



Expert Insights

IBM Institute for
Business Value

2022 Global Outlook for Banking and Financial Markets

IBM

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Banking and Financial Markets

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Key takeaways

Extreme digitization

End-to-end digitization of enterprise-wide operations enables new customer-centric business models, new products and services, new ways of working, and an ecosystem of partners. Digitization is critical to meeting customer expectations and powering financial performance across revenue, costs, and capital.

Unlocking the value of data and AI

Transforming the core data environment drives efficiency and flexibility and leverages the collaborative use of deep analytics and AI at scale. This includes building an ethical framework around how data is captured, stored, and used.

Flexible technology architecture

A modern architecture delivers optimal interoperability and portability to support the deployment and management of workloads across multiple compute environments, while helping financial services organizations meet security and compliance requirements.

Introduction

by Anthony Lipp, Global Strategy Leader, Banking and Financial Markets

In the third year of a global pandemic, the financial services industry appears to be acclimating to a new reality. Many temporary measures put in place are now poised to become permanent, and a new industry structure is emerging.

While the industry may have averted a major crisis, it is still underperforming its pre-financial crisis levels. It has lagged many other industries—and a host of new competitors—in several dimensions, including financial performance, customer experience, and embracing new business, operating, and collaboration models.

In this year's Global Outlook for Banking and Financial Markets (BFM), the BFM subject-matter experts in the IBM Industry Academy and the global industry leadership team reflected on their experience with clients over the last 12 months and their expectations for the coming year. Their collective point-of-view highlights the top industry imperatives in 2022.

- **Real industry reinvention.** Begin real reinvention—now—to solve the structural weaknesses that constrain financial performance. Financial institutions must seek out new business models to drive incremental revenue gains, new operating models and compute environments that structurally reduce operating costs, and new approaches to improve the efficiency of capital.
- **Customer-centric business models.** Build new customer-centric platform business models to orchestrate and integrate the many needs of ecosystem participants in a more frictionless environment. Leading financial institutions are creating their own bank-led ecosystem business models to serve attractive market segments, while deeply integrating their products and services with other companies' well-established platforms.

- **End-to-end digitization.** Embrace end-to-end extreme digitization to reshape operations and drive innovation. To win the race to all things digital, financial institutions are adopting new ways of exploiting exponential technologies such as automation, hybrid cloud, and AI. They drive digitization across internal business units and their ecosystem of external partners while helping ensure security and compliance.
 - **Operational resilience.** Act with urgency to increase resiliency for better risk management and to address regulatory concerns. As financial institutions pivot workloads and volumes to new channels, operations, and partners in response to the pandemic, resiliency has leapt to the forefront of industry priorities. Further resiliency improvements are required to support new business and operating models now being embraced by the industry.
 - **Viable sustainability.** Find viable sustainability models so financial institutions can launch initiatives to meet market expectations, regulatory requirements, and corporate ethical objectives—all with an acceptable cost-benefit case.
 - **Transformed use of data and AI.** Deploy AI factories and transformed data environments that put data in action to accelerate transformation. By ethically adopting new deep analytics and AI tools, financial institutions can enhance operations and customer experiences, and better meet regulatory obligations.
 - **New workforce and new workplaces.** Embrace the reality of a new workforce in new workplaces that redefine how, where, and when work is performed. The financial institution’s workforce now incorporates employees, subcontractors, vendors, and partner employees. New models can enable effective collaboration across this expanded workforce in changing physical and digital work environments.
 - **New ecosystem architectures.** Engage an ecosystem of partners to fuel faster innovation and efficiency. As financial institutions accelerate their transformation, they increasingly partner externally to deliver better functionality at a structurally lower cost across their operating model.
 - **Emerging digital assets.** Tap into the growing momentum for digital assets by working to create new customer and partner ecosystems, new products and services, and new use cases. Financial institutions can be enablers and product providers in the fast-growing digital asset marketplace.
 - **Security and fraud.** Stay one step ahead in the new frontiers of cybersecurity as bad actors become increasingly sophisticated. While new business and operating models are providing innovative ways to serve customers anywhere and anytime, they also create opportunities for security breaches. Financial institutions are revisiting their enterprise risk profile and deploying enhanced security capabilities within their walls and across their ecosystems.
- Many organizations have already started addressing some or most of these compelling needs. Others are not keeping pace. A new model for consuming financial services and accelerated digitization across the industry demands that institutions adjust course and begin real transformation today.

“Banks would like to have positive rates, unquestionably, so whenever they have negative rates, they don’t like it ... The necessity to adjust the business model to digitalization, to changes in technology, is something much more compelling than being angry about negative rates.”¹

Mario Draghi, former Chairman, European Central Bank

Real industry reinvention

Begin real reinvention—now—to solve the structural weaknesses that constrain financial performance

While surviving the pandemic has occupied much of the financial services industry’s recent focus, the industry is still not delivering returns anywhere near pre-financial-crisis levels. Changing customer expectations, competition, and other macroeconomic considerations have, in fact, exposed the structural weaknesses of financial institutions.

Consider these constraints on financial performance:

- Intensifying competition from non-traditional players that engage customers using new business and operating models grounded in exponential technologies
- Economic uncertainty with a looming inflationary environment
- Continued low or negative interest rates undermining net interest income

- A high cost of capital in the face of systemic risk considerations
- Regulatory actions resulting in more open financial services.

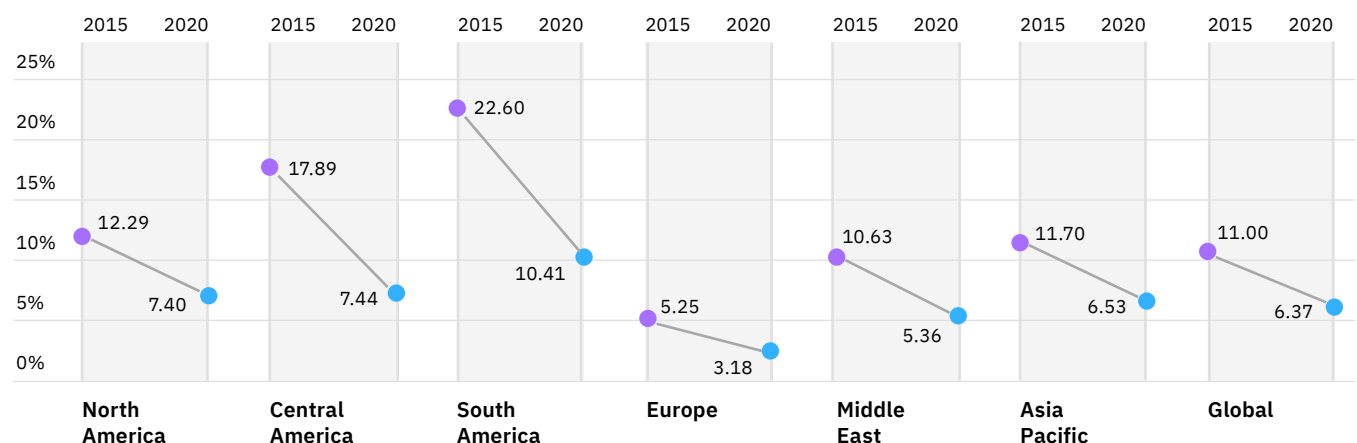
Return-on-equity (ROE) did improve in 2021 after a dramatic pandemic-driven decline in 2020, but it remains well below pre-financial crisis levels and below the industry’s cost-of-equity (see Figure 1). Net interest margins (NIM) for the industry have been declining since the 1990s, forcing banks to explore opportunities to generate non-interest income and take actions to mitigate NIM compression.² The price-to-book ratio for the banking industry is about 1 times book, compared to about 3 times for all other industries.

Financial institutions need to move beyond exploring new opportunities for non-interest income and take a more radical step: reinvent themselves by embracing new, more profitable and competitive business models. These new models depend on digital transformation to unlock value across business processes and workflows—even extending beyond the boundaries of the institution.

Figure 1

ROE challenges continue

The average ROE of banks has been declining globally since the start of the global financial crisis in 2008 and continues to contract



Source: IBM, using data from The Banker Database

“We wanted to ensure the sales of both our core banking products as well as our joint venture, subsidiary products through this [You Only Need One (YONO)] platform, while also providing an online marketplace for meeting the ‘beyond the financial services’ needs of our customers.”³

Rajnish Kumar, former Chairman, State Bank of India

Customer-centric business models

Build new customer-centric platform business models to orchestrate and integrate the many needs of ecosystem participants

Successful platform companies make it simpler for customers to go about their lives and business by tapping into value chains within and across industries. In 2021, 7 of the 10 most valuable companies in the world were based on platform business models (see Figure 2).⁴

Early platform business models that focused on commerce, social media, and communications are now expanding into a much wider range of industries. They include travel, healthcare, entertainment, industrial, manufacturing, and many others.

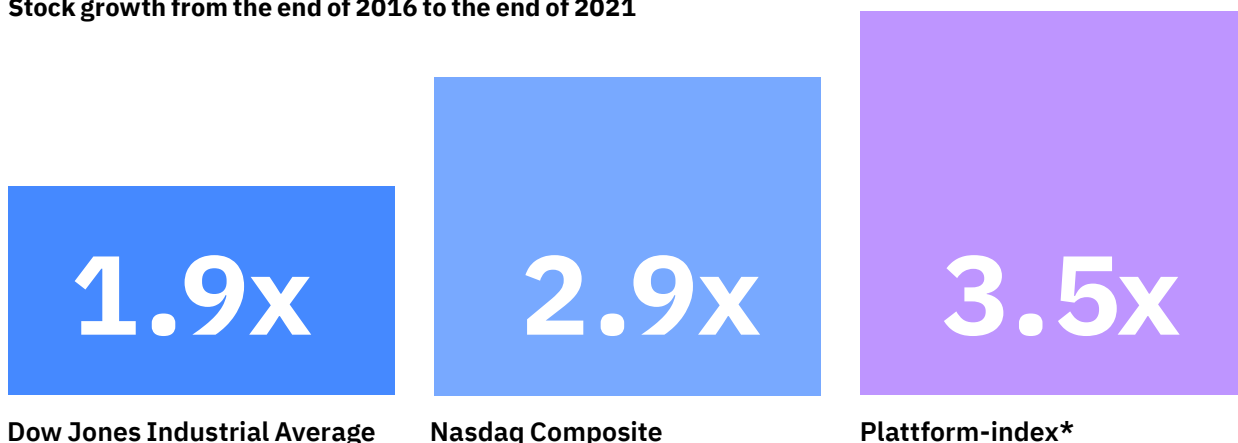
Financial services are an integral enabler for many, if not all, of these ecosystems. To reduce the friction in these complex customer interactions, platform companies are increasingly incorporating financial services into their value propositions, especially in payments. While some ecosystem orchestrators partner externally to source their financial services needs, many are building their own financial services businesses.

Figure 2

Delivering high value

The growth in market capitalization for platform companies has outperformed that for traditional firms

Stock growth from the end of 2016 to the end of 2021



**Estimated by The Original Platform Fund, which comprises an equal weight of the share price of 15 platform companies. Source: IBM internal analysis; data from The Original Platform Fund © Copyright 2022 DEIX Digital Economy Investments GmbH | www.plattform-index.com | www.theoriginalplatformfund.com | www.deix.de*

To take advantage of the platform business model opportunity, leading incumbent financial institutions are taking a two-pronged approach. First, they embed their capabilities into existing platform orchestrators' business models and take actions to mitigate commoditization by using the platform to engage customers differently, source new insights, and develop new products and services. Second, they develop their own bank-led ecosystems in market segments that exploit their own differentiated capabilities.

Open finance—safe, secure modular interactions that allow users to share their financial data with trusted third parties—can enable these ecosystems to succeed. The right application of AI can also help financial organizations hyper-personalize their engagement with customers.

End-to-end digitization

Embrace end-to-end extreme digitization to reshape operations and drive innovation

As pandemic-driven digital adaptation by customers and employees accelerated, it exposed operational and technical gaps in many financial institutions. The adaptation also outpaced many firms' ability to meet soaring demand. In response, initial digital initiatives focused on transforming the customer interface. While a good start, by itself this focus fails to release the full potential across an enterprise and its ecosystem.

To win the race to all things digital, financial institutions are taking 2 important steps. First, they exploit exponential technologies such as automation, hybrid cloud, and AI. Second, they apply them at scale—enabling collaboration across internal business units and an ecosystem of external partners through more secure platform interactions. Digitization can then unlock value across an entire organization and ecosystem, from the customer interface to middle- and back-office operations.

Adopting extreme digitization requires financial institutions to build a modern compute environment and infrastructure that supports the flexibility to innovate while improving the cost efficiency of resilient operations. However, that alone is not enough.

“The bar [competition] has been raised higher. The big change is hyper-digitalization.”⁵

Piyush Gupta, CEO, DBS Bank

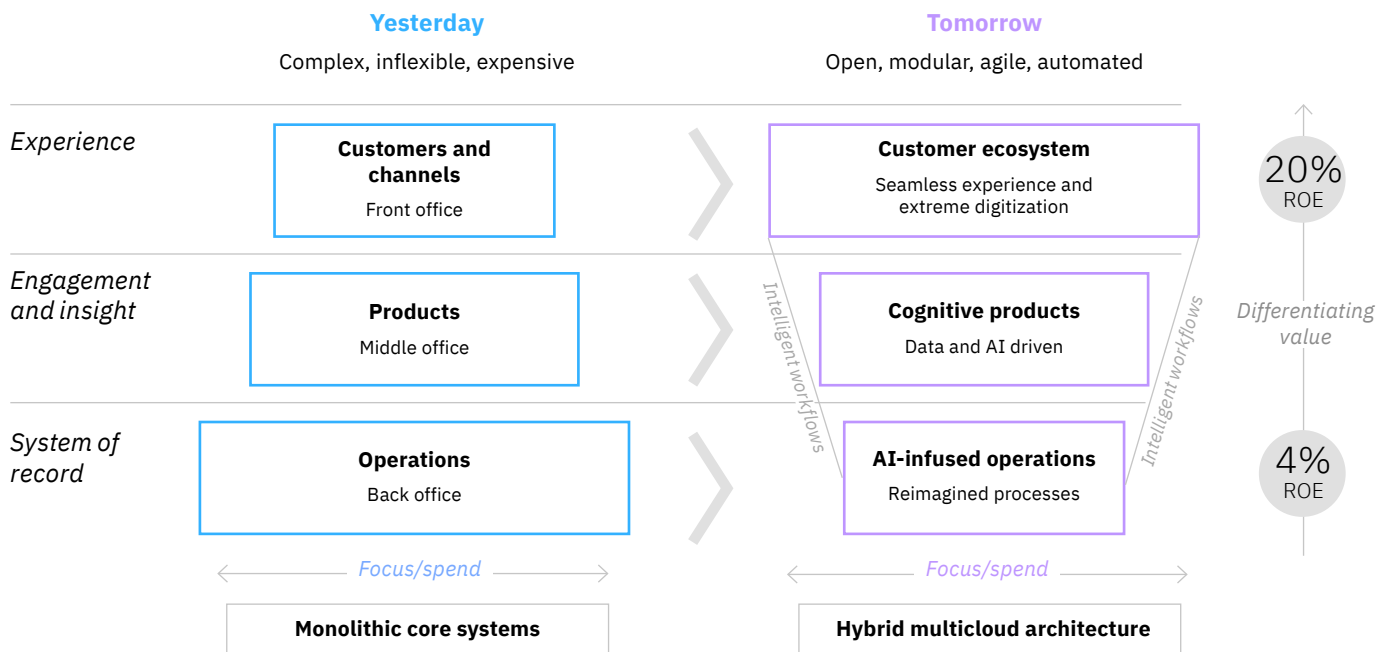
An array of tightly coupled applications running on heterogeneous technologies can limit banks in their ability to adopt these new technologies and undertake end-to-end transformation. To propel progress, they need to re-imagine their business architecture. It needs to be based on the interoperability of computing environments and the secured portability of microservices and containerized solutions (see Figure 3).

To accelerate digitalization, financial institutions should adopt an architecture-led transformation combined with re-imagined workflows and operating models.

Figure 3

The future of banking

Exponential technology is inverting the traditional banking business model



Source: IBM. ROE based on data from “Remaking the bank for an ecosystem world.” McKinsey & Company. October 25, 2017.

Operational resilience

Act with urgency to increase resiliency for better risk management and to address regulatory concerns

Before the pandemic, expectations were that ongoing digital development objectives would take a decade to complete. In the wake of the pandemic, they occurred in less than 18 months. To cope with their challenges, banks adapted new operating models and extended cloud access, and in doing so realized the benefits of greater connectivity.

At the same time, they accelerated their data and analytics innovation initiatives to bolster risk and compliance programs. This reduced the isolation of organizational siloes inside the firms and led, in turn, to new opportunities for intelligent automation. Ecosystem alliances of internal and external partners have played a central role in enabling intelligent workflows that boost organizational resilience. Consequently, critical business processes have been strengthened. For instance, when compared to an on-premises environment, a central anti-money laundering (AML) repository in the cloud makes AML controls and workflows more efficient.

However, digital acceleration, the reconfiguration of computing environments, and expanded workforce access have also yielded unintended consequences. Chief Risk Officers (CROs) and regulators are increasingly aware of novel interdependencies that prompt concerns of industry-wide operational stability. The industry's reliance on cloud hyper-scalers only intensifies these concerns.

Proactively remediating any outage of clients' access to funds and services to avoid reputational risk and regulatory action is now a top business priority. Workload portability, avoidance of "lock-in" with cloud access, and rapid recovery from service interruptions are at the forefront of business decisions.

Boards rightly view cloud technology as a strategic driver and enabler of further business performance and shareholder returns. But when considering cloud migration and digital transformation, CROs, in partnership with technology and compliance leadership teams, can help keep a sharp focus on resiliency by identifying attendant risks and potential remediations.

“CTOs can make the business case for change around technology. How can we reduce environmental impact? How can we reduce the impact of process automation on jobs? How can we reskill our talent to become future ready?”⁶

Fezile Dali, CTO, Standard Bank

Viable sustainability

Find viable sustainability models that balance business value and market expectations

Sustainability started to gain real traction in 2015 when the 2030 Agenda for Sustainable Development was adopted by all United Nations Member States. As of the end of 2021, 265 banks representing more than 45% of global banking assets had signed up to the UN’s “Principles for Responsible Banking.”⁷ The industry is now developing and deploying initiatives to meet these commitments, while helping ensure targeted investments deliver on overall business and financial objectives.

These initiatives are emerging across 4 broad areas:

- **Incorporating climate and sustainability data and insight to help manage risks.** Sustainability-related data (for example, carbon emissions) can help banks better assess opportunities and risks in financing decisions across the full product portfolio. This includes loan and mortgage underwriting, sales and trading (balance sheet) positions, and risks associated with client financings.
- **Addressing the sustainability of banking operations—the financial industry’s journey to net-zero.** Reducing the negative environmental and social impact of their own operations includes reducing the carbon footprint of transactions, data centers, real estate facilities, personnel, and travel.

- **Developing new products and services to support the sustainability agenda.** These include sustainable finance—for example, financing clients’ own sustainability initiatives—as well as financing the transition to green economy, carbon neutrality, and environmental, social, and governance (ESG) funds.
- **Reporting on sustainability performance.** This involves effectively communicating sustainability results and risks to external (for example, regulators, investors, associations, market) and internal (for example, employees, board, governance) stakeholders.

Sustainability is not only a set of initiatives used by the financial services industry to respond to society’s demands. It is also an opportunity to improve operating performance and drive new revenue streams aligned to changing customer expectations.

“Trustworthy, transparent models are critical to our success and really go back to our culture and key tenets to serve our customers”⁸

Manav Misra, Chief Data and Analytics Officer, Regions Bank

Transformed use of data and AI

Deploy AI factories and transformed data environments that put data in action to accelerate transformation

As client relationships and workforce activity are digitized, opportunities for innovation increase—but so do operational challenges. Reducing friction in interactions requires near real-time core banking capabilities. It also demands risk management models that allow for attractive, yet prudent pricing of financial products.

For example, when clients expect instant fulfillment, a bank needs a near real-time capability to understand the interdependencies among variable economic conditions, modified human decisions, completeness of data sets, and accuracy of algorithms. Data and AI, properly deployed, can become a real competitive advantage. But proper governance is required to engender the necessary trust to scale AI operations across an entire organization.

New trusted data foundations can help move AI applications from business unit experimentation to robust and reliable enterprise-wide execution. This includes transparent data and AI governance that strengthens confidence in the reliability of intelligent automation to transform core processes. Beyond just technology, a data culture and attendant mindset are what’s needed to succeed.

As AI scales, though, ethical considerations become paramount to avoid AI’s potential overreach and unintended consequences. It’s not surprising, then, that regulators are raising the bar for compliance in the use of AI to make business value sustainable. Financial institutions therefore need to establish a set of ethical standards to govern their operating model and guide a highly skilled workforce in the collaborative use of AI.

New workforce and new workplaces

Embrace the reality of a new workforce in new workplaces that redefine how work is performed

What is the workforce? What is the workplace? The pandemic has radically changed the way we think about them. Like other businesses, financial institutions have come to realize that traditional workforce definitions were too limited. As the notion of workforce expanded and its contributors dispersed across multiple landscapes, deeper interdependencies became clear.

This change extends beyond the firms’ borders to subcontractors, vendors, and partners amidst a frenzy of near real-time interactions. This is testing—and stressing—the effectiveness and resiliency of traditional operating models, encouraging a shift to open organizations that can unlock the business value of comprehensive digital transformations.

Evolving workforce/workplace models require firms to adapt to changing lifestyle choices. Flexibility is now essential to being competitive. But creating a dispersed and resilient work culture requires more than a top-down statement of aspirations.

“Today, we are experiencing new ways of working, which imply very interesting challenges, both technological and cultural.”⁹

Fernando Treviño Elizondo, CIO, Banorte

In practice, today’s workplace requires a new type of collaboration. Higher-value, customer-focused innovation relies on seamless workforce interactions, AI-augmented decisions, and the support of secure cloud access and intelligent workflows (see Figure 4).

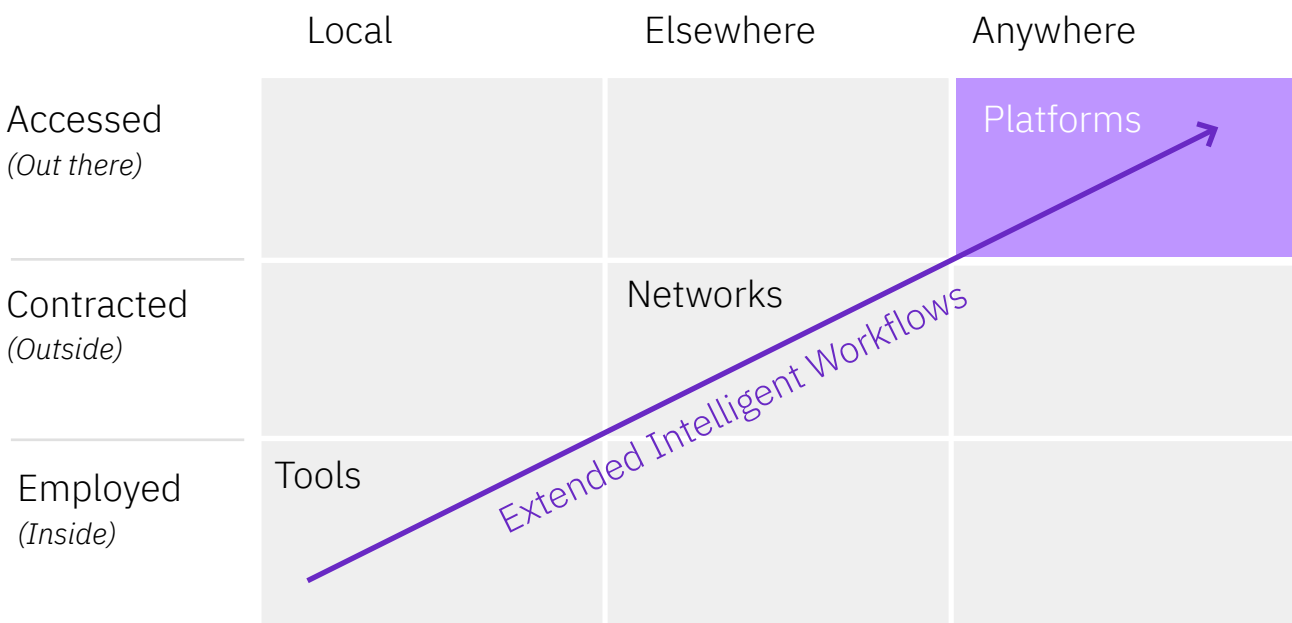
As financial institutions accelerate their operating model transformations, they can extend automation to a wider perimeter that fosters deeper and more resilient collaboration with partner ecosystems.

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Figure 4

The new normal

A more hybrid environment features new ways and locations for working, supervising, and leading



Source: Foster, Mark. “The Virtual Enterprise: The Cognitive Enterprise in a virtual world.” IBM Institute for Business Value. May 2021. <https://ibm.co/virtual-enterprise>

“We’ve been building some muscle in the organization to do better partnering. Because we can’t do everything ourselves. We don’t want to.”¹⁰

Ross McEwan, CEO, National Australia Bank

New ecosystem architectures

Engage an ecosystem of partners to fuel faster innovation and efficiency

As financial institutions face intense competition and ongoing margin compression, they must radically reduce costs as they transform their business models. And speed is of the essence.

A well-orchestrated ecosystem of partners can help accelerate this digital transformation, a point recognized by leading global executives (see Figure 5). Banks can bring together the contribution of non-financial partners to co-create new business models and services.

But to do so requires a modern business architecture that supports secure, innovative collaboration. Partnerships usually add business value but have been constrained by the lack of easy, secure interactions that today’s cloud-based architectures make possible. Now banks can deepen and extend their collaboration across their ecosystems by using a standard approach across cloud platforms.

When such platforms use industry-aligned business architectures, they can improve risk management transparency and reduce the compliance burden, making collaboration simpler while increasing operational efficiency and enhancing resilience. When properly built, these architectures rely on modular, portable, and fully interoperable services that can be delivered through a standard as-a-service model. This can help banks avoid reinventing compliance and security fixes as they bundle and re-bundle services with new offerings.

Ecosystem thinking requires business and technical acumen as well as a cultural shift toward open organizations. Approaches that can help with ecosystem success include:

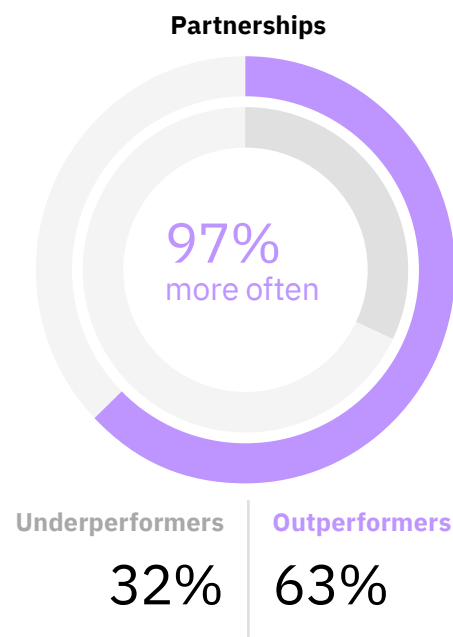
- A collaborative strategy that starts with partner engagement at inception
- Continuous investment in the relationship that can yield value over time
- Sharing risks and rewards proportionally
- Using highly modular enabling platforms to buttress the partnership.

Banks that get partner ecosystems right can rethink their strategies and position themselves to attract and retain customers based on value, immediacy, and above all, trust.

Figure 5

Partnerships: A top priority

Global Outperformers in the IBM 2021 CEO Study partner for needed capabilities 97% more often than Underperformers



Q. How has the COVID-19 pandemic changed the importance of partnerships in driving business performance?
Source: “The 2021 CEO Study: Find your essential.” IBM Institute for Business Value. February 2021.
<https://ibm.co/c-suite-study-ceo>

“Interoperability across different DLTs [distributed ledger technologies] and technologies was key in demonstrating how to save time, reduce market risk and improve security for transactions between central banks, commercial banks and in time our clients around the world.”¹¹

Mark Williamson, Managing Director at HSBC, on the test of an advanced token and digital wallet settlement capability

Emerging digital assets

Tap into the growing momentum for digital assets by working to create a new ecosystem

The financial services ecosystem faces an interesting opportunity: to reorganize itself using digital connectivity for efficiency, lower costs, and better customer experiences. This opportunity, in turn, is driving the inevitable: new digital assets—central bank digital currencies (CBDC), non-fungible tokens (NFT), stable coins, and cryptocurrencies—as solutions to eliminate even more friction in financial interactions.

But changing the status quo this radically comes with a host of challenges. Traditional institutions, their policies and processes, as well as current regulations aren't ready for the growing demand in Decentralized Finance (DeFi) lending, crypto investments, and tokenized exchanges of value and ownership.

Regulators are hurrying to define the ground rules that embrace wholesale activities as well as retail interests. More than 80 central banks worldwide are testing the logic and reliability of alternative money pipelines—a few of which have already gone live.¹² This requires trusted financial intermediaries to deploy a new digital infrastructure that also addresses growing demand for trusteeship, capital management solutions, and custody for secured storage.

Today, there are more questions than answers. What will the target infrastructure be, and how will it be managed? From the transformation of traditional business models to the emergence of a futuristic metaverse, the legal and regulatory frameworks are still under construction. Given the multiple uncertainties, hyper-transparent governance is needed to manage the explosive decentralization of all the components spread across many platforms.

If digital assets are to succeed, they need secure connectivity and interoperability embedded in a highly complex infrastructure—a new ecosystem that is still being formed.

“Security was most important. And because we were embarking upon a new transformation journey around a new technology stack, that was a very big concern for us.”¹³

Amit Saxena, Global Deputy Chief Technology Officer, State Bank of India, on the YONO initiative

Security and fraud

Stay one step ahead in the new frontiers of cybersecurity as bad actors become increasingly sophisticated

Over the last 2 years, as the workforce has dispersed to remote workplaces and an ecosystem of partners is interacting in new ways, cybersecurity has again become a burning issue.

The acceleration of cloud investments helped banks respond to changing customer expectations, not the least of which was 24x7 digital access. But the continuous re-configuration of computing environments necessary to accomplish these initiatives has potentially weakened the security framework, increasing technical complexity and incident response efforts.

Banks must now revisit the enterprise risk profile from a security perspective before further extending the business frontiers on cloud operations. Ransomware events have intensified across industries, demonstrating a trend toward more covert cyberattacks. In their cloud investments, banks must match the sophistication of bad actors with security practices enriched by sharpened skill sets and advanced technology to address new vulnerabilities as they are discovered.

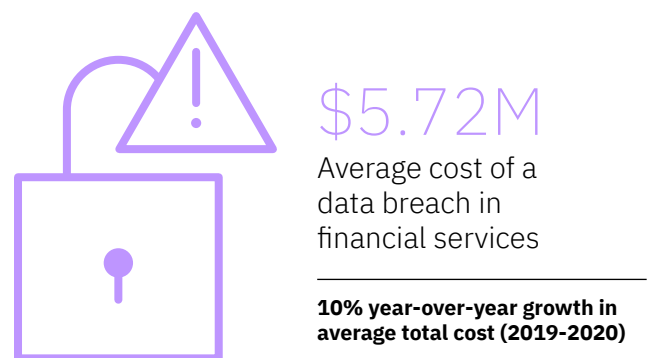
Success requires a baseline security capability in collaboration with industry participants and cloud providers. AI models augmented with shared data across institutions reinforces the industry immune system, revealing criminal patterns before they go viral on extended ecosystems.

Good beginnings make for better endings, so security can no longer be an afterthought. Data breaches are costly (see Figure 6). Transforming the operating model—and business culture—by testing security early in its development process, known as “shift left,” can slow bad actors from gaining traction without slowing the speed of innovation.

Figure 6

Climbing costs

A proactive pursuit of security can help mitigate the cost of data breaches



Source: “Cost of a Data Breach Report 2021.” IBM. July 2021. <https://www.ibm.com/security/data-breach>

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