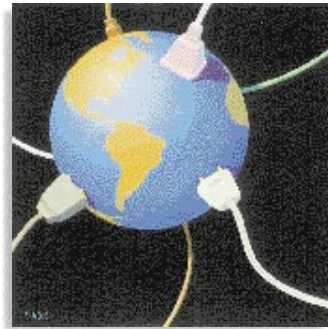


## Open Systems Help Retail Banks Compete



Each month, the TSC examines a key emerging technology or its use. This time, we look at how open systems and internetworking can help banks meet their business objectives in the 1990s.

**T**he retail banking industry has undergone dramatic changes from a decade ago. Previously, the branch office was the icon of the retail banking institution. Consumer access to the bank's financial services and products were generally limited to the hours in which the branch was open, and services and products provided by the bank were relatively limited. The branch office, as the place where consumers did the majority of their financial transactions, was the primary representative of the bank.

In today's markets, things are different. New competitive pressures have emerged from nonbanking institutions providing similar services and products, and foreign banks entering domestic markets. Consumers have become more intelligent in their buying, less loyal to a particular bank, and more demanding of products and services that fit their specific financial needs and time schedules. As a result, consumers dictate where, how and when they will conduct their financial affairs.

To respond to consumer and market demands, retail bankers must provide greater convenience, increase accessibility of financial services and products, and deliver new, better targeted products and services faster. At the same time, total operations and development costs must be maintained or reduced. All of this must be done to acquire or maintain a significant percentage of the consumer's financial transactions (or "wallet share") and

establish an acceptable profit margin.

As a result, the decision to design, implement and use an IT structure should be based on its ability to meet consumer needs and the bank's business objectives. Therefore, the IT structure should enable the rapid development of (new and existing) delivery channels for greater consumer accessibility; reduce development and delivery times for consumer services and products; and reduce total operational and development costs.

IT structures based on open systems and internetworking environments can help retail bankers achieve their objectives.

### Rapid Channel Development

The types of delivery channels within a retail bank have increased and will continue to do so. New banking icons such as self-service environments (automatic teller machines or kiosk systems), automatic voice response, home banking, electronic mail, and SmartKey are taking hold. To facilitate these channels, new or improved back-office environments are being developed. They include transaction switching processors, data repository centers, relationship management environments, item and check processing centers, and call centers for customer support and centers of expertise. As a result, there is a greater dependency on information (voice, data and imaging) and its flow within and between each channel and environment.

Open systems and internetworking

environments provide the capabilities necessary to integrate data streams and incorporate channels. Technologies such as TCP/IP and OSI for transport protocols, and frame relay and asynchronous transfer mode (ATM) services for on-demand data, voice and image networking enable information flow. Technologies such as these are enabling banks to develop flexible internetworking architectures that greatly enhance the ability to revamp current or develop new delivery channels and their back-office environments.

### Reduced Delivery Time

Given the increasing complexity and variety of technology needed to create a consumer product or service, a growing number of component suppliers are required. As a result, the role of systems integration becomes increasingly crucial and more time consuming.

If a component is not designed for integration, the systems integrator will expend additional time, resources and money. Through the use of standards, open systems-based components can be readily integrated, therefore enabling the reduction of systems integration time and cost, which in turn can reduce overall consumer product or service development and delivery times.

### Total Cost Reduction

When distribution channels were relatively limited and the number of consumer products and services were few, it seemed appropriate to use separate proprietary structures for each distribution channel. As a result, each channel had its own networking infrastructure, data repository and transaction systems, applications and end-user systems, and support service and administration personnel. Often, this produced a high and redundant total cost of ownership for designing, operating and maintaining multiple applications, systems and networks that provided similar consumer products and services.

By Bryan J. Boutté

Today, with the growing number of channels, the total cost of ownership must be marginal. Open systems and internetworking environments enable the consolidation of networks, data repositories and transaction systems, as well as operations, maintenance and personnel. As a result, the cost to develop, maintain and manage a channel can be reduced.

## Reasons to Worry

Retail bankers generally agree on and are moving to internetworking and open systems to provide new or enhanced distribution channels and consumer products and services. However, with traditional banker's caution, they are doing so slowly. Their most commonly noted technical concerns are

*security*: unauthorized access to and use of information;

*manageability and maintainability*: results of the increase in complexity and the number of components;

*migration*: easy, reliable movement of proprietary environments and (more importantly) the information within them;

and *reliability*: assurance that a component or group of components will not negatively impact the performance or availability of consumer products or services within or between channels.

Because of the increase in technology and number of channel components required today, bankers should place more time and effort in the design of the IT structure and the architecture of the channel than ever before. It is here that the four concerns listed above are initially addressed. To help implement the architecture, better open systems and internetworking development tools and systems (such as object-oriented technology and expert systems) are emerging. With the combination of a well-thought-out architecture and the development of enhancing tools, the aforementioned concerns can be overcome.

Retail bankers are in a highly com-

petitive market. For them, the true benefit of an IT structure is its ability to harness available resources to meet market demands and achieve business objectives. Properly designed and implemented, an IT structure based on open systems and internetworking can assist retail bankers to increase revenue by providing faster time to market of new or enhanced delivery channels and consumer products and services. It can help to reduce costs by protecting technology investments and bringing down total operations, development and maintenance expenses.

As a result, open systems and internetworking tools and technologies can help retail bankers meet their business objectives: greater product or service accessibility, customer convenience, better targeted products and services, and increased customer wallet share and profit margins. **IT**

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