BECOMING A DIGITAL BANK

5 Must-Have IT Capabilities Enabling Traditional Financial Services Organizations to Drive Top-Line Growth and Profitability
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A Foundation to Innovate and Thrive

Changing demographics and trends point to younger audiences trusting tech companies with their money more than banks.¹ This makes reimagining traditional approaches and providing digital services a high priority for banks seeking to achieve CEOs’ top-line revenue growth and profitability goals.

Big banks have long recognized the competitive advantages of technology. Financial firms were early adopters of supercomputing, object-oriented programming, virtualization, and custom app development. That’s why the speed with which fintechs have emerged and disrupted every aspect of finance is not altogether surprising.

Digital services are the lifeblood of new up-start fintechs, yet traditional banks operating for hundreds of years can quickly be as well positioned—if not better positioned—to modernize banking because they have the foundational building blocks to achieve digital transformation. What’s imperative is that banks move quickly to evolve their decades-strong investments in robust infrastructure, adopting more modern platforms while extending services to every available endpoint.
What is a Digital Bank?

Over the last several years, the definition of a digital bank has varied by business, publication, and expert. Banking Exchange nearly two years ago answered the question “what really is digital banking?” with the following: Digital banking is the incorporation of new and developing technologies throughout a financial services entity, in concert with associated changes in internal and external corporate and personnel relationships, to provide enhanced customer services and experiences effectively and efficiently.3

A year ago, McKinsey & Company proposed an alternate view: where digital becomes not merely an additional feature but a fully integrated mobile experience in which customers use their smartphones or tablets to do everything from opening a new account and making payments to resolving credit-card billing disputes, all without ever setting foot in a physical branch.4

Today, a digital bank definition must encompass both views, with organizations seeking to become digital banks doing the hard work of delivering mobile experiences while modernizing all of IT to maximize efficiency. For example, updating core banking platforms and leveraging cloud computing to speed service delivery as well as empowering employees to improve customer experience by delivering a mobile-first experience.
In mature industries such as financial services, achieving aggressive revenue and growth targets is dependent upon: innovation, deepening of customer relationships, and bundling of products and services. Powered by a digital foundation, traditional financial services organizations are well positioned to achieve those goals.

Because financial services organizations are already the biggest industry spender on IT—to the tune of $360 billion worldwide in 2016—becoming a digital bank does not necessarily require more, but rather the optimization of skill sets, process, and technology investments. Most important, it includes a comprehensive undertaking of transitioning to the foundational elements required to become a digital bank:

1. Commitment to innovation with a modernized data center
2. Embrace of cloud technologies to create a platform for rapid growth
3. Optimization of bank branches to be relevant in the digital age
4. Personalization of customer experiences
5. Adoption of a security-first approach—from data centers to devices
1

COMMIT TO INNOVATION WITH A MODERNIZED DATA CENTER THAT DRIVES AGILITY AND REDUCES COSTS
Drive Business Agility and Efficiency

For banks looking to achieve true agility, speed, and efficiency, a modernized data center is a required foundation. With modern data center infrastructure, banks can deliver on increasing digital business demands—from improving customer experiences to increasing scalability to enhancing security, within or at lower costs. A modern data center is software-defined, virtualized, automated, standardized, including a consistent architecture and operational model for infrastructure and application delivery, and extensible—operating across private, public, and hybrid clouds.

Software-defined compute is deployed in most financial services data centers worldwide. A recent survey reported 60 percent of financial services respondents had compute virtualization levels above 40 percent, with a third of respondents above 80 percent.8 Still, a digital bank’s need for faster deployment, unified operations, and on-demand scalability requires more. It requires a fully software-defined data center foundation that extends virtualization across the entire infrastructure stack to deliver superior performance, higher availability, and cost savings.

Modernizing infrastructure begins with hyper-converged infrastructure (HCI). By leveraging the hypervisor to deliver virtual compute, storage, and management in a tightly integrated software stack, financial services firms are lowering time to value for IT investments and TCO by 50 percent through capital and operational savings.9 Bank IT leaders are also deploying network virtualization to abstract network services, creating a flexible pool that can be allocated, utilized, and repurposed on demand, reducing time spent on reconfiguring physical networks.

Better Manage Apps

Because banks rely on thousands of internal apps to run their businesses, there is intense pressure as part of digital transformation to better manage complex application lifecycles. Moreover, the proliferation of new and traditional apps makes managing, updating, delivering and accessing apps on a multitude of devices more difficult.

A digital bank broadens IT automation to eliminate manual processes, improve resource utilization, and simplify management, particularly for application provisioning. It’s impossible for banks to be nimble in the production and delivery of new apps and services if it takes months to provision development infrastructure. From within the modern data center, a digital bank can also run modern apps side by side with traditional apps, boosting productivity.

Digital banks take a proactive approach to management, monitoring the health and performance of infrastructure, and tracking and managing the cost of data center operations. With broader automation and comprehensive IT management, bank IT teams shift their focus from maintenance to higher value services that enhance customer experiences.
2

EMBRACE CLOUD TECHNOLOGIES TO CREATE A PLATFORM FOR RAPID GROWTH
Speed Service Delivery

The second key requirement to becoming a digital bank is infrastructure extension through cloud computing, resulting in greater agility and cost savings. Calculations performed by IDC Financial Insights show the biggest global banks saving $15 billion by 2019 from cloud adoption, cutting technology infrastructure costs by 25 percent. Moreover, developing an application on the cloud can help reduce the time it takes to launch from 89 days to 15 days, speeding new products and services to market.

Given the sensitivity of financial information and driven by compliance guidelines, financial institutions may need to choose among different cloud-deployment models—private for sensitive data, public to store other information or hybrid that combines the two—for specific requirements. Banks should be able to extend seamlessly to all clouds without cloud management being a significant obstacle.

A true digital bank can run, manage, connect, and secure all applications across multiple private and public clouds and devices—including apps running natively on the leading public clouds. Moreover, bank staff can pair common management tools with their existing IT infrastructure management skills and knowledge to move workloads from private to public clouds and back again—avoiding vendor lock-in and ensuring data compliance.

Enjoy Cross-Cloud Flexibility

With a modern, flexible foundation, banks avoid new and retraining costs while running private clouds on-premises, public clouds as a service, community clouds, and hybrid clouds, to support virtually any workload—from traditional enterprise apps to modern container-based microservices—all without creating cloud silos. Because there are soon likely to be business advantages to partnering with fintechs, financial services organizations embracing cloud now can enjoy IT agility, scalability, and efficiency advantages with zero upfront capital investment while future-proofing their infrastructure for digital banking capabilities and partnerships to come.

Financial services firm ING, has teamed with technology giants IBM, Hewlett-Packard, Cisco, VMware and EMC to construct a large hybrid cloud, combining the features of public clouds and private data centers. Simplifying the rollout is the ability for ING staff to manage the large hybrid cloud through a single pane of glass, using the same administrators and common IT management solutions.
3

OPTIMIZE BANK BRANCHES TO BE RELEVANT IN THE DIGITAL AGE
Increase Employee Productivity

When 66 percent of consumers plan to use the branch in the future as often as they do today or more, opportunities for modernizing the branch assume critical significance. Digital banks ensure their branches are part of an integrated customer experience that spans all banking channels. Network reliability and performance are as important as delivery of business-critical applications to tellers and other employees. IT resources are consolidated and virtualized to keep costs low. Innovative wireless technologies enable bank branches to recognize and personalize relationships when customers enter the bank.

Digital, self-service kiosks in branches allow customers to browse the latest products and services. While one iPad enables arriving customers to view new mortgage rates, an Android device may feature an appointment calendar to book a meeting with a financial advisor.

Personalize Customer Interactions

In digital banks, interactions on the go will be as familiar as tellers are today with sales, advisory resources, and consultative selling taking place at the same time—from any device. Already, Wells Fargo is experimenting with a “Neighborhood Bank” format, leveraging technology with assisted service options through ATMs and wireless tablets. Umpqua Bank is opening a branch where associates are equipped with laptops that enable them to open accounts or serve customers anywhere. TD Bank and PNC Bank are using tablets and iPads in branches to engage with customers and streamline the onboarding process. Regardless of location or device, digital bank experiences can be delivered within a brick and mortar branch or outside the perimeter.

Branch staffed enabled to move freely around, accessing data and information, is game changing for banking. By centralizing, automating, and delivering the flow of data and information in a secure manner anytime, anywhere, on any device, financial services leaders can lay the foundation for a 24/7 digital bank that makes branch banking simple, effortless, and convenient for customers.

Scotiabank, based in Canada, is betting big on mobile banking and the digital transformation of financial services. Scotiabank has invested $100 million in technology to improve the customer experience in more than 1,000 bank branches. The company even has its own tech hub, the Digital Factory, solely dedicated to transforming banking through technologies including mobile apps and devices.

“We have someone called the ‘digital ambassador’ walk up to a customer and ask them, ‘What’s the purpose of your visit today? Maybe I can help you with that right now.’ They use this application on the iPad to start a conversation. They can demonstrate, for instance, our mobile banking app or our web-based banking on the iPad.”

ANDREW BELL
SENIOR ENTERPRISE INFRASTRUCTURE SERVICES CONSULTANT, SCOTIABANK
4
PERSONALIZE CUSTOMER EXPERIENCES
Transform Customer Interactions
Consumers are not only banking online more than ever, but also doing so on their mobile devices. Very soon, wearables and connected devices could feed data to insurance companies, further transforming the financial services industry. To meet banking CIOs’ growth expectations, traditional banks must replace both legacy technology and transactional models with relationship-management models and mobile-first mindsets. In practice that means providing anytime, anywhere access to bank services on any device and recognizing that loyal customers have a higher lifetime value. Delivering better customer experiences is the fourth reason to invest in becoming a digital bank.

Improve Engagement with the Digital Workspace
Compared to other industries, financial organizations are ahead of the curve when it comes to recognizing the potential for the digital workspace to improve operations and drive competitive advantage. The financial industry leads with 9 of the 14 most common successfully executed initiatives, compared to other industries—including enabling mission-critical apps for mobile, shifting to a new desktop architecture, and leveraging the cloud for file sharing. Successful executions of digital workspace initiatives in financial businesses are 7–8 percent higher than in other industries. ANZ Bank recognized the opportunity to take banking mobile, creating dozens of apps to support better customer and employee experiences. The bank deployed an internal app store for employees, scaling and provisioning apps quickly to increase productivity. Moreover, ANZ met security and regulatory requirements for customer data and corporate data with policy-based access provisioning. At ANZ, mobility offers simple, intuitive customer transactions anytime anywhere and increased work flexibility.

Digital banks also drive greater access to financial services. One of the main catalysts to financial inclusion is eliminating paper trails whenever possible. Innovative technologies—particularly mobile devices supported by modern cloud infrastructure—allow financial services organizations to affordably reach more customers. By digitizing services for anywhere, anytime banking, financial institutions create new ways to bring the unbanked into the financial mainstream.
5
ADOPT A SECURITY-FIRST APPROACH FROM DATA CENTERS TO DEVICES
Transform Security and Streamline Compliance

Ensuring governance, risk, and compliance has become increasingly challenging for financial services organizations, negatively impacting progress to becoming a digital bank. The U.S. financial sector is among the most targeted worldwide for cyberattacks and security breaches. There has been a 29 percent increase in the total cost per breach since 2013, and now there is a 26 percent probability of a bank having a material breach involving 10,000 or more lost or stolen records. The fifth tenet of becoming a digital bank is instituting comprehensive security and streamlining compliance processes from the data center to the device.

Gain End-to-End Protection

Digital banks understand that security can no longer be added on, but must be architected into the IT infrastructure to deliver protection anywhere—from users and the devices they are on to the networks they traverse to the infrastructure where data resides. Digital banks ensure robust security through micro-segmentation which establishes virtual firewalls around workloads or network segments to prevent intrusion and lateral movement, should malware penetrate an environment.

The most comprehensive approach to security for a changing landscape is providing a ubiquitous software layer across application infrastructure and endpoints. With this approach, digital banks can take full advantage of the visibility and context of the interactions between users and applications, so they can align their security controls and policies to the applications they are protecting.

“Micro-segmentation has ensured our organization is more secure than ever: with (VMware) NSX, the business knows we can keep internal and customer data safe and secure.”

BLAIR WRIGHT
CIO, LONDON CAPITAL GROUP
Comprehensive Digital Bank IT Capabilities from One Proven Provider

Well-orchestrated implementation of five key digital bank investments can help ensure financial firms achieve revenue growth and profitability. Only VMware provides all the digital bank technologies that financial services organizations need to meet next-generation customer, employee, and regulatory requirements.

VMware delivers groundbreaking software-defined solutions that enable financial services organizations to accelerate digital transformation. As a leader in cloud infrastructure and digital workspace solutions, VMware accelerates financial services’ adoption of modern IT to grow revenue and drive exceptional experiences while improving operational efficiencies and strengthening data and endpoint security.

VMware solutions modernize core platforms and create ecosystems leveraging hybrid clouds to launch new services and partner with fintechs. They revolutionize branch banking by empowering corporate bankers, branch staff, financial advisors, loan agents, developers, and remote workforce with access to any application, on any device, anywhere, delivering seamless customer experiences. VMware’s intrinsic security from the data center to the device helps financial organizations simplify security while automating compliance.

Financial services organizations are teaming with VMware and becoming digital banks, advancing decades-strong foundational investments to accelerate top-line growth and profitability.

Learn more about how VMware can help your bank be a digital leader at:
www.vmware.com/go/financialservices
self-service

12. Ibid.
17. Ibid.