MIT Technology Review Insights

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The financial services industry is turning to bold initiatives to propel from pandemic response to business growth.

2021 PLANNING | FINANCIAL SERVICES

New business models, big opportunity

Key takeaways

1 Financial services institutions are moving past crisis-response initiatives and on to planning big technology deployments, business model changes, and mergers and acquisitions in efforts to thrive in a post-pandemic world.

2 Keen to keep costs down, banks and other financial services institutions are interested in highly measurable projects such as technology deployments. Almost two-thirds are increasing tech investments, and an equal percentage is moving information technology functions to the cloud.

3 Organizations deploying advanced technologies, such as artificial intelligence, machine learning, and automation, are discovering companywide benefits – in finance, in information technology, in customer service, and more.

By any measure, 2021 corporate planning isn't business as usual. As the coronavirus pandemic grinds on, financial services institutions are coming out of crisis mode – addressing immediate cash management and operational challenges – with a renewed readiness for business growth.

Fortunately, most businesses across industries are doing a good job of navigating the pandemic and its economic fallout. According to a survey conducted by MIT Technology Review Insights, in association with Oracle, 80% of executives feel upbeat about their companies' ultimate objectives for 2021. They're either expecting to thrive – that is, sell more products and services – or change the way they do business. The worldwide research surveyed 297 executives in more than a dozen industries, primarily finance directors, C-suite, and information technology (IT) leaders. Forty-four, or 15%, of the executives work at banks or other financial services institutions.

That 15% is a bold bunch – 93% of them have over the past year made at least one big business move, overhauling tech infrastructure, for example, or acquiring or merging with another company – and nearly 80% will change the way they do business, by pivoting to new markets or focusing on better customer experiences.

Planning beyond the pandemic

More motivated than ever, organizations in all industries are ready to cut expenses that lack a clear return on investment. So it's no surprise that survey respondents highlight computing projects – all highly measurable – as priorities in their 2021 plans (see Figure 1). Among financial services institutions, 62% are looking to

About this report

This MIT Technology Review Insights report is part of a series that explores how organizations are rebuilding business in the wake of the 2020 coronavirus pandemic. Based on a combination of survey-based market research and in-depth executive interviews, it focuses on four industries: technology, manufacturing, finance, and retail. The report is sponsored by Oracle, and the views expressed within are those of MIT Technology Review Insights, which is editorially independent.

- In November 2020, MIT Technology Review Insights surveyed 297 executives – primarily financial officers, C-suite executives, and IT leaders.
- Respondents work in more than a dozen industries. High tech, at 20%, represented the largest response group; followed by financial services, at 15%; professional services, at 13%; and retail and manufacturing, each at 8%.
- The survey was global, with 60% of respondents from the Americas, 27% from Europe, the Middle East, and Africa, and 13% from the Asia-Pacific region, which comprises Asia plus Australia and New Zealand.
- Respondents were asked about strategic business moves their organizations have made already in 2020 or are planning in the next 36 months, challenges they face in implementing such moves, and cloud-based technologies they use to support their finance organizations.

ramp up tech investments, and another 62% expect to move IT and business functions to the cloud, compared with 46% across industries. In a recent report, Nucleus Research found that cloud deployments deliver four times the return on investment as on-premises deployments do.[1]

The Guardian Life Insurance Company of America is an exemplar of a progressive cloud adopter – it's now moving many of its core financial systems to the cloud. The insurer was motivated to do so – an internal study had found several opportunities, including insufficient data management, a need for lower-level data for better analytics, a lack of system integration, and manual reconciliation issues. "These pain points helped create the need for a new system," says Marcel Esqueu, assistant vice president for financial systems transformation at Guardian. "We looked at moving to the cloud about five years ago, but we didn't think it was ready." Now the company deems cloud services mature enough to support the advanced functionality it requires.

Financial institutions are also looking at mergers and acquisitions as a path beyond pandemic survival. In fact, according to a Reuters report, such deals were up 80% in July, August, and September 2020 from the previous fiscal quarter to hit a whopping $1 trillion in transactions. In the MIT Technology Review Insights survey, 41% of financial services execs report that their organizations acted on a business merger or acquisition or will do so over the coming year.

"People have realized they need to consolidate to create stronger and better-equipped businesses to deal with what the world looks like going forward," says Alison Harding-Jones, managing director at Citigroup, in the Reuters report.

Figure 1

Big business moves

Corporate leaders, especially those in financial services, are betting on technology investments and mergers to boost business in 2021.

	ALL INDUSTRIES	FINANCIAL SERVICES
INCREASE TECH INVESTMENTS	60%	62%
MOVE IT FUNCTIONS TO THE CLOUD	46%	62%
ACT ON A MERGER/ ACQUISITION	39%	41%
ADD A SUBSIDIARY	24%	24%
SPIN OFF A DIVISION	16%	16%
DIVEST REAL ESTATE	13%	11%
DIVEST A SUBSIDIARY	9%	11%

Source: MIT Technology Review Insights survey of 297 executives, November 2020. Respondents were asked to choose all that apply.

Mergers and acquisitions have long been a way for an organization to expand its core business – or even gain expertise in emerging technologies. For example, while many financial institutions buy business software with built-in artificial intelligence (AI) capabilities, Mastercard acquired a Canadian AI platform company called

93% of respondents in financial services have made at least one big business move over the past year.

Brighterion in 2017 to provide "mission-critical intelligence from any data source," says Gautam Aggarwal, regional chief technology officer (CTO) at Mastercard Asia-Pacific. The company first used Brighterion's technology for fraud detection but now puts it to work in credit scoring, anti-money laundering, and the company's marketing efforts. "We've really taken Brighterion and applied it not just for the payment use case but beyond," says Aggarwal.

Business change, outside and in

Indeed, organizations have had to innovate and respond fast to survive in the covid economy. In the survey, 81% of organizations across industries have evaluated new business models in 2020 or are planning to launch them over the next year. Among financial services institutions, improving the customer experience is paramount, with 55% reporting that they're improving the experience they offer their customers, compared with 35% across industries (see Figure 2).

Figure 2

New business models

In the wake of a disruptive year, organizations are adjusting to a changed business climate by changing how they do business.

	ALL INDUSTRIES	FINANCIAL SERVICES
DRIVE COST-REDUCTION PROJECTS	53%	55%
CHANGE HOW PRODUCTS/SERVICES ARE SOLD	52%	52%
PIVOT TO NEW MARKETS	50%	49%
REALLOCATE RESOURCES	44%	42%
REPURPOSE A PRODUCT	39%	39%
LAUNCH AN "AS A SERVICE" MODEL	37%	27%
IMPROVE CUSTOMER EXPERIENCES	35%	55%

Source: MIT Technology Review Insights survey of 297 executives, November 2020. Respondents were asked to choose all that apply.

Organizations have had to innovate and respond fast to survive in the covid economy.

That's true for Jimmy Ng, group chief information officer (CIO) at Singapore-based DBS Bank. When physical branches closed during lockdowns, DBS customers – like other bank patrons the world over – did their banking online. But some of them did so only because they had to. "The question is whether this group of people will continue staying on the digital channel." So DBS is exploring ways to keep customers who prefer in-person service engaged, exploring technologies such as augmented and virtual reality and the 5G mobile network, which enables superfast connections. "How do we enable a joyful customer journey in this remote way of engagement?"

Other business models that survey respondents are pursuing include changes to how products and services are sold or delivered – think of brick-and-mortar retailers shifting the bulk of their sales efforts online during the pandemic – pivoting to wholly new markets or products, or launching new "as a service" delivery. Organizations in financial services are roughly on par with their peers in manufacturing, technology, and other industries in their enthusiasm for new paths, including cost-reduction strategies. Fifty-three percent of organizations in all industries report that they're eying money-saving opportunities such as optimizing processes. Slightly more, 55%, of financial services institutions are aiming to reduce costs.

One way to do that is by streamlining data and processes. Financial services institutions can reach that goal by linking finance, accounting, regulatory reporting, and risk management under one conceptual architecture, according to a recent PWC report.[2] Today, hardware, software, and data could reside anywhere, write the authors: "You will be expected to make a virtually limitless combination of inputs and work together, quickly and securely." Doing so requires financial services institutions to anticipate the change, ensure that the IT infrastructure is aligned with applications to scale appropriately, and prepare to integrate anything.

Data quality and connections are central to these plans because connecting the dots helps financial analysts draw a better picture. That was key to Guardian's move to an integrated cloud finance system. "We're getting better analytics from deeper, richer, and unified data," says Esqueu. "And we need better data."

Guided by compliance

For financial services institutions looking to expand growth, regulatory requirements play a pivotal role in decision-making. In the survey, financial services respondents report that the biggest obstacle to making big business moves is their organizations' compliance processes and technologies, with 22% indicating that they're fragmented (see Figure 3). In contrast, business leaders across industries are most concerned about limited or frozen budgets.

Compliance concerns are justified, as the regulatory climate heats up and organizations adopt data-gathering and analytical tools. Even before the pandemic started sweeping the world early last year, the financial industry had, from the Great Recession to the end of 2019, racked up $36 billion in fines for noncompliance with anti-money laundering and know-your-customer guidance, which requires companies to keep records on the essential facts of their business relationships. And in 2020 alone, financial services institutions were slapped with $10.4 billion in fines.

According to the PwC report, regulators are trying to learn more about individual institutions' activities and overall systemic activity. "They also hope to monitor the industry more effectively and to predict potential problems instead of regulating after the fact," the authors write. Examples include supervisory procedures, asset quality reviews, and enhanced government reporting requirements.

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Figure 3

Barriers to success

Budget contraints are the top hurdle organizations across industries face in their business plans – for financial services, it's fragmented security, risk, and compliance measures.

	ALL INDUSTRIES	FINANCIAL SERVICES
BUDGET IS LIMITED	39%	19%
FRAGMENTED SECURITY, RISK, AND COMPLIANCE	18%	22%
DON'T HAVE THE RIGHT SKILL SETS	17%	19%
DON'T HAVE THE RIGHT TECHNOLOGY	12%	19%
INCORRECT DATA MODEL	10%	9%
LACK OF EXECUTIVE BUY-IN	5%	13%

Source: MIT Technology Review Insights survey of 297 executives, November 2020. Respondents were asked to choose all that apply.

Other roadblocks to business moves for financial services institutions are gaps in skills or technology: 19% say they don't have the right people or processes in place, and another 19% report that they lack suitable tools to get projects off the ground.

The AI and automation equation

Although outdated systems can hinder projects, the right ones can enable them – in particular, cloud technology. When asked how cloud applications could support business-growth efforts, survey respondents pointed to real-time analytics and automation for insights into operational efficiency and market opportunities (see Figure 4).

"Machine learning and artificial intelligence are mentioned in almost every conversation I have with controllers, CIOs, and CFOs," says Joseph Prunty, group vice president for modern finance solutions at Oracle. They want to know, "What can you, Oracle, tell us about our data that we frankly don't even know to ask?" In the survey, 61% of financial services respondents expect cloud-based technologies to provide companywide analysis and forecasting, compared with 58% across industries. A separate MIT Technology Review Insights report, published in January 2021, shows that more than half of business executives trust outputs from AI-powered planning tools.[3]

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Figure 4

Cloud-based benefits

Survey respondents are looking to the cloud for insights into operational efficiencies and market opportunities, and to automate compliance and financial close processes.

	ALL INDUSTRIES	FINANCIAL SERVICES
PROVIDE PREDICTIVE ANALYTICS	58%	61%
EVALUATE PRODUCT OPPORTUNITIES	45%	53%
AUTOMATE SECURITY, AUDIT, AND COMPLIANCE	42%	45%
CREATE A SINGLE SOURCE OF FINANCIAL DATA	41%	45%
AUTOMATE FINANCIAL CLOSE AND REPORTING	39%	47%
CONNECT FINANCE, SUPPLY CHAIN, AND HR	36%	34%
OPTIMIZE SCENARIO MODELING	33%	29%

Source: MIT Technology Review Insights survey of 297 executives, November 2020. Respondents were asked to choose all that apply.

Machine learning has a lot of value when you know what you're looking for – but these self-learning algorithms often draw correlations that yield unexpected results. Prunty cites an analysis of transaction processing that identified in-house fraudulent activity – as opposed to consumer fraud, such as someone filing for a fraudulent loan. Some of the indicative markers are subtle – even mysterious. "There's a tendency for fraudulent transactions perpetrated by employees – across all industries, not just financial services – to end in eleven cents. That's true whether it's an expense report or another kind of claim that generates a loss to the organization," he says. There's a one-in-a-hundred chance that a transaction may end in eleven cents, but machine-learning analysis can help investigators begin their research.

"In the future, we intend to see lower costs from efficiencies and automation."

Marcel Esqueu, Assistant Vice President, Financial Systems Transformation, Guardian Life Insurance Company of America

DBS is putting such analysis to work to manage risk. Over the past few years, CIO Ng says, it has used machine learning to formulate a baseline of employee behavior – how staffers typically use company data and applications. The baseline shifted during the pandemic, with most employees working from home, "but I think it gave us a good sense of where anomalies may actually lie." That made it easy for the bank to narrow down the range of activities it needed to monitor.

Prunty says two words characterize what business leaders want from plug-in technologies: "process simplification." Automation tools take on the burden of time-consuming, manual business tasks, and they're critical for financial services institutions, the survey shows: 45% report that they automate their security, audit, and compliance processes, and 47% use automation to help them close the books faster, compared with 39% across industries.

Automation capabilities in Guardian's new cloud finance system will reduce the need for manual effort and provide the ability to redeploy resources for more analytics, says Esqueu, the financial systems transformation vice president. "In the future, we intend to see lower costs from efficiencies and automation."

'A journey for eternity'

In 2021, while some industries are still coping with a state of emergency and working to reinvent themselves – with retail the primary example – financial services institutions have fared well throughout the pandemic. According to Gary Hwa, from consulting company EY, "There have been no reports of catastrophic failure or mass customer dissatisfaction. Customers have barely blinked at the obvious shift to digital and virtual channels."

In fact, Prunty says, the industry on the whole is poised to thrive. Financial services institutions have been at the forefront of technological change – moving IT infrastructure to the cloud, adopting cloud applications, and innovating with cutting-edge digital technologies.

> Technology adoption "will continue forever because as technologies evolve, we will keep adopting them."
>
> Gautam Aggarwal,
> Regional Chief Technology Officer,
> Mastercard Asia-Pacific

At Mastercard, for example, using new tools to adapt to a changing climate is natural – technology is "a journey for eternity," CTO Aggarwal says, not the kind of "digital transformation" that so many organizations are undergoing to keep pace in a data-driven age. "It will continue forever because as technologies evolve, we will keep adopting them," Aggarwal says.

Such a mindset has kept financial services institutions relevant and competitive during the pandemic. It's a good bet it will serve them well through the end of it and beyond.

Learn more about the strategic moves that financial institutions are making to capture growth.

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