Retail Delivery:

A Common Strategy Amidst An Uncommon World

by Kenneth E. Russell, excerpted from *Financial Services Information Systems*

Introduction

The following white paper describes the evolution in the financial services industry as it relates to the delivery of products and services to customers through the use of technology.

The "Problem"

One of the major challenges that faces both business and technology managers in the financial services industry today is the absence of a common set of tools to sell, service, and support their customers.

Our industry has developed *Delivery Channels.* These channels are access points with the financial institution's customers, and they are usually supported by various technology solutions to assist in the delivery of products and services.

As the number of access points with customers increases, so does the number of different *delivery systems* to support new channels. In addition, each new delivery channel brings with it a unique set of business requirements that needs to be satisfied. Unfortunately, the existing delivery systems in the industry will not meet these new requirements. From this situation is born a new industry-specific delivery system to address the needs.

While many financial services companies have consolidated and standardized their core processing backend host systems through mergers and acquisitions, almost every one of these organizations have different delivery channel software solutions – operating under various different technology environments – to support each of their many point-of-contacts with their customers.

I can safely state, from both personal experience and through industry analysis, that nearly every major bank in this country with assets over $50 billion has a different software solution for Teller, for Platform Sales and Service, for Call Center, for Internet Banking and for ATM and Kiosk Banking.

To further complicate matters, often another business group, such as Marketing, may need to access valuable information from the combination of all these customer delivery channels, which can span every technology platform from DOS, OS/2, Windows NT, UNIX, and even some proprietary operating environments.

This technology boondoggle causes IS managers to cringe when someone from the business side of the organization asks for the addition of a simple customer contact management function, that is "just like the one in the Call Center" product, to be added to the Platform Sales and Service system.

Unfortunately, what may be a simple function in one delivery system, may be very difficult task in another.

It can also create costly replication in the branches. When a branch manager wants to open a new in-store branch location to primarily perform transaction based Teller functions with some Sales and Service capabilities, the branch administration group may have to install two different PC-servers, operating systems and workstations because the Teller systems operates on one type of platform and operating system and the Platform Sales and Service product operates on another.

Case Study

Well, if you're still confused about the real issue or if you don't really care what aggravation business and technology managers face, let's take a look at this problem from a customer's perspective.

The following is a real-life example of how *"uncommon delivery channel technology"* can make for an *"unpleasant customer experience."*

In January of this year, my wife and I discovered that someone had obtained her Visa debit card number and was using it around town to make unauthorized purchases.

Since the culprits did not have the actual card, they were making phone purchases and either picking up the merchandise or having it shipped to their address.

Since the culprits did not have the actual card, they were making phone purchases and either picking up the merchandise or having it shipped to their address. Fortunately, one of the merchants called our bank to verify our address before shipping and discovered that the shipping address was different from our billing address. The merchant then called us and we immediately took action.

Since our bank is one of the nation's largest banking institutions, I first checked its Internet Banking software *(software product #1, Windows NT based).* Sure enough, I identified several fraudulent transactions on our account.

I needed to cancel my wife's debit card before additional unauthorized transactions took place, so I called the 800 number noted on the back of the card and spoke to a representative in the ATM/Card Management area. After my protracted explanation, the rep deactivated my debit card *(software product #2, proprietary operating system based)*. I then asked him to reverse the fraudulent charges on our account. His system could not perform those types of transactions, so he directed me to call the general customer service number.

I dialed that 800 number and after another pleasant little trip through IVR Land, I found myself explaining my situation at length for the second time. The customer service rep asked me if I had deactivated my card because, remember, customer service doesn't have access to the same systems as the ATM/Debit card management. After I confirmed that I had deactivated my card, the rep then asked which transactions on my account were unauthorized.

To determine that, I had to go back online and check the Internet Banking product and tell the customer service rep which transactions to reverse. She reversed the transactions *(software product #3, Windows NT based)* and gave me a provisional credit. I was then told that I would need to obtain an affidavit of fraud form from a local bank branch office, then complete and sign it.

My next call *(3rd call or 5th if you count the two Internet connections)* was to my personal banker and yes, you guessed it, I had to explain myself yet again for the third time. I was getting pretty good at this point and didn't even have to look at my notes. My personal banker needed to pull up my account to print some information for the affidavit, so she assessed the Platform Sales and Service system *(software product #4, IBM OS/2 based)* to obtain the information.

Now, all of this may sound like something you'd only read in a white paper on Enterprise Retail Delivery, but in reality this happens everyday in almost every major financial services organization. In fact, many of you were probably shaking your head in agreement as you read the above story because it has recently happened to you or someone you know.

The Solution

In analyzing the above case study, you see that the aggravation and inconvenience to the customer, and the duplication of rep services, were created because four different software products were involved to satisfy my customer request. Each solution was designed for its own specific function, purpose, and customer delivery channel use, and neither one of them could totally service the customer.

The simple solution to this problem is to remove the current restraints of *Delivery Channel* based solutions and allow all customer point of contacts to have access to all of the business functions that are required to service a customer.

This requires a basic design principal of *"One Technology for All Delivery Channels."* Then, on top of a common technology platform, you need an application architecture that is customer centric, allowing all functions to be driven through a "customer relationship management" model to track and control all access to customers, regardless of how they come into contact with the organization (walk-in branch, phone, internet, ATM, etc).

A Look Back – Where Did We Come From?

To accurately evaluate where we are currently in this evolution of *Delivery Channel* based solutions and what challenges and opportunities lie ahead for the future, sometimes it helps to take a brief look back and follow our steps to better understand how we got where we are today.

Nobody started out years ago with the intention of developing and implementing different software solutions under different operating systems for each of their customer delivery channels. It happened as a result of business needs that had to be addressed at the time. Each independent solution could be fully cost justified individually in relation to its specific purpose.

However, when you now look back and evaluate the cost of ownership, inconsistent customer support, time to market new products, and the overall costs associated with maintaining this type of channel specific environment, the strategy is hard to support as a long-term solution.

It All Started in the Branch

The illustration (above right) depicts the early banking model. It was very simple and straightforward.

You had a data center with a mainframe based core-processing solution. A large BackOffice staff, that was usually located in close proximity to the data center, handled all of the transaction proofing, new accounts setup, and maintenance-type functions directly into the core processing software products. The branches took in paper-based transactions, new account forms, and maintenance sheets and passed them to the BackOffice for actual processing.

With the decentralization that took place in the late 70's and early 80's, many financial services companies began automating their branches. They focused on high-volume, Teller-based functions,and with that came proprietary based, distributed processing systems that could provide distributed-level processing in the branch environment.

Figure 1

Data Center
Core Processing Systems

Branch
Teller automation
Platform sales/service

Customer

The Branch Decentralization Continued

Later in the 80's, decentralization continued with the automation of customer service type functions, commonly known as Platform Sales and Service. To meet the business needs of this new customer delivery *channel*, additional functionality was needed in the branches.

The existing branch Teller systems did not support sales and service based functionality and because of their proprietary nature, it would have been very difficult and costly to expand this functionality into these existing systems.

During this same period, financial PCs were growing popular and new industry standard operating systems were being released that made developing Platform Sales and Services systems in these new technology platforms more practical than using existing proprietary platforms.

Figure 2

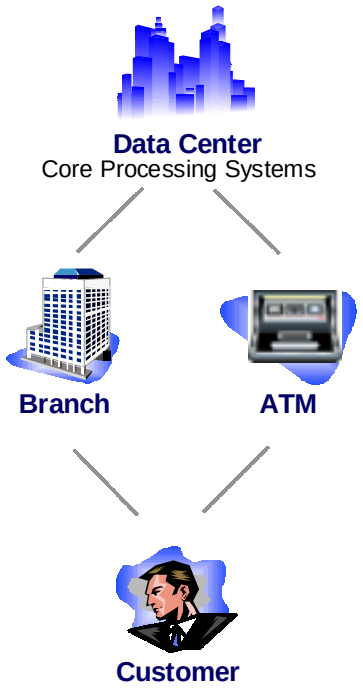
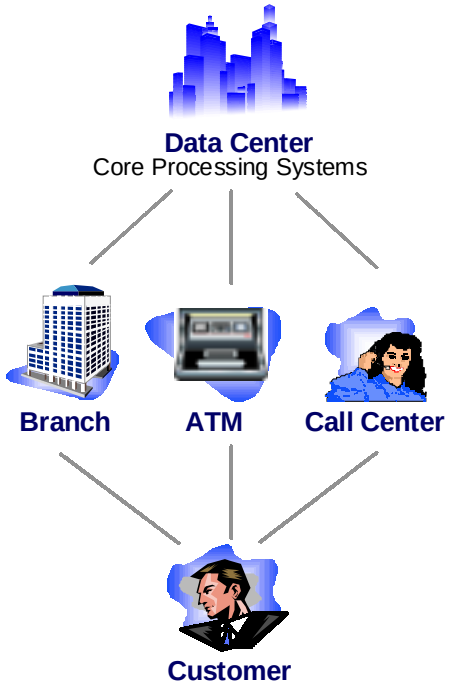


Figure 3



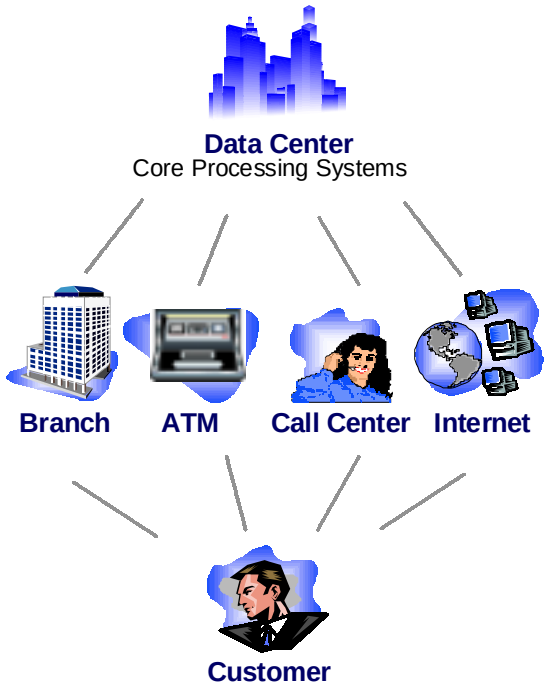
Alternative Delivery Channels Emerge

As new alternative delivery channels emerged and customer-based functions began to take place outside traditional brick-and-mortar branches, we saw the need for systems to handle automated teller transactions (ATM), bank by phone (Call Center and IVR) and, in the last few years, PC and Internet banking.

Each of these new channels, as illustrated in the following diagrams, presented their own unique set of business requirements that could not be satisfied by the existing delivery systems.

With this evolution we have seen each of these channels develop and mature a set of products that address only their specific channel requirements.

Figure 4



Where Are We Today?

In the past few years, we have witnessed major changes in the financial services industry. Traditional customer delivery channel lines of Teller, Platform Sales and Service, Call Center, ATM, and Marketing have all been blurred.

What institutions need now is a *channel* that integrates some Teller-based functions, some Sales-based functions and other customer functions that no single solution today addresses.

Rigid and inflexible, current systems and technologies prevent the bank from responding as the industry continues to evolve and change, as new customer channels emerge, and as new technologies enable organizations to leverage themselves across every point-of-contact with their customers.

Unfortunately, many delivery channels today operate on the limitations of their existing technology solutions, as noted in my real-life case study above. Instead of technology adapting to the business of the organization, the business responds and adapts to the limitations of the technology.

Summary

As previously stated, *"One Technology for All Delivery Channels*" is the simple answer.

To prepare an organization for this strategy requires an *Evolution,* not a *Revolution.* No bank is going to rip out its delivery systems and replace them with one common solution in a single project. Here's what needs to be done. The next delivery solution to be implemented must have the ability to span the organization, providing an enterprise-wide solution with a tactical migration strategy.

For example, if a financial services organization plans to refresh a Call Centre channel with new technology, that technology should enable Call Centre business functions to be reused across the entire organization. Using this strategy, a *Delivery Channel* is any set of business functions that an organization needs to offer to a customer access point.

Some financial institutions are now addressing this problem by using middleware-type solutions. The problem with middleware? It simply provides a common front-end to the same old technology issues. Middleware solutions are technology band-aids that stop the bleeding, but don't heal the underlying problems.

Bio of Kenneth E. Russell

Kenneth E. Russell, vice president of North American operations for Network Controls International, Inc. (NCI), has significant financial technology experience with banks of all sizes – from NationsBank (now Bank of America), Manufactures Hanover, Fleet Bank, to midsize and small Midwestern community banks.

With 15 years of experience in banking technology, operations, outsourcing and project management, Russell has seen enormous changes and challenges in the financial services industry.

As an engagement manager with Atlantic Data Services, Inc. in Quincy, MA., Russell led the company's development of a Year 2000 practice and held management responsibility for highly integrated and extremely complex consulting engagements with large financial institutions across the country.

Prior to that, Russell served as a program manager with Alltel Information Services. One of his more interesting projects was a four-year assignment in which he led the design, development and implementation of delivery systems for a Model Banking common platform that was developed for NationsBank and is now the enterprise platform for the new Bank of America entity.

Russell began his career as a programmer, responsible for managing the information systems needs of a small community bank.