The IT Innovator's Guide to Digital Transformation in Financial Services







Introduction

The technology landscape in the financial services sector is vast, ranging from cutting-edge to mission-critical, each having an impact on the industry as a whole. Customer-facing services and back-end operations alike are seeing real benefits from innovation, including greater efficiencies and higher levels of customer satisfaction.

The digital transformation in financial services is not new; organizations have recognized the need to embrace technology to help them stay competitive in a marketplace that increasingly is digital-centric. From augmented reality and natural language processing enhancing customer services to intelligent risk analysis helping operations make smarter business decisions, technology plays a critical role in the financial services sector. As such, organizations must continue to digitally transform to adapt and meet changing business expectations.

The technologies that power a digitalcentric financial services organization need a network powerful enough to derive their true value. Speed, agility and flexibility all are critical in running the systems necessary for financial services organizations to provide exceptional services to all their customers—both outside and inside the company—at any time in any location using any device. The right infrastructure is a must for financial services organizations moving farther up the digital transformation ladder to realize more efficient processes and greater customer satisfaction, which translates to higher revenues.



The Financial Services Industry: A Snapshot

The financial services sector is at a crossroads: Technology is enabling organizations to work smarter to achieve higher revenues, yet they face a growing number of roadblocks in form of increased competition from non-traditional banks, greater regulatory controls and the growing threat of data breaches and attacks by cybercriminals. As a result, many organizations struggle with simply ensuring their data and systems are safe and compliant while striving to keep their customers happy. Oftentimes, innovation takes a back seat to keeping up with the day to day.

Digital banks and fintech companies are becoming an even greater threat to traditional financial services organizations, as consumers become ever more comfortable with conducting transactions, opening accounts and paying bills online, especially from their mobile devices. To remain competitive,



> THE FINANCIAL SERVICES INDUSTRY: A SNAPSHOT

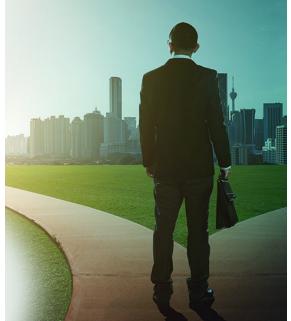
traditional banks therefore must adopt and improve their digital offerings to address a wider range of services that customers now expect to be able to perform online via web and mobile apps.

The regulatory environment, too, remains complex, forcing financial services organizations to spend more time, money and effort trying to keep compliant. And, as more regulations become global in scope—such as the EU's General Data Privacy Regulations, which impacts any company doing business with EU citizens regardless of location—the challenge to maintain compliance will loom large among financial services organizations that don't have help from some form of technology.

Security, meanwhile, is moving well

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beyond the traditional firewalls and other cybersecurity strategies as bad actors increasingly utilize technologies such as artificial intelligence (AI) to infiltrate financial services networks. In fact, security is recognized as a top concern for financial services risk managers.¹ That means organizations must be proactive in their security efforts, incorporating a securityfirst strategy that also includes AI and other technologies favored by cybercriminals.





Technologies Necessary for Digital Transformation



Despite the similarities in challenges among financial services organizations, the technology required to address these challenges is different for each company. Digital transformation is not a one-size-fits-all solution, and the process is more evolutionary than revolutionary.

That said, there are some technologies each organization should incorporate to work more efficiently, compete more effectively and provide higher levels of customer service. Big data analytics, artificial intelligence, design-thinking technologies such as augmented reality and natural language processing and the cloud are a few of the technologies every financial services organization needs in their digital transformation toolkit, regardless of size or challenge.



Big data and analytics are creating new and greater opportunities for organizations that are able to derive the maximum value and intelligence from the massive amounts of data they collect. Using big data, financial services organizations can better forecast demand for certain services such as mortgages, act on financial market trends such as stock activity related to a world event, or even offer personalized suggestions for new services to existing customers, such as personal loan offers at times of the year when the customer's account balance historically has hit its lowest point.

> TECHNOLOGIES NECESSARY FOR DIGITAL TRANSFORMATION



Cloud services remain a major player in financial services and will continue to, as more organizations adopt a digital-centric

approach to doing business and serving their customers. Recognizing the concerns by financial services organization that have plaqued cloud adoption-including security and compliance concerns—public cloud providers have stepped up their efforts in ensuring their offerings are secure, compliant and easy to use. According to an article in The Wall Street Journal: "... many public cloud providers can better accept and protect regulated financial services data and help speed company responsiveness to regulators, allowing organizations to establish operations in other countries more quickly while still meeting in-country regulatory requirements."²

The speed and responsiveness of the cloud is opening new avenues for financial services organizations to compete more effectively against their fintech counterparts, enabling them to react quickly to customer needs and market demands, and to offer a higher level of services to attract and retain customers.



Artificial intelligence is becoming a player in financial services, as more organizations pair it with big data to extract even

more intelligent insights and discover new opportunities. Additionally, Al is being used to help spot security issues such as fraud or potential malware activity on the network, as well as in risk management, such as determining whether an account that has been compromised during a security breach would become fraudulent.³ Al also can help financial services organizations become—and ensure they remain—compliant, by "learning" all the laws applicable to the organization.⁴

Finally, technologies that advance the customer experience—so-called

"design thinking" tech-

nologies—are becoming more important as organizations face growing pressure from tradition-



al and non-traditional competitors alike. Augmented reality can help in branch locations by "labeling" areas in the branch where certain services are offered or can post the bank's loan rates as a floating box above their mobile app when customers walk in the location, for example.



Natural language processing, meanwhile, can help improve the customer experience in-branch and via app,

allowing customers to speak to chatbots as though they were humans. The technology also could be used in operations to "tell" applications to perform certain functions.



Building the Infrastructure for Digital Transformation

Digital transformation in financial services requires an infrastructure that can support technologies both on-premises and in the cloud and can manage the data transport that many customer-centric and back-office technologies require.

As processes and applications become even more digital-centric, digital transformation is imperative for financial services organizations in their ability to provide customer service above and beyond today's standards. One-off digital initiatives in areas of technology such as social, mobile, analytics and cloud have converged as a required transformation to ensure high customer satisfaction at the highest levels of efficiency, saving organizations and customers alike time and money.

Hybrid cloud and network environments, SD-WAN and high-speed



> BUILDING THE INFRASTRUCTURE FOR DIGITAL TRANSFORMATION

broadband are just some of the technologies that can enable financial services organizations to better manage applications across all locations, while networking components such as Wi-Fi and unified communications can ensure all employees are always productive.

Working with a network service provider can help ease the burden associated with building and maintaining a capable network. By working with a network services provider, financial services organizations can leverage virtual and physical private Ethernet connectivity to assure there are no issues regarding network performance and availability for critical applications at all locations, from corporate headquarters to branch offices. They also can receive all or some of their most critical connectivity functions as a managed service, including managed connectivity, Wi-Fi, security, voice and business continuity, among others.



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Conclusion

The financial services sector is experiencing challenges from multiple areas, including increased competition among traditional and non-traditional financial services organizations, greater regulatory controls and an increasingly digital-centric customer base. Technology is helping these organizations address these challenges, meeting the needs of the organization while addressing the wants of its customers through digital transformation.

> But despite the similarities in challenges among financial services organizations, each requires different technologies to address those challenges. Digital transformation

is not a one-size-fits-all solution; the process is more evolutionary than revolutionary.

To enable these and other transformative technologies, financial services organizations must undergo their own digital transformation. Such solutions need a network powerful enough to provide the speed, agility and flexibility necessary to provide higher operational efficiencies and exceptional customer experiences.

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1 "2018 Banking Industry Outlook," Deloitte https://www2.deloitte.com/us/en/pages/financial-services/articles/banking-industry-outlook.html

2 Ranjit Bawa, "Cloud Adoption in Financial Services," The Wall Street Journal, Sept. 12, 2017 https://deloitte.wsj.com/cio/2017/09/12/cloud-applications-in-financial-services/

3 "Five ways AI is disrupting financial services," FinTech Futures, April 2, 2018 https://www.bankingtech.com/2018/04/five-ways-ai-is-disrupting-financial-services/

4 Ibid



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