MIT Executive Study Uncovers Top Financial Services Trends Shaping IT Resilience

How the pandemic changed and accelerated digital transformation
Strategic Insights from Global Financial Services IT Organizations

As financial services organizations worldwide were forced into COVID-19 work-from-home orders, they had sudden, dramatic proof of the value of digital technologies. Now as financial service leaders across the globe are attempting to build resiliency to what looks like a long-term scenario, new technology priorities are emerging. It turns out that financial services organizations that are “future ready”—possessing technologies that are highly flexible and capable of fully supporting their now-distributed operations and workforces—are best positioned to succeed in the uncertain times ahead.

Here are the top takeaways from a survey and series of selected follow-up interviews with 120 financial services executives as part of 600 respondents about the pandemic’s effect on IT conducted in June 2020 by the MIT Technology Review in partnership with VMware.

In this survey, digital transformation is defined as “the incorporation of modern technologies into an organization’s processes and strategies to achieve business goals, such as improving customer outcomes or operational agility.” Examples include migrating applications to the cloud and automating company operations.
Strategic Insight #1

The Pandemic Upended In-Person Banking, Turning the App into the New Branch

76% of financial services respondents are accelerating their digital transformation efforts as a result of the pandemic.

More than three out of four financial services respondents (76%) to the MIT Technology Review study believe their digital transformation efforts have been accelerated by the pandemic. COVID-19, it appears, is a catalyst for speeding implementation plans for next-generation technologies supporting digital banking experiences. Across industries, only healthcare respondents (89%) were more likely to say they were moving digital transformation forward faster due to the pandemic.

Takeaway: The pandemic has accelerated digital transformation of financial services firms.

Before COVID-19, financial services firms delivered their best customer experience in person—in branches and investment centers. J.D. Power categorized more than half of USA retail banking customers (52%) branch-dependent in a study at the
beginning of 2020 yet the same study strikingly revealed that customer satisfaction tends to decline the more customers use digital-only banking.\(^1\) All of this means it’s become business imperative for banks and financial firms to increase digital technology investments as quickly as possible to keep customers, now unable to walk into a branch office to sign loan papers or invite a claims adjuster to their homes, feeling satisfied.

The goal is to become future ready. Financial services firms that achieve this possess digital foundations supporting any cloud, any app, and any device so they can better respond to change—ensuring business continuity as well as resiliency. Of the approximately one-fourth of financial services firms that have not accelerated digital transformation, there are two possibilities. Either they were already moving so fast to seize digital-first opportunities that no acceleration was necessary, or their technology infrastructures were so antiquated they were hard-pressed to know where to begin. The former organizations are well on their way to resiliency. The latter organizations are unlikely to survive long term.
Strategic Insight #2

Digital-First Financial Experiences—Enabled by App Modernization—are Top Priority

98% of financial services leaders have accelerated adoption of a cloud-based platform to support modern application development.

A full 98% of financial services leaders surveyed say they are increasing or maintaining focus on customer needs in digital-first customer experiences within applications clients need—all because of COVID-19. A clear majority (65%) of them indicate that they have expanded their Agile practices and continuous delivery (CD) methods in response to new business demands stemming from the app becoming the new branch. Securing the digital branch is also being prioritized as more than half of financial leaders (53%) have instituted “secure-by-design” application development. Financial services, with telco, leads all of the industries in modernizing app development.
Takeaway: Improving the application portfolio is key to improving the financial services’ customer experience and ultimately, driving revenue, according to a recent Forrester survey (source).

Legacy application development and delivery models creating IT technical debt are costly and ill-equipped to support the modern, cloud-native and software-as-a-service (SaaS) apps needed to ensure customers that preferred in-branch engagement remain loyal. Applying continuous integration/continuous delivery (CI/CD) models when developing applications empowers financial services organizations to easily support changing business and client requirements, especially when developing apps to enhance the customer experience. And, as outside events continue to drive digital transformation, flexible and automated technology environments allow banks and financial firms to take advantage of fintech partnerships becoming more fully digital and more swiftly moving to software-defined infrastructure.
Strategic Insight #3

Financial Services Investment in Emerging Tech and Cloud is on the Rise

90% of financial services respondents are planning to maintain or increase their commitment to emerging technologies in their customer-facing apps, due to COVID-19.

More than three-fourths of financial services respondents say they hope to stay the course throughout the crisis by continuing to invest in the adaptable technologies required to achieve digital transformation. Almost four in 10 (37%) report that their 2020 IT budgets will be the same, and slightly more (41%) anticipate increases as a result of the pandemic.

90% of financial respondents plan to maintain or increase their commitment to emerging technologies in their customer-facing apps, such as artificial intelligence/machine learning (AI/ML) and Internet of Technology (IoT). And they are adapting IT infrastructure to deliver. Survey respondents
report only 13% of financial services applications, on average, were running in public clouds prior to the pandemic yet a top two infrastructure priority to increase in importance due to the pandemic was increasing business resilience by adopting/expanding a multi-cloud strategy. Only accelerating digital capabilities was higher.

Across industries: financial services is in the middle of the pack while healthcare, government, and telecommunications providers are the most likely to maintain or increase their digital investments as a result of the pandemic with manufacturing shows signs of pulling back in response to the crisis.

Takeaway: Prior to the pandemic, emerging tech was slowly beginning to enhance banking and client relationship management experience.

Nearly three-quarters (72%) of banking executives surveyed by Accenture a year ago believed they risked going out of business in five years if they didn’t scale AI. During COVID-19, financial services leaders are similarly feeling the urgency to deliver innovative experiences with transformative technologies for today, and into tomorrow.
Like their IT and business peers, today’s financial services executives and boards of directors are increasingly in favor of IT investments that improve customer and employee experience, speed workflows and drive new revenue models. Those ahead of the curve on digital transformation investments are able to more proactively plan—and execute—their technology responses in response to unforeseen events like the pandemic. Alternatively, those financial services businesses with tight IT budgets can today first focus on optimizing their infrastructures. This should help them gain sufficient efficiencies to free up the budget for digital innovation.

**Strategic Insight #4**

**Distributed Work Capability Becomes a Business Continuity Must-Have**

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<th>Estimated % of financial services remote workforce</th>
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<td>Pre-COVID-19</td>
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<td>Post-COVID-19</td>
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Pre-COVID-19, only 8%, on average, of workforces regularly worked remotely. This shot up to 34% in financial services, higher than the average of 27% across industries globally during the pandemic, and second only to telecommunications.
Somewhat surprisingly, half (50%) of financial services leaders expect at least 25% of their employees to work remotely three days a week going forward.

Because distributed work is now the norm and moving forward, expected to become commonplace, financial services organizations cite three employee-experience actions as priorities. Tied for first are security and formalizing work-from-home policies. A full 63% of financial services firms said that securing new endpoint risks and expanding threat management was a top priority as they seek to protect data in the new remote-access world. The same number (63%) prioritized formalizing or expanding work-from-home policies. Finally, optimizing employee efficiency by automating manual workflows was a priority for approximately four in 10 (43%) of financial services firms.

These priorities vary considerably across industries. In manufacturing, 73% of business and IT decision makers place employee efficiency and workflow automation as the highest priority now. IT and business leaders in retail, telco and healthcare all say that providing employees with the physical equipment necessary to be productive remotely is their top employee experience challenge.
Takeaway: The shift to distributed work has been a dramatic one, and financial services firms that have the most flexible and employee-friendly platforms are best positioned for success.

Collaborative tools and platforms such as digital workspaces that unify device management and identity are essential to remote work productivity and engagement as they enable the real-time sharing of information across the globe and employees’ choices of what platforms to use—all keys to organizational agility.

Strategic Insight #5

As Threats Continue to Rise, Security Teams Play Defense

51% of financial services respondents are allocating a significant share of their IT budget to security and threat management.

As financial services firms adjust to new risk realities, more than half of them (51%) indicate they are allocating a significant share (more than 25%) of their IT budgets to security and threat management. And more than six in 10 financial services respondents (63%) indicate they will put
more emphasis on defending against cyberattacks over the next 12 to 18 months.

During the February and March 2020 COVID-19 surge in the U.S., financial institutions were heavily targeted, seeing a 38% increase in cyberattacks.³ Of all global industries’ 148% spike in ransomware attacks at the time, 52% were financial-related attacks.

**Takeaway: Future ready financial services organizations recognize that distributed workforces widen potential attack surfaces and have moved to strengthen their security models with zero-trust, least-privilege policies, as well as controls across on-premises, cloud, and endpoint devices.**

They leverage intrinsic security to automatically embed protection everywhere. This is a fundamentally different approach from “bolting on” security products. By deploying intrinsic security, financial services organizations looking to fortify operations can pivot to leveraging infrastructure and control points in new ways across any app, any cloud, and any device. When combined with threat intelligence, financial services security teams can shift from simply reacting to proactively protecting their environments from positions of strength.
Strategic Insight #6

Resilient Infrastructure Is Key to Digital Success—Automation and Multi-Cloud Are Next

Top financial services initiatives:
51% Infrastructure efficiency
37% Adoption of a multi-cloud strategy

The MIT Technology Review study found that financial services remote workforce numbers more than tripled during the crisis (see takeaway #4). They are expected to remain elevated even after the pandemic passes. This marks a long-held corporate attitude shift while raising questions about how to sustain hands-on IT operations across a widely distributed organization. When questioned about resilience, more than half (51%) of financial services firms surveyed cited infrastructure efficiency as key to success—this group is planning to invest a significant portion of the budget, 25% or more in infrastructure efficiency to maintain resilience. And the infrastructure efficiency initiatives they plan to accelerate next are automating (42%) and adopting a multi-cloud strategy (43%).
Takeaway: Automated IT infrastructure and operations can protect the health and safety of financial services employees not only during work-from-home mandates, but in the aftermath of natural disasters and unrest.

The pandemic highlights the need for financial services organizations to build an adaptable and resilient technology infrastructure that supports all aspects of the enterprise—from front-office transactions and client engagement to back-end operations. Those financial services companies that have already been diversifying their infrastructure to eliminate single points of failure—moving to multi-cloud while retaining their on-premises environments—are better positioned to adapt.
Strategic Insight #7

Cloud Growth Unabated—Adoption Remains Balanced

#1 app challenge for financial services is maintaining governance and compliance.

The survey reveals that modernizing apps and cloud adoption go hand in hand. Moving to the cloud—to infrastructure- or platform-as-a-service (IaaS and PaaS) as well as SaaS applications—accelerated during the crisis, and is expected to continue to rise. Public cloud workloads are growing, albeit slowly, due to COVID-19, the survey shows. On average, financial services companies expect to host 19% of their applications in the public over the next 18 months. Yet cloud adoption during the crisis has introduced challenges, especially with regard to compliance. A majority of decision-makers at financial services firms (68%) cite maintaining governance and compliance regulations, for example, patching apps to meet security/compliance requirements as a top application challenge because of financial services firms’ expanded public cloud activities.

Takeaway: More cloud services than ever are now available to power business apps. This gives financial services organizations the flexibility to rapidly meet new business needs.
For example, banks and financial firms seeking to modernize apps can leverage commodity SaaS productivity apps while focusing on refactoring and replatforming the mission-critical business applications core to their competitive advantages. And by adopting a single, unified digital foundation, financial services organizations can simplify cloud adoption by seamlessly extending to multi-cloud without having to reskill, refactor apps, or retool.

**Strategic Insight #8**

**Disaster Recovery Does Not Equal Business Continuity**

Only 42% of financial services respondents had effective business continuity plans.

COVID-19 has challenged large financial services organizations’ disaster recovery/business continuity (BC/DR) plans. Three-fourths (75%) of financial services respondents indicate they had business-continuity plans in place prior to the crisis. However, for many, these were oriented toward traditional notions of disaster recovery. Of this traditionally prepared group, fewer than half (42%) felt their plans were effective when attempting to cope with the shutdowns.
Takeaway: The pandemic is further proof that BC/DR strategies are critical aspects of financial services organizations’ overall IT strategies.

BC/DR plans and technologies have traditionally been structured to support a quick return to business as usual. Future ready banks and financial firms incorporate BC/DR into all of their operations to respond quickly to crises, adapt to new realities, and accelerate innovation. Only when financial institutions can respond swiftly and effectively to crises are they able to advance more digital transformation initiatives.

1. J.D. Power April 2020 Press Release: Retail Banks Face Major Customer Satisfaction Challenge as World Shifts to Digital-Only Engagement


3. VMware Carbon Black; “Amid COVID-19, Global Orgs See a 148% Spike in Ransomware Attacks; Finance Industry Heavily Targeted”; April, 2020
Looking Forward

Keys to business agility and resilience in the financial services industry include adaptable technology architectures, exceptional customer experience, employee productivity, and forward-looking management, according to the MIT Technology Review study. The COVID-19 crisis is just the latest—albeit most severe—test of banking and financial services firms’ abilities to respond and succeed during adverse times, and it has shown that those with future ready strategies are best positioned for success.

Understanding IT and pandemic resilience trends can help your organization be better prepared for what’s next. To learn more visit our website or our Digital Banking Experience.