Anywhere–anytime banking is here. Your IT infrastructure needs to be innovative, optimized, secure and ready to roll to meet the demands of today’s empowered and tech-savvy customer.

Executive Summary

Technology has become the driving force of change. It’s no longer business as usual in the banking industry – the customer experience has changed forever. Banking customers are empowered, expecting exceptional service on an anytime–anywhere basis via the channel of their choice. Loyalty is reserved for who is best serving them at the moment.

In the current multi–channeled banking model, customers are directed to the channel of least cost, but this siloed business approach to services and products can result in increasing dissatisfaction. The process is inefficient, inconsistent and costly. Today, adoption of omnichannel banking is essential to ensure that the customer experience is seamless, integrated and supports customers at the right time in the right place. It must fit into their mobile and digitally savvy lifestyles.
Staying relevant in this digital banking revolution will require deep insight into your customers' needs. It will also require the right IT — from infrastructure to innovative new technologies — to ensure you remain profitable and ahead of the curve in the increasingly competitive landscape.

North American banks' IT spending will grow to $59.5 billion in 2014, and much of that will be in retail banking, with focus on enhancement to the user experience and omnichannel sales and service endeavors.

The New Face of Today's Banking Customer

Ready or not, the new face of the banking customer has arrived, and it has drastically changed. Today's customers are technologically savvy, living an "anytime–anywhere" lifestyle enabled by mobile devices. They are empowered and know what they want — a personalized experience and exceptional service. Convenience is of the utmost importance, and they desire to interact with your institution through the communication vehicle of their choice, at their preferred time, and in the speediest and easiest way possible. Institutional loyalty no longer exists; if you don't serve their needs, they will rapidly choose a competitor who does.

Marketplace Challenges

The economic climate continues to challenge banking institutions of every size, compelling them to identify new methods of achieving sustainable and profitable growth. Competition for wallet share is heating up, and getting even hotter as disruptive technologies, digital startups, telcos and other businesses vie for customers' attention, luring them with innovative new banking options and communication vehicles. The traditional bank must create new products and services to compete with these outliers, satisfy the empowered customer's demands and increase revenue. Driving efficiency, boosting productivity and streamlining operations are imperative to profitability.

The Struggle: Channels vs. Silos

Today, the challenge for many banking institutions is how to better connect with customers. The banks’ products, services and transactional vehicles/tools are not aligned with current customer behavior and demands. Empowered customers want the choice of multiple channels through which they can pursue their banking activities. Traditional banking operations are typically conducted in siloed lines of business (e.g., deposits, lending, wealth management) and often require a visit to a brick-and-mortar location, especially for more complicated transactions. This can often be inefficient, costly to budgets and customer retention, and create an inconsistent bank experience.
“The challenge for many banks is that they have a long-standing culture of branch-centric banking,” says Mark Schwanhaus, director of omnichannel financial services at Javelin. “You can’t wait for the customer to come in [to the branch] with their problems. You need to be proactive and reach out to the customer with answers through the digital channels.”


The Solution: An Omnichannel Banking Strategy

It’s time to break down the silos and transform the banking experience by implementing an omnichannel strategy. This concept is based on a single institution providing a customer-centric experience at the right place, the right time, the right way — and so smoothly transacted it becomes seamlessly embedded in the customer’s lifestyle. It ensures easy and consistent access to bank services and products that may span multiple channels.

46% of people managing their finances online switch between devices before completing the activity.


Options for channels can include:

**Branches.** The brick-and-mortar bank branch is highly popular when a one-on-one, in-person consultation with an expert is desired, especially for more complex transactions such as mortgage loans. Up to 65 percent of customers prefer the branch for rich advice and personalized attention.¹

---

Top tips for your branch technology

Stefan Perreca, CDW Executive Account Manager

1. **Start thinking about the future.** Begin exploring technologies like tablets and video to determine how you might utilize them in new ways to create a better customer experience and more efficient services within your bank branch.

2. **Network access and security need to be top of mind** as cyber attacks and data breaches increase. For every product you buy, you need one to secure it.

3. **Digitalizing your banking processes can put a strain on your storage capacity and performance,** so make sure they can also meet the demands.

4. **Some banks are still running software that was developed on older operating systems and databases.** Since they can lag two or three generations behind, make sure you **plan for compatibility issues.**

5. **While IT can automate, replace or enhance interactions,** don’t force it into every aspect of the customer experience. Sometimes it’s nice to shake a hand or see a smiling face.

Aside from affinity for personal interaction at the branch, speed and ease of use are driving factors in banking consumers’ decisions regarding channel usage. When asked why they chose a different option than the branch for their latest transaction, over 40% of those who used either online banking or mobile banking said what they needed to do was quicker and easier via these automated channels.


---

¹“Winning Strategies for Omnichannel Banking,” Cisco IBSG survey, 2012
Mobile. This is the channel of choice for fast and easy transactions. Tapping the go-anywhere convenience of mobile devices — including smartphones and tablets, combined with the right apps designed by companies like Lextech, for activities such as real-time expense tracking, mobile payments and personal finance management — is a simple way to satisfy customers. In fact, 32 percent of U.S. customers currently bank using their mobile devices.²

Video. When real-time engagement with a specialist offering advice such as investment guidance is requested, individual customers and businesses can easily access that counsel remotely irrespective of the expert’s location. Branches can host a two-way video conference in a self-service kiosk, or video conferencing can be accessed via a home computer. Banks also benefit because they can eliminate the unnecessary overhead associated with staffing each branch with multiple experts. This allows them to optimize productivity during surges and lulls in activity and reduces the need for experts to travel from branch to branch. Today, more than one-quarter (28 percent) of customers value video access to remote experts.³

Social media. There is emerging interest in tapping the power of social media like Facebook and Twitter to deliver financial services like making deposits, transferring money, applying for loans and opening accounts. Security will need to be an integral part of social media banking platforms as they begin to roll out to the public.

ATMs. Still commonly used for simple transactions and dispensing cash, ATMs are getting a new facelift. Some banks are dispensing smaller bill denominations and utilizing video options. Within more streamlined branches with a smaller footprint, ATMs can typically outnumber traditional tellers.

The average cost to a lender for a mobile transaction: **10 cents**

The average cost of a desktop–computer transaction: **20 cents**

The average cost of an ATM transaction: **$1.25**


### The Key to Success: The Right Technology

How do you revitalize your bank’s IT systems to meet the on-the-go demands of today’s customer? What is the key to a successful omnichannel strategy? The right technology.

The transition begins with upgrading restrictive legacy infrastructure to increase technological agility and optimize systems. Next, introduce innovative communication technology and launch a variety of channels from which customers can select to meet their unique needs. Delivering a seamless, customized experience that builds loyalty and provides a competitive advantage is the goal.

### Optimize Your IT Configuration for Omnichannel Banking

What are the critical components of an IT configuration that doesn’t just support but optimizes a seamless omnichannel banking experience?

**IT infrastructure.** At the core of it all is a robust, reliable and resilient IT infrastructure. This is the most critical element because it serves as the underlying foundation of the omnichannel configuration and strategy. It functions as the engine and key enabler, powering up the entire operation.

Designing your IT infrastructure requires focused forethought and careful planning. CDW advises that you take an architectural approach so the model is scalable and flexible to grow with your bank’s needs. Your IT infrastructure configuration should also be application–centric so it amply supports the core processing system, existing and new technologies, and current and innovative applications.


³ “Winning Strategies for Omnichannel Banking;” Cisco IBSG survey, 2012
Finally, it should be designed with elasticity to accommodate ever-changing financial regulatory and compliance requirements. For example, it is possible that in the future regulators may require a recording element for audio transactions to provide audit trails that span the total system.

Upgrading your IT infrastructure with reliable and robust solutions from trusted technology providers like IBM, Cisco and HP will help your banking organization meet rigorous regulatory requirements, manage risk, support better decision making and prepare for future growth.

Components you might consider for upgrade include:

- **x86-based servers.** Easy-to-manage yet powerful centralized servers can help increase cost savings, yield energy efficiency, boost analytic performance and protect massive quantities of data.

- **Network switches.** Best-in-class switching and networking are needed to ensure your network keeps up with the growing demands of your data center.

- **Hard drives.** High-capacity memory devices can increase database memory performance and the scalability of your enterprise data center.

- **Storage networking.** Benefit from a redundant, high-speed path to a pool of storage devices to help maximize the performance of servers and applications.

- **Virtualization solutions.** Storage virtualization can help manage the burgeoning storage demands on banks by improving efficiencies, centralizing data management systems and enabling greater scalability.

**Collaboration technology.** Engagement and interaction are essential elements for building customer loyalty. Financial transactions can be complicated and often require customer interaction for research, education, questions and problem solving.

Collaboration technology can address this issue. It enables banks to cost-effectively interact with their customers at the time and place of the customers’ choosing, whether from the comfort of their homes or at a branch location.

Versatile technology is the key to anytime-anywhere communication. The variety of options available range from voice (phones) to video and self-service kiosks that easily and cost-effectively facilitate two-way, real-time collaboration and greater customer service.

23% of consumers saw the use of video conferencing with remote experts as a way to enhance the quality of advice in situations where access to quality expertise is a concern.


Because connectivity and collaboration are critical to banking organizations, CDW’s Telecommunications Practice, as part of our Aggregation Services, can help define and scope your voice and data requirements domestically and internationally. Our experienced carrier service specialists are up to date on the latest providers, technologies and financial services industry trends, giving them the knowledge and experience to make solid recommendations based on your needs.

A variety of communication solutions can be tailored to provide the tools you need to serve your customers with real-time advice in a time- and cost-efficient way. Here are two cutting-edge Cisco collaboration solutions that provide unique customer collaboration capabilities:

- **Cisco Unified Communication Manager** can improve collaboration with a unified call control platform. It provides services such as session management, voice, video, messaging, mobility and web conferencing.

- **Cisco Remote Expert** serves the customer at the right place and the right time with counsel from a banking specialist in a virtual face-to-face meeting with high-definition video.

**Enterprise networking.** The enterprise network is a foundational element often taken for granted. Yet it is critically necessary for delivering a high level of service to customers who want integrated access to banking across multiple channels. The network must be resilient and perform in an optimal manner with flexible bandwidth and low latency to support a variety of applications and financial solutions. Most important, your network must consistently deliver fast, reliable and accessible services to your customers.

Networks are crucial in organizations that can’t afford downtime or interruptions. They are even more critical in an omnichannel-focused organization with an influx of video and mobile devices consuming available bandwidth.

Components such as routers, switches and wireless access points help create a unified access approach to integrated wired and wireless networks. Since omnichannel banking is all about connections, routers and switches play a singularly important role in the network. Key technologies should be hot swappable and redundant and include modular software management support and upgrade paths.

Optimizing your network is one of the most important steps to take to prepare for the increasing demands an omnichannel strategy will place on your equipment. This can be done in a variety of ways. It may include updating core switching and routing to 1, 10 or 100 GB options to improve bandwidth shortages and maintain network resiliency. Adding load balancing devices can improve the performance of those critical applications that are now being centralized within the data center, across the enterprise or in the cloud.

WAN optimization techniques can also increase efficiencies over expensive links, reduce latency and improve the user experience at remote locations. Network management tools are another option to deliver higher visibility and control across both the wired and wireless network. Add to that overall network security to ensure smooth operations and protect your organization’s assets.

**Server virtualization and storage.** At the heart of the IT infrastructure is the data center housing your computer systems and associated software and hardware. Its key “tenant” is the server platform for the omnichannel banking strategy. In order to support the high-end video, collaboration, ATM and web technology required of a bank’s growing number of branches, the server platform must be agile and scalable. Since financial technology is rapidly evolving with innovative beta technology concepts, the server platform must also allow a bank to provision for future IT needs.

One powerful method of optimizing the server platform is through server virtualization. Creating a virtual version (essentially transforming hardware into software) allows users to maximize physical resources in the most efficient way possible. Server virtualization functions by running multiple independent virtual operating systems on a single computer. The benefits include reducing power and cooling requirements while increasing server utilization, data security and remote access.

### Server virtualization assessments (SVAs)

Using a proven methodology, CDW can help you assess whether you’re a candidate for a server virtualization refresh, whether you’re getting the most ROI from your current investment, and what your virtualization “vision” could look like in the next five years.
Customer and transactional data volume is exploding and appearing in both structured and unstructured formats like Twitter and Facebook — challenging traditional ways of storing, accessing and managing information. As customer cross-selling via omnichannel banking grows along with the limitless quantities of customer data (and don’t forget regulatory compliance requirements), data storage management solutions must be implemented to assist in more quickly aggregating data enterprise-wide.

An effective data storage solution can transform your IT environment by providing flexibility and systematically standardizing and simplifying your data storage systems. Integrating archiving into your data storage solution lets you define data retention policies for various data and users. Such policies ensure the proper storage of data, and deletion when no longer needed. Data archiving enables banks to perform advanced searches and supports greater scalability and flexibility for future growth.

Storage area networks (SANs) can also be a benefit to the ever more complicated task of managing limitless amounts of data. SANs are storage architecture that provide a redundant high-speed path to a pool of storage devices. These devices house data to maximize the performance of servers and applications.

Technology like the SAP HANA is ideally suited for omnichannel banking. It converges database and application platform capabilities in-memory to transform transactions, analytics, text analysis, and predictive and spatial processing so banks can glean valuable customer and business insights in real time.

Security. Cyber attacks increase in volume and severity on a daily basis, while millions of financial transactions are made with the expectation of security and reliability. Highly confidential and sensitive personal and financial information being shared across multiple channels exposes your organization to cyber-criminal activity. Unsecured Wi-Fi networks, mobile malware, third-party apps and risky consumer behavior increase the system vulnerability of mobile banking. Security has never been more important, or more challenging.

Maintaining the trust of your customers is a top priority; one breach can destroy that relationship forever. Top-notch security is a must, not only to protect your valued customer from data breaches and cyber attacks, but to meet the growing demands of regulatory compliance. Companies like RSA and Veeam can help you do the job with confidence.

88% of attacks against financial services companies were successful in less than a day.
21% of these were discovered within a day.
40% of these were restored within a day.

Source: “Security a Strategic Objective, Not Just IT’s Problem,” Verizon, ABA Banking Journal, April 1, 2014

Be Brave, Be Bold, Be Willing to Experiment

Omnichannel banking is the new financial frontier. Success will be achieved by tapping the power of technology in new and innovative ways. Banks must bravely explore a variety of concepts and approaches to understand how they can best serve customers’ needs to ensure seamless delivery of their desired services and connection points.

The branch must also address the Millennial challenge, a generation of customers who are the least likely to have visited a branch. In fact, only 19 percent visited in the past week, according to a March 2014 Bankrate.com survey. So, creating a compelling virtual dialog between the bank and the Millennial customer will be particularly critical to developing loyalty and a long-term financial partnership.

What’s our final advice? Ask your customers. They’ll tell you the best way to interact with and serve them. Ultimately, that’s the key to building a successful long-term relationship and profitable growth for the banking institution.

And, of course, your CDW Finance account manager is always here to share insights into what CDW is seeing in the industry to help banks and credit unions as they plan for the future.
To learn more about CDW’s banking technology solutions, contact your CDW Financial Services account manager, call 888.706.4239 or visit CDW.com/banks.

Stay on top of the latest industry trends and updates.

Keep on top of industry trends at CDW.com/fintalk

Follow us on Twitter @CDW_Finance