on, customers can perform nearly all their banking activity online. From within the virtual banking application, they can also request to sign up for online trading.

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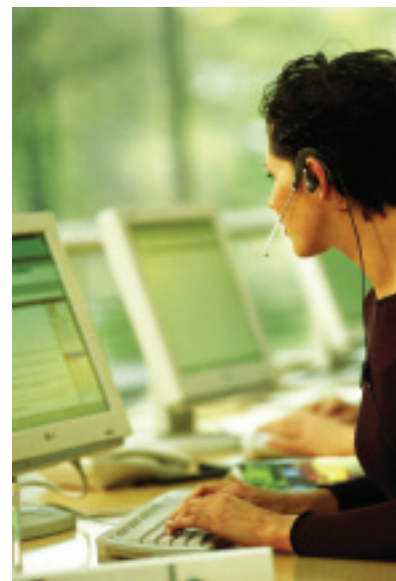


*Using DirectTalk, customers can complete routine banking transactions by phone, freeing service representatives to resolve more complex issues.*

IBM HTTP Server accepts incoming user requests and passes them on to the OneWealth application, which runs on a pair of RS/6000 H70 servers. DB2 Universal Database for AIX, also running on the application server, supports OneWealth by storing the online customers' account information.

Enterprise JavaBeans (EJB)—created with IBM VisualAge for Java and deployed in WebSphere Application Server on the RS/6000 H70 servers—accept requests from OneWealth business objects to access data and trigger transactions in the legacy banking systems. IBM Tivoli Firewall, running on two RS/6000 F50 servers, helps minimize the exposure of the legacy applications to the Web.

While this multitier solution may seem to present a virtual obstacle course for online banking transactions, Lombardi is pleased to report that the system response time for a typical account balance lookup is less than one second. (Actual user response time depends on the speed of the user's Internet connection.) "The parallel processing capabilities of DB2 and the RS/6000 H70 servers help deliver fast, round-the-clock service—online and by phone," Lombardi says. "And as customers increasingly utilize these self-service channels, the scalability of the IBM infrastructure is proving to be a critical asset."

Customers who lack Internet access will soon be able to conduct their banking over the phone through CSE's automated call center. DirectTalk, running on an RS/6000 server, will provide automated interactive voice response services, enabling customers to obtain answers to most inquiries and perform most banking transactions without waiting for a customer service representative.

**A new market for Web-only banking**
CSE's multichannel banking platform has made great strides in transforming its brick-and-mortar client banks into click-and-mortar e-businesses. But Lombardi sees additional opportunities for CSE in an emerging market for Internet-only banks. "We are already serving two such banks," Lombardi says. "With the infrastructure we've built with the WebSphere platform for e-business, it would take only a minimal investment on our part to serve many, many more."

**For more information**
Please contact your IBM marketing representative or IBM Business Partner.

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