

Accelerating Financial Services' Digital Transformation

WHITE PAPER

Financial services companies face multiple challenges that are driving the need for digital transformation (DX). For instance, online banks now represent a potentially powerful new competitor for traditional financial services companies. Also, the proliferation of mobile applications, spurred by the demands of new consumers with radically different views of how banking should be done, have added substantial complexity to how financial services are provided.

This white paper explores the evolution of financial services offerings, the evolving demands of customers who expect frictionless experiences and the new requirements shaping how network infrastructure must evolve to meet these new demands.

Banks and other financial institutions are rearchitecting how they do business. Ubiquitous Internet access has opened up new areas for customer engagement, including mobile banking apps, digital banks and new forms of digital currency. Financial technology (fintech) suppliers are adopting the latest data analytics tools and utilizing high-speed data transfer so they can provide even more information to their customers when and where they demand it.

The way banking is done by customers is also evolving. It now requires access beyond traditional branch locations and hours. Customers expect always-on, always-available access to their accounts and funds. The change has been so dramatic that many millennials and Generation Z consumers have never set foot in a bank branch. While banks continue to invest in their physical locations, they also need to embrace new business models that add to their services portfolio and create better customer experiences.

Traditional banking technology infrastructure needs to be modernized so that these new customers have a reliable, frictionless experience and banks can leverage advanced communications options like video conferencing to deliver a broad range of services even if clients are not physically present at a branch.

Even though each institution and its branches have different needs, there are some common threads, such as the importance of security designed to keep transactions safe and personal information private from end to end, regardless of a customer's connectivity method or transaction location.

What financial services companies want from DX

Regardless of their market niche, virtually every financial institution wants to achieve bottom-line value from its digital transformation investment. And, according to Jeanne Ross, Sloan principal research scientist at the MIT Center for Information Systems Research, the path to DX success includes the abandonment of IT silos and the development of agile methodologies for data, applications and service delivery.¹ By embracing agility, financial organizations can speed the time to market for new products and services to be more competitive. Such agility can also lead to an increase in customer engagement, higher satisfaction and better Net Promoter Scores as customers extol the virtues of advanced and more flexible banking technology to friends and social media feeds.

Where transactions used to be simple and low bandwidth and were assumed to be secure, today's applications and services need to support more transactions, richer applications that require higher bandwidth and multilayered security across infrastructure, applications and devices.

Today, institutions want to offer enhanced applications and services, many of which need to be supported by a modernized, more flexible network that can keep pace. Speed, reliability and secure connectivity in branch locations are now table stakes, whether for back-office applications, customer self-service capabilities or even entertainment for customers while on premises.

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Banking today must be omnichannel; customers want to be able to begin a transaction on an app, continue at an on-premises kiosk and complete it, if necessary, with a bank employee—all without having to re-enter or repeat the same information. This demands that both customer-facing and back-end operations become more efficient, drive customer satisfaction levels and offer better security control to bank and IT operations. These

must include such functions as centralized security and network management in order to support growth in transaction volume and service variety, which are at the heart of a digital banking experience.

Preparing for the digital future

Forward-thinking financial organizations will benefit from a broad range of trending technologies—if they keep their options open and architect their systems for the rapidly changing trends in how, when and where financial transactions take place.

For instance, adoption of automation and robotics in branches enables institutions to accelerate time to value by speeding and simplifying mundane networking and IT functions. These technologies also reduce the need for staff to execute redundant tasks like network and security management, freeing up IT and business units to focus more on creating new business value.

¹ "For True Digital Transformation, Businesses Must Embrace Agility," MIT Sloan Executive Education [innovation@work blog](https://innovation@work.blog), 2019

New data visualization tools utilize big data analytics, artificial intelligence (AI) and machine learning to create visual representations that can make it easier for financial institutions to act on trends before competitors even see them. New intelligent applications can be deployed to predict possible fraud, forecast customer needs and even align demographic and banking information to determine where branches should be located.

Further, those AI tools paired with big data analytics can enable personalized suggestions tailored to every customer's usage and further enhance global security by learning regulations for every jurisdiction in which the bank operates.²

Many institutions, however, find that their digital transformation plans may be thwarted by their existing network infrastructure. Increasingly, banks are discovering that they can't squeeze today's software-based business processes through yesterday's hardware-centric, bandwidth-limited network pipes.

Technologies that drive DX

All of these new technologies need infrastructure capable of delivering increased bandwidth demand for on-premises, mobile and cloud-borne applications and a network that can manage data and applications as well as the data transport. Several functions, in particular, are critical for modernized network infrastructure:

- **Performance:** New devices, added kiosks and more users all add up to increased data volume as users increasingly rely on multiple devices for each banking task.
- **Flexibility:** Consumers' and business users' demands are changing at a rapid pace. This puts a premium on agility, as networks need to adapt to each new technology advance without becoming a bottleneck and slowing down business-critical processes.

- **Affordability:** Legacy networks, such as proprietary leased lines and MPLS, can't scale either up or down to meet a bank's evolving needs in an affordable manner. Banks want to easily add new technologies that can integrate with existing infrastructure and applications seamlessly but without massive, unpredictable cost increases as network service options expand.

The positive impact of new technologies can be dramatic. For example, JPMorgan Chase deployed an AI-based solution that reduced 360,000 man-hours spent analyzing 12,000 commercial credit agreements down to seconds,³ and natural language processing now powers chatbots that helped Swedbank achieve a 78% first-contact resolution within just months of deployment.⁴

In today's hybrid, multicloud IT environment, banks are relying on cloud providers to help accelerate their digital-centric approach with secure, compliant, easy-to-use offerings that enhance traditional on-premises services. As banks rely on unified communications and Wi-Fi-enabled branches to keep customers happy and engaged, what does this mean for how networks are deployed?

What's in your network? Factors to consider

Traditional legacy T1 and MPLS-based networks were great for the limited applications of traditional banking. Making a deposit or looking up an account balance in a pre-big data world didn't require a lot of bandwidth, just a secure connection.

Today, however, more performance is a must-have. If gigabit speed is good, then gigabit-plus speed is better. Software-defined networks (SDNs) and software-defined wide-area networks (SD-WANs) give financial institutions the flexibility and agility required to meet today's business demands. While existing MPLS networks may be appropriate for legacy applications and infrastructure, SD-WANs deliver the speed, agility and cost savings financial institutions are seeking.

2 "Five Ways AI Is Disrupting Financial Services," FinTech Futures, April 2, 2018

3 "AI in Banking – An Analysis of America's 7 Top Banks," Emerj, Aug. 8, 2019

4 "How AI Is Disrupting the Banking Industry," International Banker, July 4, 2018

It's no surprise that the SD-WAN and SDN market is exploding, with research firms like Adroit Market Research projecting SDN market value to hit \$100 billion by 2025.⁵

Thus, organizations must modernize their IP networks to meet these constantly evolving needs. So, what should financial firms consider when planning their 21st century network support for DX?

- First, take into account the size of the provider's IP network coverage. Will it be available for all the desired branch locations and headquarters facilities? Can it connect to preferred cloud providers on-ramps?
- Next, determine if the provider can source the last-mile connectivity. Financial institutions should look for a provider that can handle the entirety of the network connections, so the bank doesn't have to negotiate, contract and deploy connectivity from dozens—or even hundreds—of providers to complete their IP network.
- Organizations should seek a full-service network provider that can help design, provision, build and manage the IP network so the bank's IT staff doesn't have to. Why manage what can be simply and efficiently outsourced?
- Legacy mindsets and priorities can encumber some providers. Choose one that has a digital-first strategy, focused solely on IP networks rather than having to manage its own MPLS networks as well.
- Consider the financial health of the provider. Look for one that is stable, has the ability and resources to get the job done on time and can be expected to still be there to support the network once it's deployed.

Make sure the chosen provider's network supports video and other high-bandwidth use cases, such as expanding in-branch Wi-Fi needs or supporting 21st century trends like the Internet of Things as they move into banking.

WesBanco Bank

Founded in 1870, WesBanco has 2,000 employees and at one point had 174 branches connected to its Wheeling, W.V., data center using legacy T1 and DS3 circuitry. The connection couldn't scale to support the digital needs of the bank as it continued to acquire and open new branches. WesBanco knew traditional telecommunications strategies couldn't meet its needs without significant new expenditures. Instead, it chose Comcast Business to provide a comprehensive enterprise network solution of Ethernet and Internet services to all in-market locations, given Comcast Business's reputation for reliability, speed options and value. As a result, WesBanco was able to deploy new banking services 95% faster than before moving to Comcast Business, while delivering improved employee collaboration and an enhanced customer experience, all with cost efficiencies to boot.

⁵ "Software Defined Networking (SDN) Market to Hit \$101.23 Billion by 2025," Adroit Market Research, April 16, 2019

Introducing Comcast Business for Finance

There is one company that can confidently and definitively address all of the above needs: Comcast Business.

Comcast future-proofs enterprise networks with its ActiveCore Platform, an SDN that runs on the nation's largest gigabit-speed network. Financial institutions can then leverage ActiveCore to deploy Comcast's SD-WAN, which overcomes the complexity of existing MPLS systems with features like:

- Application-aware routing to make the most intelligent choice for sending data.
- Secure VPN that meets governance, regulatory and security demands for every user.
- Stateful firewall that detects threats without impacting network performance.

Comcast Business enables smarter network connections that are reliable enough to support the entire enterprise while reducing the time to market for new offerings and new locations. SDN and SD-WAN flexibility translates into network deployments and changes that take hours rather than months.

Banks can either upgrade their existing MPLS networks or take an all-digital approach from the start. In either case, financial institutions can rely on Comcast Business to eliminate their network bandwidth constraints, reduce their dependence on MPLS and other legacy approaches, and utilize Comcast Business facilities to protect branches from outside attacks, such as distributed denial-of-service, malware and advanced persistent threats.

Why Comcast Business?

Comcast Business provides the largest IP-based broadband network in the U.S. and has partnered with last-mile providers so they can offer end-to-end connectivity for any financial services organization.

Comcast Business is 100% focused on providing, building and managing networks for its financial service customers, freeing their IT teams to focus on profit-generating activities rather than managing network connections. Comcast Business can help lower both operating costs and total hardware costs while enhancing network and endpoint security for both employees and customers. Its centralized provisioning and management enable banks to add network bandwidth or services on demand to meet dynamic changes organization-wide.

Next steps

It is clear that next-generation technology will power the new applications that underpin digital transformation. Those banks and financial institutions that can't evolve to meet these changing demands will lose business to competitors. Having a modernized network architecture in place is essential to make that happen.

ActiveCore and SD-WANs can meet the demands of DX, lower overall costs and greatly improve efficiency for financial institutions today and into the future. Comcast Business offers the most comprehensive offerings and cradle-to-grave capabilities to offload IP network headaches from overburdened IT and line-of-business teams.

For more information, please visit
www.Comcast Business.com/enterprise.

About the Sponsor:

**COMCAST
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Comcast Business provides a variety of enterprise solutions, from network connectivity to managed services, that enable businesses to simplify the complexity of their network in the face of dynamic innovation and the evolution of the distributed enterprise.