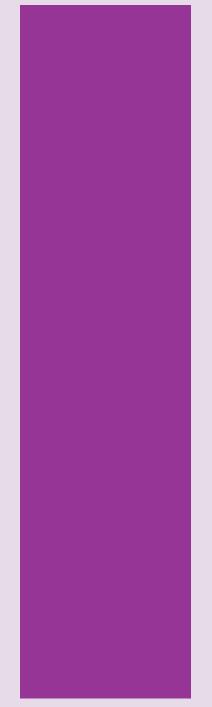
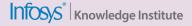
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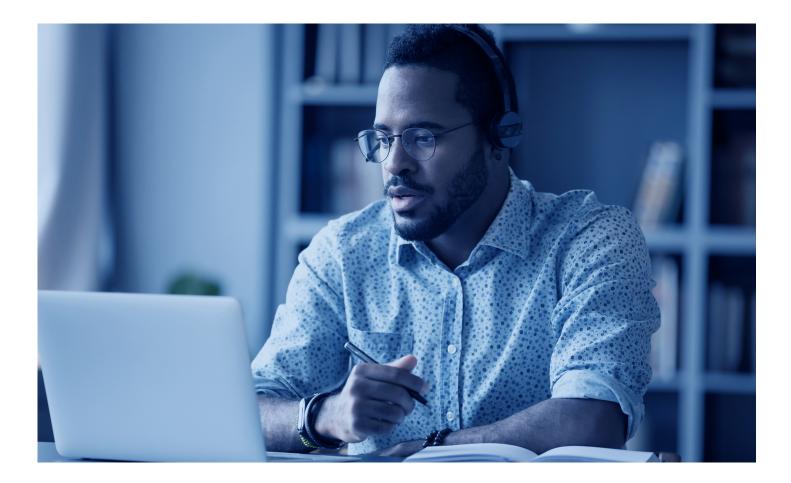




# ACCELERATING COMMERCIAL BANKING'S DIGITAL TRANSFORMATION IN THE POST-PANDEMIC ERA

Commercial banks accelerated their digital transformation during the pandemic — making years' worth of progress in months. An Infosys survey of financial institutions found extraordinary advances, many barriers to further transformation, and shifting digital priorities. To continue their momentum, banks must take a broad view and create a strategic road map that provides end-to-end perspectives on their technology and business goals.





Commercial banks faced an unprecedented year in 2020 — one that undermined how firms interacted with their corporate customers. The industry was built on a traditional foundation of sticky personal interactions, extensive paperwork, and manual processes. The pandemic's disruption forced banks to rethink what worked well just months earlier and to learn how to conduct business digitally.

This was not an easy task, for many reasons. The industry had to navigate new government regulations created to support businesses devastated by the COVID-19 pandemic. These financial institutions also needed to manage shifting operations, including a spike in customer requests and cybersecurity risk from remote working. In a matter of weeks, banks had to digitally transform their technology infrastructure to adjust to these new demands from regulators, customers, and employees.

To understand the pace of digital transformation among financial services firms, Infosys conducted a global survey of 1,000 respondents from across the industry in March 2021.<sup>1</sup> A subset of these respondents — 156 senior executives — was from commercial banks in the U.S., Europe, Australia, and New Zealand.

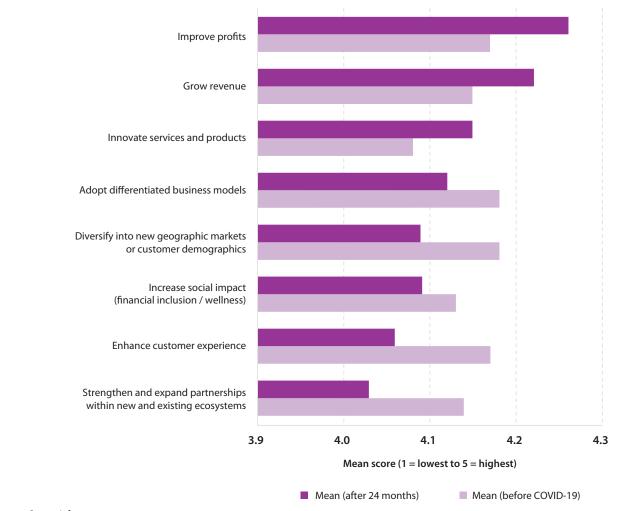
While not statistically significant, how these senior leaders responded still can provide insights into banking trends now and in the coming years. Institutions that started their digital transformation before the pandemic emerged stronger. These financial services firms, including banks, proved to be more resilient and delivered on their promises to strengthen customer trust, a finding backed up by the J.D. Power 2020 U.S. Small Business Banking Satisfaction Study.<sup>2</sup>

## Focus shifts as speed increases

The pace of digital acceleration among commercial banks during 2020 was astounding. Ninety-five percent of respondents said their institutions at least doubled their pace of digital transformation. This included nearly 20% that more than quadrupled their pace during the past year. Our survey, however, shows that digital transformation priorities turned upside down when the pandemic started. Commercial banks focused on diversification, differentiation, and customer experience before the pandemic. After, executives said they are deprioritizing those initiatives and shifting to ones that offer more-productive business cases. The industry cited growing revenue, profitability, and innovation as three of the top priorities (see Figure 1).

Innovation was a low priority before the pandemic but now has moved up to third place. Conversely, efforts to enhance the customer experience were a top priority before COVID-19 but are expected to be among the lowest in the next two years. This could create a paradox for those striving to meet continuously rising stakeholder expectations.

#### Figure 1. Strategic priorities changed after the start of the pandemic



Source: Infosys

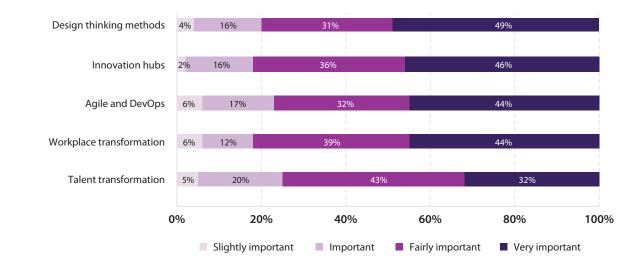
## Modernize technology to stay relevant

To address the challenges of the past year, commercial banks have been focusing on design thinking, innovation hubs, and workplace transformation initiatives (see Figure 2). Their interest in talent transformation has taken a back seat temporarily. However, the focus on people might return as vaccination rates increase and organizations think more strategically about how to manage their hybrid work environments in the long-term.

Commercial banking systems are built on legacy infrastructure in which processes rely heavily on physical paperwork. For example, opening new accounts requires extensive documentation, and processes are often manual and siloed. This significantly increases the time to onboard a new customer and makes it difficult to obtain customer data and to analyze their transactions.

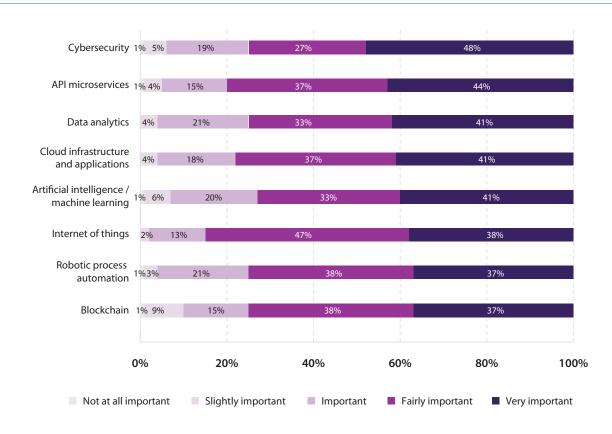
With these limitations, banks often miss opportunities to offer products and services that could be tailored to the customer. Banks have upgraded their technology but often focused almost exclusively on the front end. This is now changing. Banks are now modernizing their core back-end systems, which allows them to become fully digital and to reduce their technical debt. More important, it helps banks better understand and connect with their customers. Application programming interfaces (APIs) can simplify onboarding, while real-time analytics on customer transactions allows commercial banks to quickly offer new services.

Banks are making these changes with the help of a broad range of technologies. The internet of things was the most important among respondents, followed closely by APIs and cybersecurity (see Figure 3). Figure 2. Banks are prioritizing a wide range of digital initiatives



Source: Infosys

#### Figure 3. Technologies are important across the board



Source: Infosys

Cyberattacks are a particular concern in the financial services industry due to the value of the information that banks and other institutions possess. According to research, the sector is hit by cyberattacks 300 times more frequently than businesses in other industries.<sup>3</sup> An Infosys and Interbrand study showed that the cumulative value at risk due to a cybersecurity breach can be as high as \$2.6 billion.<sup>4</sup> Perhaps that's one reason why an Infosys Knowledge Institute survey found that the industry's cybersecurity programs are more mature than in other sectors.<sup>5</sup>

API microservices are another obvious place for banks to invest because of the potential they unlock. This modern architecture enables flexibility and makes banks nimbler. For example, Citizens Financial Group developed hundreds of APIs that allowed the bank to migrate new and existing applications to the cloud.<sup>6</sup> When the pandemic struck, the institution was ready to deliver the benefits of the U.S. government's Paycheck Protection Program to its customers. The embrace of APIs equipped the bank to make faster decisions, process over 48,000 loan applications, and rapidly disburse more than \$5 billion in loans.

These technologies are not implemented in a vacuum. When augmented with artificial intelligence (AI) and machine learning (ML), analytics can provide useful customer insights, help develop personalized offerings, and prevent fraud. Scotiabank used analytics and ML to forecast customer cash flow in real time. This helped predict which customers might be severely affected by the pandemic and then allowed the bank to help.<sup>7</sup> This combination of analytics and AI-ML is also being used to build resilience and predict failures. At the Bank of New York Mellon, the institution uses Google Cloud's data analytics to help it forecast 40% of daily customer settlement failures, thus reducing risk.8

Cloud infrastructure finished slightly lower in importance, even though it can interact with other technologies to enhance scalability, resilience, and security. Nevertheless, banks have begun realizing the importance of the cloud, not just from a cost perspective but also as an innovation tool and a way to speed time to market.<sup>9</sup> For example, Old National Bank is counting on the cloud to improve its technical resilience and to manage digital workflows for its entire operations.<sup>10</sup> The move will also help the bank adopt cloud-compatible products, including ServiceNow to better manage the incident tracking system. A recent Infosys study of 554 financial institutions found that the highest-performing businesses use the cloud to accelerate their adoption of AI and to derive additional value from their data.<sup>11,12</sup>

Infosys research also found that blockchain is increasingly important to commercial banks, especially as a way to tackle the challenges in international trade finance. This area requires a great deal of manual effort and many documents, making it ripe for transformation. To resolve these issues, a consortium of 15 Indian banks collaborated to create a distributed ledger platform that manages trade finance processes.<sup>13</sup> The platform facilitates the exchange of documents for imports and exports. Information about collateral and customer data on the platform is usable by different banks. This lowers the risk of conducting business with unknown parties, reduces administrative errors, and increases speed. Equally important, it is a revenue opportunity. The blockchain-based platform provides banks with visibility into the supply chain of buyers and suppliers, thus enabling them to offer customized products and services.

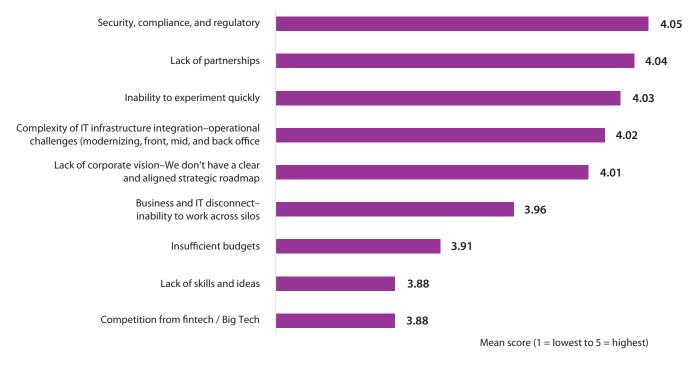
### Significant digital transformation challenges remain

Digital transformation is not an easy process, but money does not appear to be a factor holding back financial institutions. Budgets were cited as one of the least important concerns for commercial banks. Instead, there is a long list of other roadblocks they face (see Figure 4). Overall, executives agree that the combination of security, compliance, and regulatory issues is the biggest challenge to maintaining a continued focus on risk management and resiliency of operations. This is not surprising given that these grow in complexity with the advancement of digital technology. Respondents also cite a lack of partnership opportunities to be almost as challenging an obstacle to their digital transformation. Inability to experiment quickly was a close third.

Despite their progress, commercial banks suffer from aging IT infrastructure. The mountains of paperwork that built commercial banks do not help either. Customers expect the experience at their banks to match what is offered by Amazon or other retailers. Legacy platforms, however, make it difficult to provide frictionless experiences. Banks want to launch new products quickly in the market and to improve customer experience, but those are possible only through more advanced technology. Yet this technology must be viewed from an end-to-end business perspective and not just in silos. This can enable significant opportunities to use platforms to create marketplaces, orchestrate best-of-class solutions and build client centric journeys.

The industry's archaic, monolithic platforms have created this siloed system. To have an integrated view, banks must patiently untangle their complex IT infrastructure. No matter how much customer experience is improved at the front end, the industry's limitations and challenges will persist if institutions do not modernize the back end. Banks could also face larger obstacles particularly technical debt — if this complex integration is not managed effectively.

In addition to those woes, survey respondents pointed out the absence of a corporate vision among commercial banks that can make it difficult to solve their IT complexities. All these hurdles — combined with frequent regulatory changes threaten to stifle progress. Figure 4. Challenges to digital transformation initiatives



Source: Infosys

## Digital transformation – a continuum

Our survey shows that the pandemic and a confluence of other challenges have forced financial services firms to race faster toward new technologies. This has accelerated their digital transformation and tested their ability to deliver at scale. However, changes in economic demands forced the industry to flip their strategic priorities toward financial outcomes and innovation.

As much of the global economy recovers, there are still many hurdles to overcome,

including security concerns, finding partnerships, and innovating quickly. Commercial banks have to deal with these issues against the backdrop of aging legacy infrastructure that hampers their agility and of a lack of a corporate vision.

Banks have thought of modernizing their infrastructure as a journey. But what started out as a marathon has turned into something more akin to a sprint in the past year — although the finish line still isn't in sight. Even with this acceleration and progress, banks need to continue to reinvent how they operate and how they serve their customers. To compete or even just to survive, many institutions need to speed up their pace beyond their comfort levels or what they thought was possible.

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