

Unified Branch Strategies for Financial Institutions

A Key Service Delivery Channel

for The Second Wave of eBusiness

Second Wave of eBusiness

The first wave of eBusiness, spurred by the Internet, has had fundamental impacts on the financial service provider industry. The first wave of eBusiness consisted of information retrieval and transactions, though the overall customer experience has often fallen short of expectations. Web-based customer access, lower transaction costs, and new entrants have all challenged the status quo and at the same time created new opportunities. Regulatory changes, particularly in the US, have set the stage for major restructuring of the industry.

The second wave of eBusiness will see leading-edge financial institutions shift from transaction-based customer interactions to relationship-based customer interactions – and a completely different set of performance metrics. This shift will make creating business strategies that foster customer loyalty the top business priority across multiple service delivery channels (over the web, over the telephone, via fax/chat/email or in person). Critical to these strategies is the evolution of branch networks towards this new business model.

In the retail banking sector, even as Internet-based banking is exploding, 50 to 70% of the IT investment is still targeted at branch networks, with the high margin investment targeting new in-store bank centers and mini-branches. This is not likely to change quickly. While consumers may be moving away from traditional branches for routine transactions, they still prefer the branch environment for more complex higher dollar value transactions, because of the increased confidence in dealing directly with bank personnel. It's all a matter of trust. Furthermore, the majority of new customers are acquired through relatively newer in-store and mini-branches. Meridien Research reported that Wells Fargo, a leader in electronic banking, still acquires 90% of its new customers via the branch network. Faced with this customer preference reality, dotcom companies are now establishing brick and mortar points of interaction to address customer needs and attract new customers.

Branches take numerous forms including full service branches, mini-branches (stand-alone and in store), automated branches and virtual branches (emulating local presence via electronic means). In the US (according to the Tower Group), there are over 90,000 branch locations, with 68000 in retail banking and the rest split between thrifts and credit unions.

This includes approximately 50000 full service branches (7 stations and up), 30000 down-sized or mini-branches (5 stations) and over 10000 retail in-store branches (up to 3 stations). What is significant is that there has been a significant shift since 1996 when there were over 62000 full service branches. So while the number of traditional bank branches has decreased, highly reliable, branch networking continues to be a critical link in the chain of delivering financial services to consumer and small business customers alike.

CIOs of financial services providers, such as Retail Banking & Trust, Investment & Securities, Consumer Credit, Commercial Banking and Insurance companies, are under enormous pressure to evolve their branch networks, while dramatically expanding their other channels. At the same time, they need to support the demands of new applications and reduce operational costs, in an ever-growing and highly competitive global marketplace.

Branch Market Drivers and Networking Needs

The branch network is the bricks portion of the bricks and clicks multiservice delivery strategy of financial institutions. The 'clicks' portion includes telephone, chat, email, fax and web access. While 60% of transactions in the US are now coming through some of these alternate channels (with highest growth through Internet banking), the transaction volumes through branch channels is being maintained at over \$12B (Tower Group).

In fact, over 60% of the worldwide IT expenditures of US\$28.9B for retail banking delivery systems is targeted at the branch level. One of the larger challenges is to provide seamless service whether the customer walks into a branch or virtually walks into the bank over some electronic means. The reality today is that financial institutions will only achieve the full economic potential from their customers (i.e. maximizing the return on relationship) by delivering the highest level of customer service over a broad range of financial products, including a common customer experience no matter how he/she chooses to interact with the financial institution.

Effective branch strategies have two major components: expense reduction and improved revenue generation. Real estate and staff in the branch are big components of the expense, while attracting new customers and expanding services are the catalysts for new revenues. Branch channel executives are looking to:

- optimize the location and footprint of the branch (by better use of existing space and opening new outlets closer to the customer)
- adopt methods to better leverage in-person interaction (by selling more products and services)
- motivate consumers to use all available channels efficiently (and thus minimize transaction costs)

This latter point is critical. Since the transaction cost in a branch may be in the order of US\$4 (compared to \$0.40 at an ATM, \$0.25 via telephone banking and \$0.20 via PC banking), it is important to optimize branch activity for high value transactions.

A variety of strategies are being taken. For example,

- Use of analytical data analysis tools and Customer Relationship Management (CRM) to segment customers into various categories of profitability, and to develop appropriate strategies on a customer specific basis across all delivery channels.
- Movement towards web-based applications
- Training and empowering staff across a broader range of financial services and staffing certain branches with Certified Financial Planners (a scarce skilled resource in the market).
- Sales automation, financial planning tools and collaborative selling tools to expand the expertise cost efficiently.
- Audio and even video collaboration with experts to provide “just in time” knowledge at the point of customer contact
- Diversion of branch phone calls that don't require branch level handling (up to 80% of calls) to call centers to free up branch personnel to have more customer interaction time.
- Centralization of certain administrative processes and other functions (e.g. credit adjudication) to improve efficiencies in the branch

- Branch productivity tools such as unified messaging and mobility to improve staff effectiveness.
- Subletting some branch space to coffee shops or dry cleaners to increase traffic and reduce overhead costs.
- Complementing full service and mini-standalone branches with “specialized” branches, e.g. offering home equity loans in furniture stores and small business banking in office supplies stores.

IT challenges at the branch level include meeting current and future application needs, offering the best price/performance possible, being operationally effective, this in an hybrid application environment of mainframe-based legacy and of IP-based client-server systems. The economics of the WAN are also daunting: the recurring cost of bandwidth can account for up to 40% of the total IT cost of ownership.

The number of **classical branches** is constant or decreasing while the range of offered services is increasing. The growth in the branch network environment is in **new-style in-store and stand-alone mini-branches**, and fully **automated branches** this driven by the needs to extend the number of points of presence to better serve existing customers and attract new ones. These can take various forms and employ various branding strategies. In many cases, new universal agent platforms are being deployed that combine traditional teller and sales agent functionality. In the new style service centers, the operative word is revolution as financial institutions move towards a more extensive branch network leveraging technology for increased service flexibility. These in-store branches can be staffed on a part-time or full-time basis by several employees, and consist of a self-serve kiosk, and one or two agent positions with PC (or laptop jack in the smaller sites), printer and telephone.

Financial institution requirements placed on the branch networking infrastructure fall into the following categories, applying to various degrees in various types of branches:

1. **Scalability:** This meets the varied connectivity and bandwidth needs of large full service branches and small in-store service centers.
2. **Consolidation:** Today's multiple network environments lead to ineffective bandwidth use, application inflexibility, and added complexity.
3. **Agility to support new applications:** These are increasingly based on IP distributed client-server architectures and web technologies, representing a change from more traditional host centric approaches.
4. **Merging applications and web enabling legacy application for a more business agile environment:** Pushing legacy applications and protocols to the back office allows branch investments to be optimally positioned for high growth application environments.
5. **Application differentiation in the network:** The ability to differentiate traffic handling over a broad range of real-time and non-real-time applications allows networks to meet application and user needs.
6. **Flexibility to use the public service:** Given the significance of bandwidth costs within IT budgets, it is critical to have the ability to use carrier services that provide the best price/performance.
7. **Higher network availability:** This is needed to meet the needs of business for “7x24” operation.

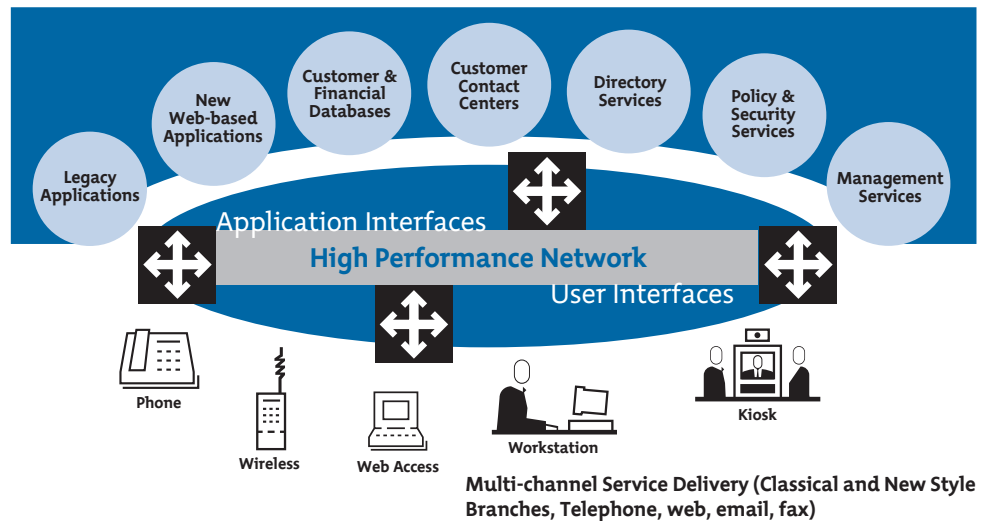
8. Simplified end-to-end network management:

This lowers management complexity and reduces operational costs.

No branch is an island. Therefore these requirements are not isolated to the branch level; any branch architecture has to be integrated with the central site solution to ensure that scalability, application-optimized networking, connectivity, availability and management requirements are met on an end-to-end basis.

Finally, an overriding need of CIO is to lower the total cost of ownership, which is split among people/operations, capital depreciation, and recurring costs of bandwidth (the exact proportion depends on the demographics of a given enterprise). As a rule in the branch environment, the split is 30/30/40 with the largest portion for bandwidth. At the operational level, doing more with less, minimizing training requirements, and retaining skilled operational personnel can reduce ownership costs. At the equipment level, CIOs need to preserve their investments in un-depreciated equipment, often by supporting multi-vendor standards. At the bandwidth level, where traffic grows from 30 to 100% per year, a key challenge is to lower the cost per bit transmitted while meeting application needs.

Figure 1: High Performance Architecture for Multi-channel Service Delivery



Unified Branch Vision

Nortel Network's vision for unified branch networking addresses the needs of financial institutions in ways that significantly change network economics and enable new applications.

Each financial institution has to define its own networking architecture incorporating the branch level, based on its business and networking strategies. That said, Nortel Networks believes that there is great value in defining a flexible architecture that provides a convergence path to IP, takes an end-to-end networking perspective, guarantees multivendor interworking through a consistent application of standards, and enables omni-media killer applications. Nortel Networks' **High Performance Architecture** is an open

IP-optimized eBusiness-grade networking environment that supports all client, server and media types, provides comprehensive security and quality of service mechanisms, and operates under a consistent directory structure with end-to-end network, policy and service management.

The benefits of this architecture to financial institutions are lower total cost of ownership, improved price/performance across applications, multivendor interoperability avoiding lock-in, and investment protection. The High Performance Architecture provides the networking environment that allows financial institutions to catch the eBusiness wave, serve customers better and more effectively compete in time and space.

Nortel Networks unified branch solutions operate within this architecture and exhibit three main attributes:

- **Convergence to IP** allowing controlled migration to web-based services, to IP-based data and telephony applications and to IP VPNs, for increased business agility
- **Application-optimized performance** meeting the reliability, performance and security needs of telephony, data and video applications across the WAN and into the Internet, fully leveraging carrier services
- **Network unification** driving operational simplification and lower cost of ownership, by consolidating multiple branch platforms and networks.

Convergence on IP

Convergence to IP allows controlled migration to web-based services, IP-based data and telephony applications and to IP VPNs, for increased business agility.

Web-based services are forming the basis of the first and second waves of eBusiness. This is driven by the ubiquity of the Internet, growing list of Internet-compatible user devices, browser-based graphical user interfaces, IP addressing

(www.corp.com and anyone@corp.com) and the growing family of IP protocol standards, and by the availability of millions of IP application developers, many of whom are developing applications for the financial services industry. This is also driven by the opportunities to use common web-based platforms for customers, business partners and employees. Nortel Networks' strategy is to help financial institutions transition their data applications onto IP. A critical component of Nortel Networks' Unified branch vision is to provide gateways into legacy applications.

Another component of the Nortel Networks' branch solutions is to provide financial institutions the capabilities to evolve their telephony communications environment to IP telephony, both in the context of employees in the branch and for customer interaction. This involves adding IP telephony clients, communications servers and gateways to the branch LAN environment distributing the functionality to meet performance, cost and reliability needs. This can also involve leveraging the installed PBX base and feature set and extend its reach to branches over the intranet for both digital sets and IP telephones. In both cases, full feature interoperability is provided.

Nortel Networks allows financial institutions to leverage the Internet through IP Virtual Private Networks (VPNs) on a "roll your own" basis, or by subscribing to VPN services from Nortel Networks service provider customers. As the performance and reliability of the Internet improves, IP VPNs will become an increasingly viable alternative, offering private network equivalency for all traffic classes from the full range of branch sites. Today, IP VPNs can be used for small office, remote user access and extranets, by leveraging carrier broadband last-mile technologies.

Application-Optimized Performance

The next branch-level element of Nortel Networks' vision for the unified branch (within the High Performance Architecture) is application-optimized performance. With the second-wave of eBusiness, network performance will increasingly be measured in terms of how consistently and reliably the network delivers connectivity, latency and throughput requirements for eBusiness-critical applications and end users. These will be managed under a system of Service level Agreements (SLAs) between business units (the owners of the applications) and the IT organization.

Application-optimized performance is provided by establishing a structure of network-wide quality of service and security mechanisms to configure, enforce, and audit network components, such that the "right" applications and end users have access to network resources. Configuration management and auditing application performance is the role of policy management, which is tightly linked with enterprise directories, as well as with real-time network-level functionality. Policy management implements a set of rules or policies that dictate the access and use of resources on a per-user or per-application basis, to meet established business objectives. It is focused on providing end-to-end quality of service mechanisms (bandwidth, latency, priority) and security (authentication, authorization, auditing).

Branch Network Unification

The final branch-level element of Nortel Networks' vision for the unified branch (within the High Performance Architecture) is consolidation of all traffic leaving the branch onto a single high performance network, a key strategy to maximize the performance for the bandwidth dollar, and to provide the greatest flexibility to accommodate growth and new applications. Network consolidation provides "plug and play" with a range of carrier services for optimal price/performance. Nortel Networks' vision is to deliver the highest price/performance branch networking across the full spectrum of full-service, mini and automated branches through network unification over whatever carrier service best meets the needs of the financial institution. Network unification driving operational simplification and lower cost of ownership, by consolidating multiple branch platforms and networks.

Conclusions

Financial institutions are looking for branch solutions that are highly agile to their business needs. Nortel Networks' solutions for the unified branch are based on the industry-leading Passport portfolio of Multiservice Access products complemented by either the Succession IP Telephony solution or the Remote Office telephony portfolio, and on the Enterprise Edge, an innovative new small system architecture. For central sites, the strategic product is the Passport 6000 Multiservice Switch portfolio. End-to-end comprehensive network, policy and service management is delivered by the Optivity portfolio.

Nortel Networks unified branch solutions operate within its High Performance Architecture and exhibit three main attributes:

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Nortel Networks' Unified Branch solutions deliver business agility, increased performance and operational simplification to financial institutions.

Nortel Networks is uniquely positioned to deliver its vision of the unified branch. It has taken a holistic approach in developing its unified branch portfolio for financial service providers. It has taken its years of experience in high end networking and applied it in developing highly reliable platforms, robust network level routing and traffic management capabilities, and very sophisticated distributed network management systems. It has taken its application knowledge to build networking platforms that will meet application needs and deliver short time to market for new applications. In addition, Nortel Networks has the global presence (directly and through its distribution and service provider partners) to offer nuts-and-bolts customer service to its financial services customers.

Why Nortel Networks

- Fastest growing major networking/application company with market cap of over \$100B having grown 300% in 1999
- Major supplier to the financial industry including Bear Stearns, Bloomberg, Bridge Communications and NYSE/SIAC, as well as to 80% of the world's largest FSIs
- 34 of 40 national and pan-country Optical Internets based on Nortel Networks terabit technology
- #1 and #2 in Wireless Internet infrastructures around the globe
- Global leader in Internet Telephony with 150,000 Succession ports deployed globally in enterprise and service provider networks
- A new eBusiness powerhouse delivering customer relationship management, contact centers, web centers, and the high performance Internet solutions



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